ADDENDUM TO THE CITY OF NEWPORT BEACH GENERAL PLAN UPDATE PROGRAM ENVIRONMENTAL IMPACT REPORT

City of Newport Beach

1600 Dove Street Residences Project

April 2024

Submitted To:
City of Newport Beach
Planning Department
100 Civic Center Drive
Newport Beach, CA 92660

PSOMAS

TABLE OF CONTENTS

TABLES

EXHIBITS

Exhibit **Follows Page**

APPENDICES

ACRONYM LIST

AAM	Annual Arithmetic Mean
AB	Assembly Bill
ADT	average daily trip
AELUP	Airport Environs Land Use Plan
AHIP	Affordable Housing Implementation Plan
ALUC	Airport Land Use Commission
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
BER	Business Environmental Risk
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Cal Fire	California Department of Forestry and Fire Prevention
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CH_4	Methane
CHR	California Historic Resources
City	City of Newport Beach
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO_2	carbon dioxide
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Conditions
CRHR	California Register of Historic Resources
CV	Visitor Serving Commercial
CWA	Clean Water Act
CY	cubic yard
dB	decibel
dBA	A-weighted decibels
DCV	design capture volume
DU/AC	dwelling units per acre
EAP	Energy Action Plan
EDR	Environmental Data Resources
EIR	Environmental Impact Report

EOP	Emergency Operations Plan
ERNS	Emergency Response Notification System
ESA	Environmental Science Associates
FAA	Federal Aviation Administration
FTA	Federal Transit Administration
GHG	greenhouse gas
GP	General Plan
GPA	General Plan Amendment
GPD	gallons per minute
Gpad	gallons/acre/day
GPM	gallons per minute
GWP	Global Warming Potential
HCOC	hydrologic conditions of concern
HCP	Habitat Conservation Plan
HREC	Historical Recognized Environmental Conditions
HVAC	heating, ventilation, and air conditioning
JWA	John Wayne Airport
kWh	kilowatt hour
LCFS	Low Carbon Fuel Standard
L_{max}	maximum instantaneous noise level
LOS	level of service
MBTA	Migratory Bird Treaty Act
mg/m^3	milligrams per cubic meter
mgd	million gallons per day
MGP	Manufactured Gas
MM	mitigation measure
MMs	mitigation measures
MND	Mitigated Negative Declaration
MRZ-1	Mineral Resource Zone-1 (an area with little or no likelihood for presence of significant mineral resources)
MTCO2e/yr	metric tons of carbon dioxide equivalent per year
MU-H2	Mixed Use Horizontal 2
MWDOC	Municipal Water District of Orange County
MWS	Modular Wetland Systems
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NBFD	Newport Beach Fire Department
NBMC	Newport Beach Municipal Code
NBPD	Newport Beach Police Department
NBPL	Newport Beach Public Library
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NMUSD	Newport Mesa Unified School District
NO	nitric oxide
NO_2	nitrogen dioxide
NOI	Notice of Intent

NOx	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRHP	National Register of Historic Places
O&M	Operation and Maintenance
O_3	Ozone
OCSD	Orange County Sanitation District
OITC	Outdoor-Indoor Transmission Class
OPR	Office of Planning and Research
PFC	Perfluorocarbons
PC	Planned Community
PM10	respirable particulate matter with a diameter of 10 microns or less
PM2.5	fine particulate matter with a diameter of 2.5 microns or less
Ppd	pounds per day
ppm	parts per million
PRC	Public Resources Code
PST	Pacific Standard Time
RCRA-SQG	Resource Conservation and Recovery Act – Small Quantity Generators
REC	recognized environmental condition
RHNA	Regional Housing Needs Assessment
ROG	reactive organic gases
RR	regulatory requirement
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SAUSD	Santa Ana Unified School District
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SDBL	State Density Bonus Law
SEMS	Superfund Enterprise Management System
Sf	square foot
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SR	State Route
SRA	Source Receptor Area
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
TACs	toxic air contaminants
TSD	Treatment, Storage, Disposal Facilities
$\mu g/m^3$	micrograms per cubic meter
UNFCCC	United Nations Framework Convention on Climate Change
USC	U.S. Code of Federal Regulations

USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VdB	velocity in decibels
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WMP	Water Master Plan
WMUDS/SWAT	Waste Management Unit Database System
WQMP	Water Quality Management Plan

1.0 INTRODUCTION

1.1 PURPOSE AND BASIS FOR THE ADDENDUM

On July 25, 2006, the City Council of the City of Newport Beach (City) adopted the Final Environmental Impact Report (EIR) for the City of Newport Beach General Plan Update, which consisted of three volumes: Volume I—City of Newport Beach General Plan 2006 Update Draft EIR; Volume IA—Draft EIR Changes, Responses to Comments, and Final EIR Report Preparers; and Volume II—Technical Appendices to the Draft EIR. The Draft EIR was distributed for a 45-day public review from April 21 to June 5, 2006. The City Council found that the Final EIR was complete and was prepared in compliance with the California Environmental Quality Act (CEQA) (*Public Resources Code* [PRC], Section 21000 et seq.). The findings of the General Plan Update EIR are summarized, below:

Less Than Significant Impact (compliance with General Plan policies and applicable regulations and conditions)

- Aesthetics (obstruction of scenic vistas and changes to visual character)
- Air Quality (exposure of sensitive receptors to carbon monoxide and objectionable odors)
- Biological Resources (direct or indirect effects to candidate, sensitive, or special status plant and wildlife species through habitat modification; adverse effects on riparian habitat or other sensitive natural communities; and wildlife movement and wildlife corridors)
- Cultural Resources (damage to or destruction of archaeological and/or Native American cultural resources; damage to or destruction of unique paleontological resources; and damage to or destruction of human burial grounds)
- Geology and Soils (exposure of people and structures to adverse effects from strong seismic ground shaking; exposure of people and structures to adverse effects from seismic-related ground failure or landslides; substantial soil erosion and loss of topsoil; hazards associated with lateral spreading, subsidence, collapse, differential settlement, or heaving; and substantial risk to people and structures caused by construction on expansive soils)
- Hazards and Hazardous Materials (routine transport, use, storage, or disposal of hazardous materials; release of hazardous materials, including lead and asbestos, during construction activities and operational activities; existing oil wells [Newport Oil Field and West Newport Oil Field] and the five methane gas mitigation districts; hazardous emission at schools within one-quarter mile of a project site; listed hazardous materials sites; interference with the City of Newport Beach Emergency Management Plan; and fire risk associated with development near wildlands)
- Hydrology and Water Quality (violation of water quality standards and discharge requirements during construction activities and operations; interference with groundwater recharge or depletion of groundwater supplies; alteration of drainage

patterns resulting in substantial erosion or siltation; alteration of drainage patterns resulting in flooding; exceedance of stormwater drainage infrastructure or require new infrastructure, or cause substantial polluted runoff; degradation of groundwater quality; and development in 100-year flood zones and exposure to flood risks)

- Land Use and Planning (physically divide an established community and consistency with applicable land use plans, policies, and regulations, including habitat conservation plans)
- Noise (construction activities)
- Public Services (fire and police protection, schools, and libraries)
- Recreation and Open Space (deterioration of park and recreational facilities, and park deficiencies)
- Transportation/Traffic (intersection operation's levels of service; impacts to Congestion Management Plan (CMP) arterials; air traffic patterns; roadway design features causing safety hazards; emergency access; inadequate parking accommodation; and applicable policies)
- Utilities and Service Systems (water treatment, water supply, wastewater treatment and facilities, solid waste disposal, and energy use).

Significant Unavoidable Impacts (compliance with General Plan policies and applicable regulations and conditions)

- Aesthetics (new sources of light and glare)
- Air Quality (conflict or obstruct implementation of the South Coast Air Quality Management Plan [AQMP]; population levels exceeding 2003 AQMP; construction emissions; and cumulatively considerable net increase in criteria pollutants within the nonattainment area)
- Cultural Resources (demolition of historic structures)
- Hazards and Hazardous Materials (residential development constructed in the Airport Area within the 65 dBA CNEL noise contour specified by the Airport Land Use Commission's Airport Environs Land Use Plan [AELUP] for John Wayne Airport [JWA])
- Noise (potential exposure of persons to roadway noise exceeding standards established in the General Plan and Newport Beach Municipal Code (NBMC); vibration associated with specific construction activities)
- Population and Housing (exceedance of the Southern California Association of Governments [SCAG] population projections)
- Transportation/Traffic (deficient freeway mainline segments and ramps)

Applicable General Plan policies and regulations/conditions were applied to each of these topics, but the impacts could not be reduced to a less than significant level.

The General Plan Update was approved by the City Council on July 25, 2006. The General Plan Update, which included an increase in density and intensity of development and associated traffic trips, was upheld by a vote of the electorate on November 7, 2006, pursuant to City Charter Section 423. The Notice of Determination for the EIR was filed on July 26, 2006, at the Orange County Clerk. The EIR is herein referred to as the “2006 EIR”. The General Plan Update analyzed in the 2006 EIR is herein referred to as the “2006 General Plan Update”. It is noted that the reference to the 2006 EIR is inclusive of subsequent amendments, including the approved 2014-2021 Housing Element Update. An Initial Study/Negative Declaration was prepared for the 2008-2014 Housing Element Update and incorporates by reference the environmental analysis from the General Plan Update EIR. On October 25, 2022, the General Plan Circulation Element was approved by the City Council to comply with State law mandates including “Complete Streets” and “Vehicle Miles Traveled (VMT)” legislation. The updated Circulation Element includes new and revised goals and policies to provide for a balanced transportation network that will support and encourage walking, bicycling, and transit ridership. A finding was made per CEQA Guidelines Section 15061(b)(3). On November 28, 2023 (ordinance effective date of December 28, 2023), the City Council adopted changes to the General Plan and the NBMC to reflect the noise contours identified by the 2014 John Wayne Airport Settlement Agreement Amendment EIR No. 617 as well as updated General Plan Land Use and Noise Element policies and additional noise attenuation measures for future housing units proximate to JWA. A finding was made, per CEQA Guidelines Section 15183, that the amendments are within the scope of the 2014 John Wayne Airport Settlement Agreement Amendment EIR No. 617.

CEQA allows for the preparation of an Addendum to a certified EIR (Section 15164 of the CEQA Guidelines, Addendum to an EIR or Negative Declaration) to document minor changes in the project characteristics or environmental conditions under which the project will be developed. This Addendum to the Certified 2006 EIR for the 1600 Dove Street Residences (hereinafter referred to as the “Project” or “proposed Project”) has been prepared in accordance with the provisions of CEQA (PRC, Sections 21000 et seq.); the State CEQA Guidelines (Title 14, *California Code of Regulations,* Sections 15000 et seq.); and the rules, regulations, and procedures for implementing CEQA as adopted by the City of Newport Beach. Section 15164(b) of the State CEQA Guidelines states that “an addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred”. Pursuant to Section 15162 of the CEQA Guidelines, no subsequent EIR may be required for a project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, that one or more of the following conditions are met:

A. When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

    (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the

involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

  (a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

  (b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

  (c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

  (d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

In accordance with Sections 15162 and 15164 of the State CEQA Guidelines, based on the analysis and substantial evidence presented in this Addendum, the City has determined there are no new significant environmental impacts resulting from the proposed Project. The City has determined that there are no substantial increases in the severity of any previously identified significant environmental impacts and no new mitigation measures are required for the implementation of the proposed Project; there are no changes in circumstances under which the proposed Project would be undertaken that would result in new or more severe significant environmental impacts; and there is no new information of substantial importance that would result in one or more new or substantially more severe significant impacts. Therefore, an Addendum is the appropriate environmental documentation for the proposed Project and requested approvals.

Pursuant to Section 15050 of the State CEQA Guidelines, the City of Newport Beach is the lead agency for this Addendum and has the authority for Project approval and approval of the accompanying environmental documentation (i.e., this Addendum). This Addendum evaluates the impacts associated with the Project, including the following entitlements requested for the Project:

- **General Plan Amendment**: A General Plan Amendment is requested to increase the base density of the Project by 49 dwelling units and update Anomaly No. 12 of the General Plan to include the additional residential units.
- **Development Agreement**: A Development Agreement is requested between the Applicant and the City, pursuant to Section 15.45.020 (Development Agreement Required) of the NBMC, which would provide the Applicant with the vested right to develop the Project for a term of 10 years and to provide negotiated public benefits to the City.
- **Traffic Phasing Ordinance Study:** A traffic study pursuant to NBMC Chapter 15.40 (Traffic Phasing Ordinance).
- **Affordable Housing Implementation Plan (AHIP):** A plan specifying how the Project would meet the City's affordable housing requirements, in exchange for a request of 50 percent increase in density including a request for three development standard waivers related to height, park dedication requirement, and overall residential density along with two development concessions related to the payment of park in-lieu fees and affordable unit mix pursuant to Chapter 20.32 (Density Bonus) of the Newport Beach Municipal Code and Government Code Section 65915 *et seq.* ("State Density Bonus Law").
- **Addendum No. 9 to the City of Newport Beach General Plan Update PEIR:** Pursuant to the California Environmental Quality Act (CEQA), the Addendum addresses reasonably foreseeable environmental impacts resulting from the Project.

In addition to the approvals identified above, the proposed Project would be subject to other approvals and ministerial actions by the City as part of project implementation. These approvals include, but are not limited to, grading permits, sign permits, and building permits.

1.2 BACKGROUND

1.2.1 CITY OF NEWPORT BEACH GENERAL PLAN UPDATE

In 2006, the City of Newport Beach comprehensively updated the City's General Plan from the last updated version in 1988. The General Plan Update provided land use, housing, circulation and infrastructure, public service, resource conservation, and public safety policies for the entire City.

The 2006 General Plan Update not only proposed policies for the future land use and development citywide, but it also focused on the nine primary study areas (10.5 percent of the City's land area) where majority of the proposed land use changes would occur. Accordingly, the 2006 EIR would comprehensively address the impacts of all policies throughout the City and, additionally, focus on those areas in which the most significant land use changes could occur.

The update to the 2006 General Plan would result in changes in the Residential (single- and multi-family), Commercial, Office, Industrial, Visitor Serving, Institutional, and Parks land uses but would seek to conserve the existing land use pattern. The General Plan Update would primarily result in re-use of economically underperforming properties and obsolete development; conversion of uses in response to market demand (e.g., office and industrial to residential); and more intense use of land in defined areas. As indicated above, several subareas were the subjects of special study during the update process. These subareas were identified as districts or corridors depending on a number of factors, including physical form, functional role, and relation to land or water.

It has been 16 years since the General Plan for Newport Beach was comprehensively revised. In early January 2019, the City Council initiated a comprehensive review of the Newport Beach General Plan. However, in the later portion of 2019, it became clear the City was going to receive a heightened Regional Housing Needs Assessment (RHNA) allocation. This ultimately required the City to plan for 4,845 new housing units, of which nearly 75 percent must be affordable to lower income households. The RHNA allocation included 1,456 units for very-low income, 930 units for low income, 1,050 units for moderate income, and 1,409 for above-moderate income households. Given this mandate, the City Council directed City staff to focus on the Housing Element, Land Use Element, and Circulation Element. After several iterations and reviews by the State Department of Housing and Community Development, the City Council adopted the Newport Beach 6th Cycle Housing Element on September 13, 2022, and on October 5, 2022, HCD certified the City's housing element. City Council approved the 2014-2021 Housing Element Update and noted that all environmental concerns were addressed in the previously adopted Negative Declaration for the 2008-2014 Housing Element Update, as discussed above in Section 1.1. The Negative Declaration uses and incorporates by reference the environmental analysis from the General Plan Program EIR. On October 25, 2022, the City Council adopted an update to the Circulation Element.

The City is in the process of reviewing the remainder of the General Plan for updating and refreshing to align with the community's goals and vision of Newport Beach for the future.

Districts

Per the 2006 update, districts were identifiable by their common functional role, mix of uses, density/intensity, physical form and character, and/or environmental setting. The General Plan policies in the identified districts would focus on those that would likely change over the next 20 years, as the existing land uses would be enhanced, underperforming properties would be revitalized, and opportunities would be provided to accommodate the City's fair share of regional housing needs. These subareas would encompass areas that would extend equally in length and breadth. The following five districts were identified:

- West Newport Mesa
- Newport Center/Fashion Island
- John Wayne Airport Area
- Banning Ranch

- Balboa Peninsula

Corridors

Similar to the districts, corridors were also determined to share common characteristics such as their functional role, land use mix, density/intensity, physical form and character, and/or environmental setting. They differed in their linear configuration, generally with shallow depth parcels located along arterial streets. The 2006 General Plan Update's policies would focus on those in which change was anticipated to occur during the next 20 years. The following four corridors were identified:

- West Newport Coast Highway
- Old Newport Boulevard
- Mariners' Mile
- Corona del Mar

The 2006 General Plan Update also included other land use changes; transportation improvements; and goals and policy changes in the Land Use, Circulation, Safety, Natural Resources, and Recreation elements of the General Plan. Additionally, two new elements, Historical Resources and Arts and Cultural, were introduced.

John Wayne Airport Area

The proposed 1600 Dove Street Residences Project is within the JWA subarea. The 2006 General Plan Update would allow for re-use of underperforming industrial and office properties and development of cohesive residential land uses in proximity to jobs and services. Plan policies would encourage commercial development that would support the JWA, the existing office uses, and the future residential development under the proposed General Plan Update; allow new multi-family uses to be developed in mixed use buildings that support local commercial land uses; and call for the provision of distinct business park, commercial, and airport-serving districts and residential neighborhoods that are integrated to assure a quality environment and compatible land uses.

It should be noted that the 2006 EIR over analyzed the number of residential units in the JWA subarea. Although the adopted General Plan approved a maximum of 2,200 residential units in the said area, at a maximum density of 50 dwelling units per net acre (du/net acre), the General Plan Program EIR evaluated 4,300 residential units in the Airport Area. As set forth in the General Plan Land Use Element, of the 2,200 residential units allocated to the Airport Area, 1,650 of the units must replace existing office, retail, and/or industrial uses so that there is no net gain in vehicular trips. The remaining 550 units of the 2,200 units allocated to the Airport Area (2,200 minus 1,650) are "additive" units that may be developed as infill on existing surface parking lots or areas not used as occupiable buildings on properties within the Conceptual Development Plan Area if parking is replaced onsite.

On July 25, 2006, the Newport Beach City Council adopted the General Plan and certified the Final Program EIR. At the General Municipal Election held on November 7, 2006, the City electorate approved increased density and intensity of development and associated increased peak hour traffic trips provided in the Land Use Element of the General Plan, pursuant to City Charter Section 423. The City's General Plan contains the following elements: Land Use, Harbor and Bay, Housing, Historical Resources, Circulation, Recreation, Arts and Cultural, Natural Resources, Safety, and Noise. The comprehensive General Plan Program EIR analyzed the potential impacts of a citywide comprehensive update to the land use plan and goals and policies for General Plan elements.

The following summarizes the findings of the 2006 EIR associated with the adoption and long-term implementation of the General Plan. The 2006 EIR does not identify mitigation measures. Rather, it relies on the General Plan policies adopted in the General Plan to mitigate potential environmental impacts. Existing enforcement and monitoring mechanisms are in place to ensure that all compliance measures will be implemented, including conditions of approval and mitigation monitoring.

Less Than Significant Impact (compliance with General Plan policies and applicable regulations and conditions)

- Aesthetics (obstruction of scenic vistas and changes to visual character)
- Air Quality (exposure of sensitive receptors to carbon monoxide and objectionable odors)
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- Hydrology and Water Quality (violation of water quality standards and discharge requirements during construction activities and operations; interference with groundwater recharge or depletion of groundwater supplies; alteration of drainage

patterns resulting in substantial erosion or siltation; alteration of drainage patterns resulting in flooding; exceedance of stormwater drainage infrastructure or require new infrastructure, or cause substantial polluted runoff; degradation of groundwater quality; and development in 100-year flood zones and exposure to flood risks)

- Land Use and Planning (physically divide an established community and consistency with applicable land use plans, policies, and regulations, including habitat conservation plans)
- Noise (construction activities)
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Significant Unavoidable Impacts (compliance with General Plan policies and applicable regulations and conditions)

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- Cultural Resources (demolition of historic structures)
- Hazards and Hazardous Materials (residential development constructed in the Airport Area within the 65 dBA CNEL noise contour specified by the Airport Land Use Commission's Airport Environs Land Use Plan [AELUP] for John Wayne Airport [JWA])
- Noise (potential exposure of persons to roadway noise exceeding standards established in the General Plan and NBMC; vibration associated with specific construction activities)
- Population and Housing (exceedance of the Southern California Association of Governments [SCAG] population projections)
- Transportation/Traffic (deficient freeway mainline segments and ramps)

The 2006 EIR did not include any mitigation measures, as the potential impacts were either considered less than significant requiring no mitigation measures, or no feasible mitigation measures were available for the potentially significant impacts.

The 2006 EIR assumes project-level compliance with adopted General Plan policies to avoid or reduce environmental impacts with General Plan build-out. Existing enforcement and monitoring mechanisms are in place to ensure that all compliance measures will be implemented, including conditions of approval and mitigation monitoring.

2.0 PROJECT DESCRIPTION AND SETTING

2.1 PROJECT LOCATION

The 2.49-acre Project site is located at 1600 Dove Street, at the corner of Dove Street and Dolphin-Striker Way (Assessor Parcel Number [APN] 427-181-03), in Newport Beach, Orange County, California.

The site is a largely mixed-use area of the City, surrounded by Dove Street to the west, a commercial development to the north, an existing parking lot to the east, and Dolphin-Striker Way to the south. The Project site can be accessed from MacArthur Boulevard and Dove Street. Regional access to the site is provided by Interstate 405 (I-405) via MacArthur Boulevard or the State Route 73 (SR-73) via Campus Drive. See Exhibit 2-1, Regional Location and Local Vicinity and Exhibit 2-2, Aerial Photograph.

The Project site is located within JWA subarea and is approximately 0.5 mile southeast of the southernmost JWA runway.

2.2 EXISTING SITE AND AREA CHARACTERISTICS

The Project area is characterized by low rise light industrial, office, and commercial uses. The site is surrounded by office, restaurant, and commercial uses and associated surface parking lots to the east and north. The Project is located adjacent to the Newport Crossings project, an approved mixed-use project on approximately 5.6 acres.

The existing use on the subject site is a 60,675-square-foot (sf), 4-story office building with a surface parking lot and associated improvements. Mature ornamental trees and turf exist along the southern and western perimeter of the site, and there are also trees within the surface parking lot along the eastern and northern perimeters.

The Project site is currently zoned Planned Community (PC)-11 (Newport Place) and is within the PC's Residential Overlay. The site is designated as Mixed Use Horizontal 2 (MU-H2) in the City's General Plan. The Project proposes a General Plan Amendment to obtain additional base density allocated to the Airport Area (Statistical Area L4).

2.3 PLANNING CONTEXT

2.3.1 PLANNED COMMUNITY 11 – NEWPORT PLACE

The Project site is included in Planned Community 11 (PC-11) (Newport Place). PC-11 and associated development standards were adopted by the City of Newport Beach on December 21, 1970. Multiple amendments have been prepared, with Amendment No. 1 dated December 13, 1971, and the most recent Amendment No. 41 dated November 28, 2023.

Regional Location and Local Vicinity

Exhibit 2-1

1600 Dove Street Residences

N
W E
S

2,000 1,000 0 2,000
Feet

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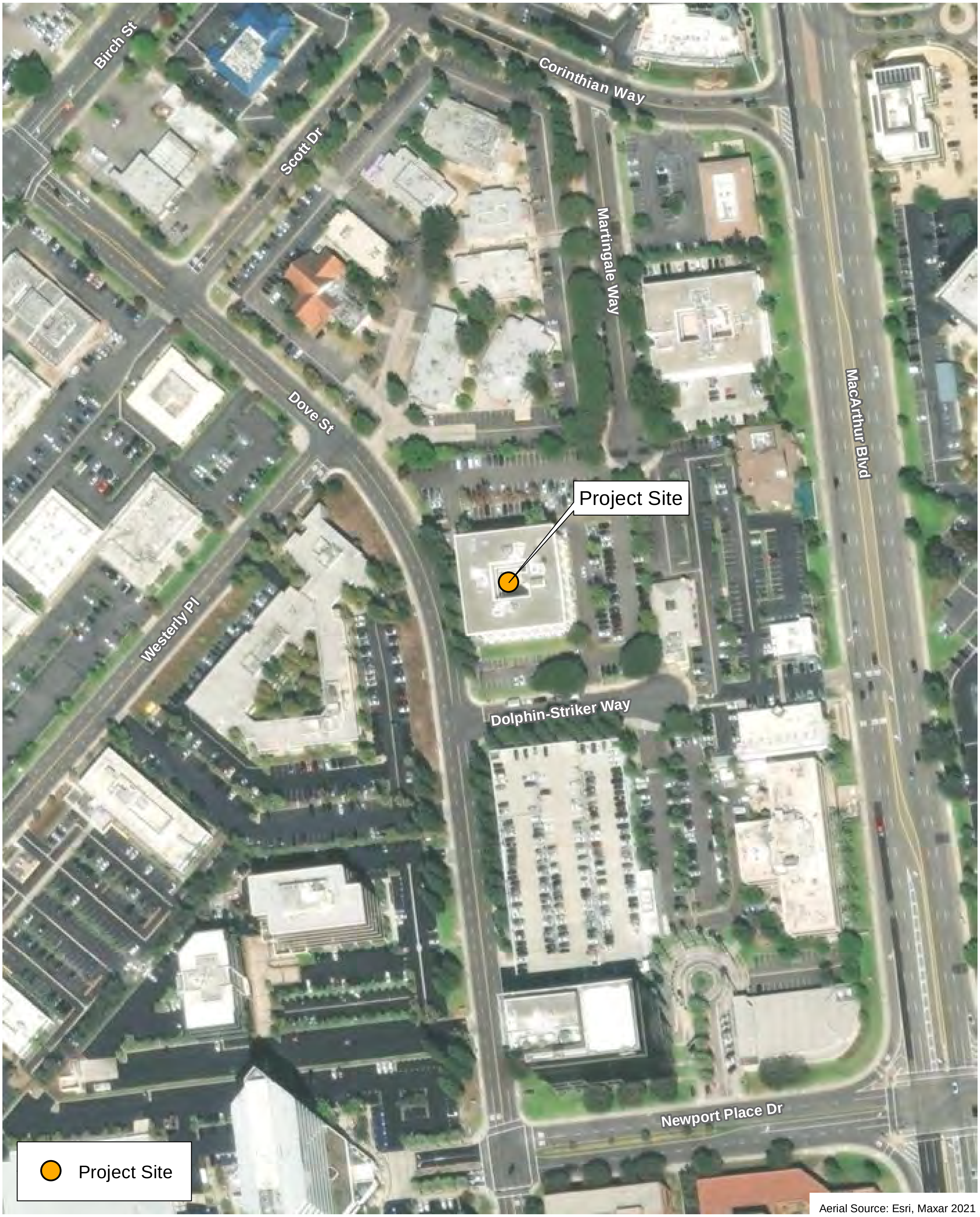

Aerial Source: Esri, Maxar 2021

Aerial Photograph

Exhibit 2-2

1600 Dove Street Residences

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On August 22, 2023, the City Council adopted Ordinance No. 2023-13 an amendment (Amendment No. 40) to the Newport Place Planned Community Development Plan to revise the minimum affordable housing percentage of the residential overlay (PA2023-0082). The amendment is a step in the implementation of the 6th Cycle Housing Element by reducing potential governmental constraints through the reduction of affordable housing percentages from 30 percent to 15 percent, facilitating construction of market-rate housing and affordable housing for all income groups. Additionally, on November 28, 2023, the City Council adopted Ordinance No. 2023-21, an amendment (Amendment No. 41) to allow residential development up to the JWA 65 dBA CNEL noise contour (Figure N5 of the General Plan Noise Element), related to noise in the Airport Area necessary to implement the 6th Cycle Housing Element. The changes to the General Plan and the NBMC were implemented to reflect the noise contours identified by the 2014 John Wayne Airport Settlement Agreement Amendment EIR No. 617 and updated General Plan Land Use and Noise Element policies and additional noise attenuation measures for future housing units proximate to JWA.

Due to its central location, topography, accessibility to four freeways, two railroads, and its relation to the Orange County Airport, the 81.74-acre PC-11 was identified in the 2006 General Plan and the 2014-2021 Housing Element as a key area for future housing opportunities.

2.3.2 AIRPORT ENVIRONS LAND USE PLAN FOR JOHN WAYNE AIRPORT

The Project site is located approximately 0.5 mile southeast of the southernmost JWA runway. The Project site is outside of the 65 dBA Community Noise Equivalent Level (CNEL) Contours identified in the AELUP and the City's General Plan and falls within JWA Safety Zone 6 (Traffic Pattern Zone), where the likelihood of an accident is low. The zone allows for residential uses and most nonresidential uses; however, uses such as schools, stadiums, and health care facilities are not permitted (OCALUC 2008).

As indicated in the AELUP for JWA, the Project site is located within the AELUP Part 77 Notification Area for JWA. Within the Notification Area boundary, the Airport Land Use Commission (ALUC) must be notified of any proposed construction or structural alterations involving a land use or legislative amendment in the AELUP Planning Area, development that exceeds 200 feet above ground level, and all heliports or helistops. Additional criteria for notification include development in proximity to an airport exceeding the slope ratio; development involving construction of a traverse way (i.e., highway, railroad, waterway) and exceeding a standard of 77.9(a) or (b) once adjusted upward with the appropriate vertical distance; development emitting frequencies and not meeting the conditions of the Federal Aviation Administration (FAA) Co-location Policy; development being in an instrument approach area and potentially exceeding Part 77 Subpart C; and development being in proximity to a navigation facility and potentially impacting the assurance of navigation signal reception.

2.4 PROPOSED PROJECT DESCRIPTION

The proposed 1600 Dove Street Residences Project is a 7-story apartment development consisting of 282 residential units, podium level amenity space, a leasing office, roof-top common space, and 530 parking spaces within an on-grade parking garage with 2.5 subterranean levels and shown on Exhibit 2-3, Conceptual Development Plan and Exhibit 2-4, Representative Elevations. Residential units within the Project would include a mix of studios, one-bedroom units, two-bedroom units, and potentially three-bedroom units.

The Project's base density consists of 188 units (139 units from the conversion of the office building to residential and 49 additional units, which are sought via a General Plan Amendment. The proposed Project qualifies for a 50 percent density bonus (i.e., 94 units) in exchange for providing the necessary level of affordable housing. The 49 additional base units referenced above, do not constitute a "major amendment" for purposes of Section 423 of the City's Charter, and a vote of the electorate is not required.

Under the State Density Bonus Law (SDBL),[1] the Project is entitled to a 50 percent density bonus, three incentives[2]/concessions and unlimited waivers from development standards that would physically preclude construction of the Project at the density sought.[3] The Project is requesting two incentives/concessions related to partial park fee waiver and affordable unit mix and three development standard waivers related to park dedication, density, and height.

The entitlements currently requested for the Project include (i) a General Plan Amendment; (ii) a Traffic Study pursuant to NBMC Chapter 15.40; (iii) a Development Agreement; (iv) Affordable Housing Implementation Plan (AHIP); and (v) preparation and approval of an Addendum to the City's General Plan EIR under CEQA. The Applicant submitted a AHIP for the City's review and approval. An amended AHIP would be submitted at a future date when project design approvals are sought (i.e. Site Development Review). In addition to the 94 density bonus units, the Project is entitled under California Government Code Section 65915(d), Section 20.32.070, to receive up to three incentives/concessions that would result in identifiable, financially sufficient, and actual cost reductions. The Project includes two development concessions to waive a portion of the required in-lieu park fee for a half-acre park and waive the affordable unit mix.

In addition to the density bonus units and qualified concessions, the Project is entitled under California Government Code Section 65915(e), Section 20.32.080, and recent caselaw to receive waivers or reductions of development standards where application of the development standard would physically preclude construction of a density bonus project. In this case, the following development standards are entitled to waiver:

a. Park dedication requirement. General Plan Land Use Policy LU 6.15.13 requires a public park equal to 8 percent of the gross land area of the development, or a

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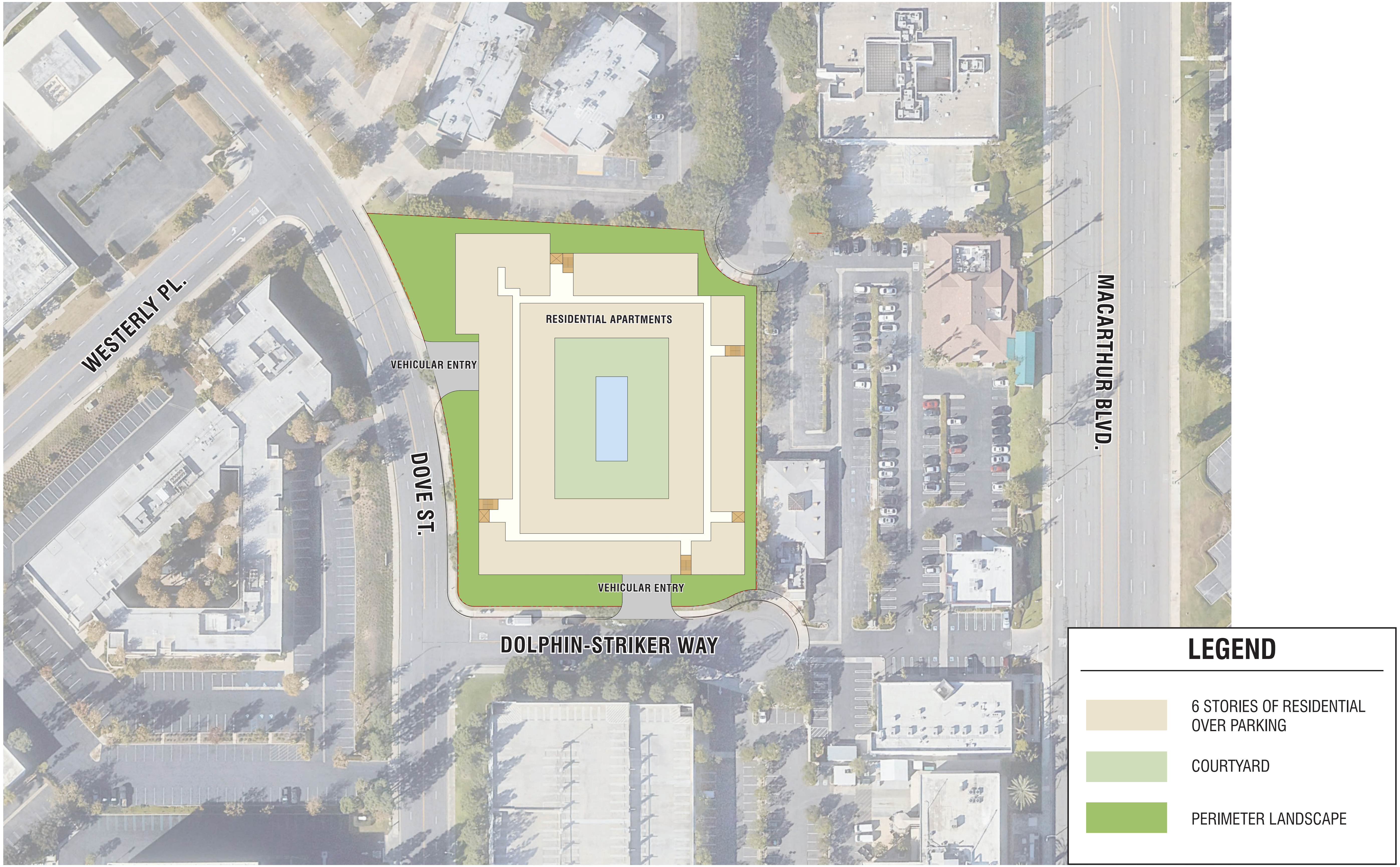
[1] Government Code § 65915 et seq.

[2] Government Code § 65915 (d)(2)(c).

[3] Government Code § 65915(e).



Source: TCA Architects 2023

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Conceptual Development Plan

Exhibit 2-3

1600 Dove Street Residences

Map not to scale

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Source: TCA Architects 2023

Representative Elevations

Exhibit 2-4

1600 Dove Street Residences

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D:\Projects\3NEW003400\Graphics\ex_Representative_Elevations.ai minimum 0.5-acre, whichever is greater, be provided. In this case, the 2.49-acre Project site is too small to feasibly accommodate a 0.5-acre park.

b. Residential density. General Plan Land Use Policy LU 6.15.7 requires residential density between 30-50 units per acre. Inclusive of only the conversion units, the proposed density of 55.8 dwelling units per acre would exceed the maximum density of 50 dwelling units per acre. Including the proposed GPA units, conversion units, and density bonus units, the Project would not comply at a density of 113 dwelling units per acre and a waiver is necessary to implement the Project.

c. Building height. The Newport Place Planned Community (PC-11) limits building height to 55 feet from established grade. In this case, a higher building height is necessary to accommodate 282 residential units within 7 stories. The Project is anticipated to have a height of 100 feet from established grade.

The Applicant reserves the right to utilize any additional SDBL incentives/concessions or waivers that the Project is entitled to, for either the currently requested entitlements or subsequent design approvals.

2.4.1 CIRCULATION AND PARKING

Vehicular access to the development will be provided via a private driveway off Dove Street, Martingale Way, and/or Dolphin Striker Way.

2.4.2 PROJECT CONSTRUCTION

Phase I site improvements include excavation, shoring, retaining walls, wet and dry utilities. Construction of the building may or may not occur concurrently. Phase II residential building includes parking garage, wood-framed structure, and all mechanical, electrical, and plumbing work.

Project construction is anticipated to be completed in 28 months from the start of demolition. This timeline includes approximately 3 months of demolition, 3 months of site preparation, 3 months of grading/excavation, approximately 23 months of construction of the new subterranean parking structure and residential building, paving would take approximately 2 months, and the application of architectural coatings would occur over 5 months. The Project would require the export of approximately 65,000 cubic yards (cy) of soil (approximately 2,240 cy per day or 120 trips).

During construction, all equipment and material will be staged on site. Staging of materials on site will not interfere with emergency access for first responders. After framing and drywall, most materials will be placed, as needed, into units and temporarily on the podium deck. The entrances from Dove Street, Dolphin-Striker Way, and Martingale Way will be utilized during construction. Construction fence and gates will be installed along the perimeter limits of the Project improvements. Hours of construction will comply with NBMC Section 10.28.040.

It is noted that a Construction Management Plan (CMP) is prepared for the Project to minimize the Project impact to the surrounding uses. The construction team will adhere to the provisions of the CMP from start of demolition through issuance of Certificate of Occupancy.

On-Site Parking for Contractor Employees and Construction Crew Members

Construction parking will be accommodated off-site (location to be determined) during garage construction and will move into the garage upon completion. There is sufficient parking in the garage to accommodate the workforce for the remainder of the Project, and construction workers will not park on public streets. Carpooling would also be encouraged.

Short-Term Parking

Short-term visitors to the site such as City inspectors, City staff members, engineers, consultants, and owner's representatives will be accommodated on-site at the construction office trailer location.

2.4.3 INFRASTRUCTURE PLAN

Water services for the existing office facility is currently obtained from an 8-inch water main located in the Martingale cul-de-sac. The proposed Project will utilize this existing water main as the primary source and the 12-inch water main on Dove Street as the secondary source for fire and domestic water service.

An existing 6-inch sewer lateral connects the project site to the existing 8-inch VCP public sewer main on Dolphin-Striker Way. As part of the Project, the existing 6-inch will be upgraded to an 8-inch line. No other changes would occur to the public sewer system. The change in land use is anticipated to increase the rate of discharge to the system.

2.4.4 LANDSCAPE PLAN

The conceptual landscape plan would include a hierarchy of plant materials consisting of trees, shrubs, low shrubs, and groundcover around the perimeter of the site as well as within the central open space, around the pool. The proposed landscaping provides a buffer between the structure and Dove Street and Dolphin-Striker Way. Additionally, it provides privacy at the pool area.

The planting palette proposes non-invasive and low water consuming plants. These are selected for their growing conditions and their deep root systems, which stabilize the soil and minimize erosion impacts.

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3.0 ENVIRONMENTAL CHECKLIST

This Addendum evaluates whether any of the conditions requiring preparation of a Subsequent Environmental Impact Report (EIR), pursuant to Section 15162 of the CEQA Guidelines, are met, and whether there are new significant impacts resulting from the proposed Project, as compared to the impacts previously approved and analyzed in the 2006 EIR. As previously identified in Section 1.0, Introduction, of this Addendum, the 2006 EIR was adopted by the Newport Beach City Council on July 25, 2006 and approved on November 7, 2006. The analysis contained within this Addendum relies upon and incorporates by reference the said Program EIR (i.e., 2006 EIR). This Addendum uses Appendix G of the Environmental Checklist Form, pursuant to 15063(d)(3) of the CEQA Guidelines, that compares the anticipated environmental effects of the proposed Project with those addressed in the 2006 EIR.

For each topical issue, summaries of the environmental analysis conclusions from the 2006 EIR are provided. The 2006 EIR did not include any mitigation measures, as the potential impacts were either considered less than significant requiring no mitigation measures, or no feasible mitigation measures were available for the potentially significant impacts. As such, those impacts were considered significant and unavoidable. However, applicable General Plan policies were applied in each of the technical topics. Relevant policies are also applied in the respective sections of this Addendum document.

Following the summary of the 2006 EIR, the analysis for the proposed Project is presented. This document is an Addendum to the adopted 2006 EIR and demonstrates that there are no changes to the previous information or analysis or changes in circumstances that would substantially increase significant environmental impacts or create any new significant impacts. This Addendum demonstrates that no new information of substantial importance has been identified that shows the proposed Project would have one or more significant effects not discussed in the 2006 EIR. Additionally, this Addendum demonstrates that no new mitigation measures are required beyond the General Plan policies identified in the 2006 EIR.

3.1 AESTHETICS

3.1.1 2006 EIR

The 2006 EIR stated that there are no officially designated scenic vistas in the City, but many natural features, such as the ocean and bay, provide open coastal views. Particular roadways are identified as providing public coastal views of significant vistas within the City's Local Coastal Program. State Route 1 (SR 1) is identified as "eligible" for State Scenic Highway designation, but the City would need to adopt a scenic corridor protection program and apply for scenic approval from the California Department of Transportation (Caltrans) to officially designate the highway. Because there are no designated State Scenic Highways in the City, the 2006 EIR found that implementation of the General Plan would have no impact. The 2006 EIR stated that the General Plan Update would provide development opportunities, which would complement and enhance the City's existing visual character. Therefore, the 2006 EIR determined that the General Plan Update would have a less-than-significant impact on the visual character of developed urban areas. Regarding new sources of daytime glare, the 2006 EIR stated that glare could be produced by the increased amount of surface area of proposed commercial and residential structures, which could reflect or concentrate sunlight and result in a potentially significant impact. However, Policy LU 5.5.2 would require that new and renovated buildings be designed to avoid the use of styles, colors, and materials that unusually impact the design character and quality of their location such as the use of reflective surfaces that increase heat gain of adjoining buildings and ambient glare. Implementation of design features required by Policy 5.5.2, including the use of non-reflective textured surfaces on building exteriors, as well as avoidance of the use of reflective glass, would reduce impacts resulting from daytime glare from new development to a less-than-significant level. Regarding nighttime light, as implementation of the General Plan Update would primarily result in infill of vacant or underutilized parcels, as well as intensification and reuse of existing sites, the majority of new development would be located in areas that commonly experience at least minimal impacts from existing light sources. The 2006 EIR focused on the impacts to Banning Ranch and determined that development in Banning Ranch would result in significant and unavoidable impacts, but that nighttime light in other areas of the City, when following General Plan Update policies, would result in less than significant impacts.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The applicable policies to the proposed Project will be implemented as conditions of approval.

- **LU 5.6.2 - Form and Environment:** Require that new and renovated buildings be designed to avoid the use of styles, colors, and materials that unusually impact the design character and quality of their location such as abrupt changes in scale, building form, architectural style, and the use of surface materials that raise local temperatures, result in glare and excessive illumination of adjoining properties and open spaces, or adversely modify wind patterns.
- **LU 5.6.3 - Ambient Lighting:** Require that outdoor lighting be located and designed to prevent spillover onto adjoining properties or significantly increase the overall ambient illumination of their location.
- **LU 6.15.1 - Land Use Districts and Neighborhoods:** Provide for the development of distinct business park, commercial, and airport serving districts and residential neighborhoods that are integrated to ensure a quality environment and compatible land uses.
- **LU 6.15.3 - Airport Compatibility:** Require that all development be constructed in conformance with the height restrictions set forth by the Federal Aviation Administration (FAA), Federal Aviation Regulations (FAR) Part 77, and Caltrans Division of Aeronautics, and that residential development shall be allowed only on parcels with noise levels of less than the John Wayne Airport 65 dBA CNEL noise contour

area as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within the 65 dBA CNEL noise contour shown in Figure N5 are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are, however, encouraged on parcels located wholly within the 65 dBA CNEL contour area.

- **LU 6.15.22 - Building Massing:** Require that high-rise structures be surrounded with low- and mid-rise structures fronting public streets and pedestrian ways or other means to promote a more pedestrian scale.
- **NR 22.1 - Regulation of Structure Mass:** Continue to regulate the visual and physical mass of structures consistent with the unique character and visual scale of Newport Beach.

3.1.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues		New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
AESTHETICS – Would the project:					
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)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

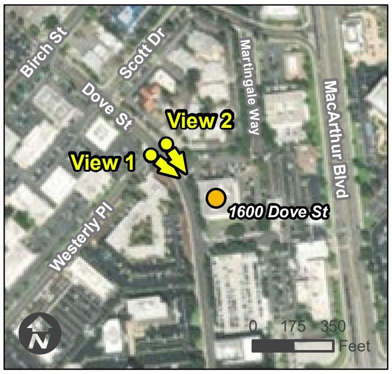
Existing Views and Visual Character

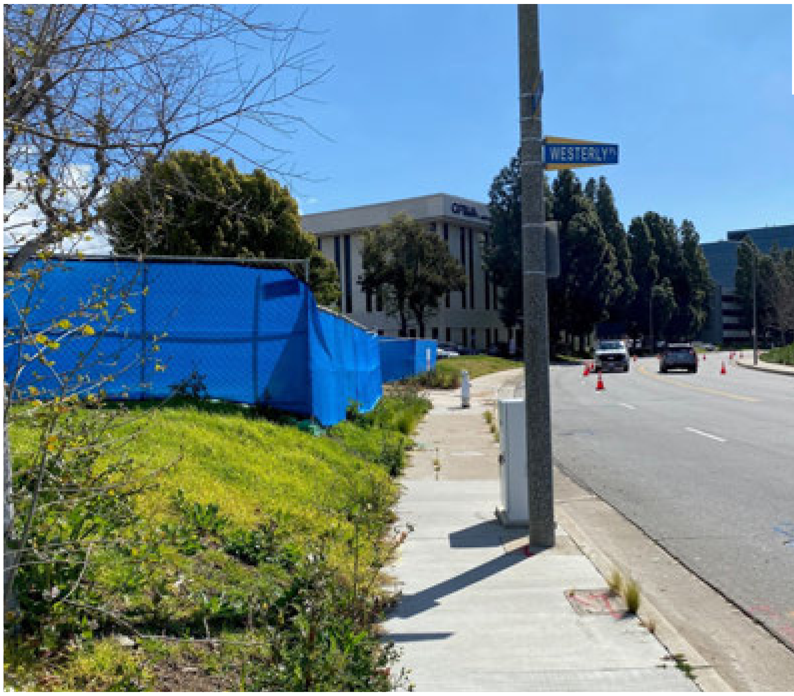
The Project site is currently developed with an existing 4-story office building and surface parking lot. Additionally, mature trees and turf exist along the southern and western perimeter of the site, and there are also trees within the surface parking lot along the eastern and northern perimeter.

The existing visual character of the Project site is depicted in the site photographs provided on Exhibits 3.1-1a through 3.1-1c and are described below.

- **View 1** on Exhibit 3.1-1a, Site Photographs: Looking southeast toward the existing building to be demolished and replaced with the proposed apartment building. This view shows construction along Dove Street in the foreground and a sidewalk, grass

View 1





View 2

Site Photographs

Exhibit 3.1-1a

1600 Dove Street Residences

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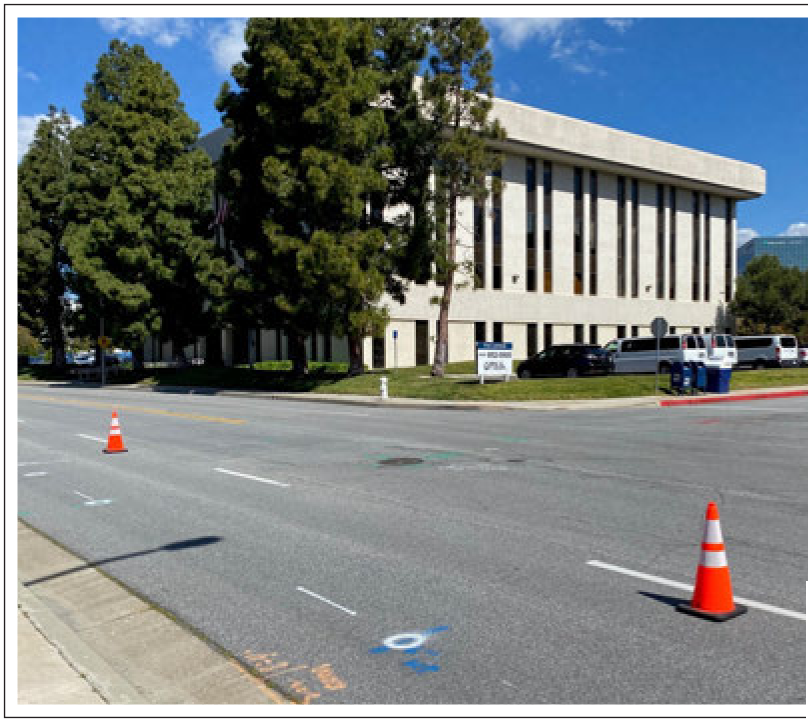
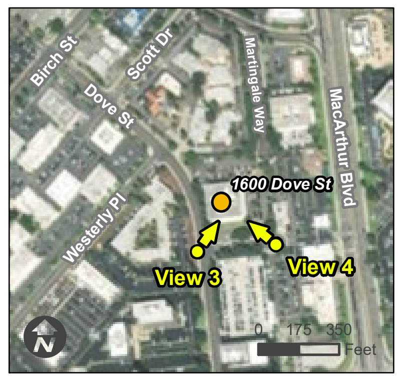


View 3



View 4

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Site Photographs

Exhibit 3.1-1b

1600 Dove Street Residences

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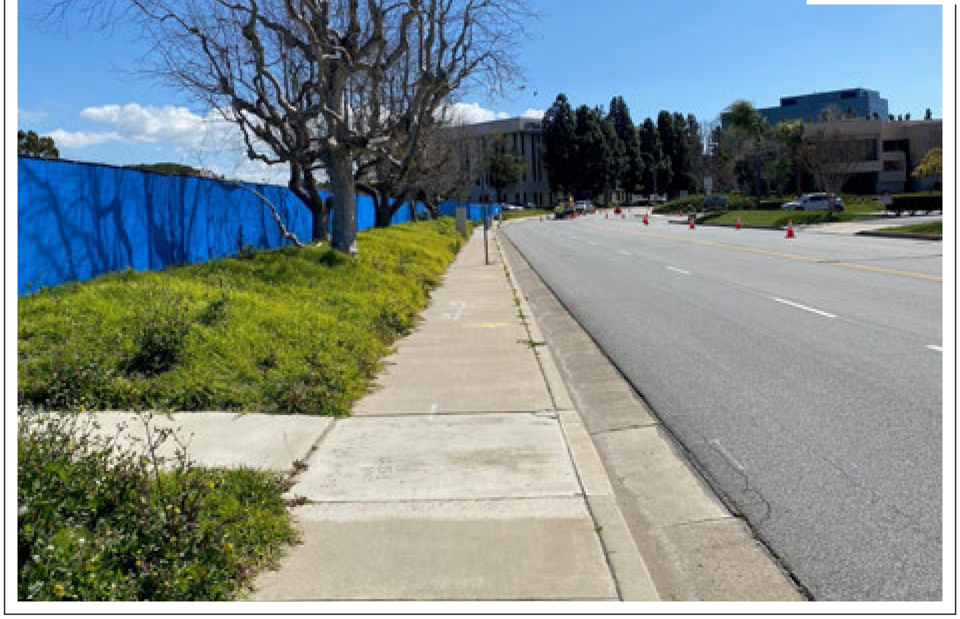
View 5



View 6

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Site Photographs

Exhibit 3.1-1c

1600 Dove Street Residences

(03/07/2023 JVR) R:\Projects\NEW\3NEW003400 - 1600 Dove Street Residences\Graphics\Addendum\ex_SP.pdf area, and mature trees in the middle ground in the left of the photograph. Additionally, a high-rise office building can be seen in the distance in the right-hand side of the photograph.

- **View 2** on Exhibit 3.1-1a, Site Photographs: Looking south toward the existing building to be demolished and replaced with the proposed apartment building. This view shows a light pole and sign for Westerly Place in the foreground, construction along Dove Street in the middle ground, and existing office buildings and a parking structure in the background. Additionally, the Newport Atrium building can be seen in the right-hand side of the photograph.
- **View 3** on Exhibit 3.1-1b, Site Photographs: Looking northeast toward the existing building to be demolished and replaced with the proposed apartment building. This view shows traffic cones and construction along Dove Street in the foreground, cars parked along Dolphin-Striker Way and the existing surface parking lot in the middle ground, and a high-rise office building in the background. Additionally, through the mature trees, a boarded-up building can be seen adjacent to the existing building to be demolished.
- **View 4** on Exhibit 3.1-1b, Site Photographs: Looking northwest toward the existing building to be demolished and replaced with the proposed apartment building. This view shows the cul-de-sac along Dolphin-Striker Drive in the foreground and mature trees and a surface parking lot can be seen in the middle ground. Additionally, a large dumpster and a boarded-up building can be seen in the right-hand side of the photograph.
- **View 5** on Exhibit 3.1-1c, Site Photographs: Looking southwest toward the existing building to be demolished and replaced with the proposed apartment building. This view shows the driveway/entrance at Martingale Way. A sidewalk lined with mature trees can be seen in the foreground. Blue fencing can be seen in the left-hand side of the photograph where construction is currently taking place. The existing surface parking lot is in the middle ground and a commercial building in the background of the photograph.
- **View 6** on Exhibit 3.1-1c, Site Photographs: Looking south along Dove Street. This view shows the existing construction along Dove Street. Commercial and office buildings can be seen in the right-hand side of the photograph. The existing building to be demolished and replaced with the proposed apartment building is in the background of the photograph, which is currently screened by mature trees lining the roadway along Dove Street.

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

No Substantial Change from Previous Analysis. The 2006 EIR states that there are no officially designated scenic vistas in the City, but many natural features, such as the ocean and bay, provide open coastal views. Particular roadways, including the Corona Del Mar Freeway, Irvine Avenue, and Jamboree Road, were identified as coastal view roads. The closest coastal view road is Jamboree Road located approximately 0.7-mile south of the Project site. However, the view from this roadway is intended to show views of the ocean to the south, and the Project site would not hinder this view, as the proposed apartment building would be north of this roadway and would not block coastal views. According to Caltrans List of Eligible and Officially Designated Scenic Highways, there are no Officially Designated State scenic highways in the City of Newport Beach. Portions of SR-1 are identified as "Eligible" for State Scenic Highway designation, including the segment of SR-1 located approximately 4.28-miles south of the Project site (Caltrans 2023). Due to intervening development and topography, no portion of the Project site is visible from SR-1 under existing or proposed conditions.

Because the Project site and its existing features are not currently visible from SR-1, the demolition and removal of existing features would have no effect on the viewshed of SR-1. When the Project is developed as proposed, the apartment building would be a compatible height to other nearby structures in the JWA subarea and has no potential to damage scenic resources visible from SR-1. As stated previously, the Project area is characterized by low rise light industrial, office, and commercial uses. As detailed in Section, 2.4, PC-11 development standards limit building heights to 55 feet. Given the constraints imposed by the street setbacks, the perimeter road, and the utilities required to serve the site, imposition of the 55-foot height limit would physically preclude the development of the proposed 282 dwelling units, as such, the building is proposed at a height of 100 feet from established grade. As such, the Project Applicant is requesting a development waiver (PC-11 Development Standards Deviation for the building height) for the Project consistent with Government Code Section 65915(e)(1). Further, because SR-1 is not an Officially Designated State scenic highway corridor and due to its significant distance from the project site, the Project would have no potential impact to scenic resources visible from a State scenic highway. Therefore, the Project would not create a new significant impact pertaining to scenic vistas that was not previously analyzed, and no new mitigation measures are required.

b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No Substantial Change from Previous Analysis. As detailed above, the 2006 EIR identified that there are no officially designated scenic highways within the City of Newport Beach or in surrounding nearby cities (Caltrans 2023). The nearest Eligible Scenic Highway is SR-1, which is designated as "Eligible for State Scenic Highway" designation and is located approximately 4.28-miles south of the Project site at its nearest point. The Project site is not currently visible from this portion of SR-1, due to distance and intervening topography and structures. Further, because SR-1 is not an Officially Designated State scenic highway corridor, the Project would have no potential impact to scenic resources visible from a State scenic highway. As such, implementation of the proposed Project would not damage scenic resources within a State scenic highway. Additionally, there are no rock outcroppings, historic buildings, or any other scenic resources at the Project site. There are ornamental trees located in landscaped areas, but the trees are not considered scenic resources. Therefore, the Project would not create a new significant impact pertaining to scenic resources, including tees, rock outcroppings, and historic buildings within a state scenic highway. No impacts would occur, that was not previously analyzed, and no new mitigation measures are required.

c) *In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

No Substantial Change from Previous Analysis. The Project site is located within an urbanized area. As such, the potential impacts under this threshold are assessed based on whether the Project would conflict with applicable zoning and other regulations governing scenic quality. The Project uses would be consistent with the PC-11 zoning designation for Newport Place, as detailed in Section 2.3, Planning Context, of this Addendum. Additionally, the 2006 EIR emphasizes that the General Plan Update would concentrate infill development and redevelopment in several specific subareas, including John Way Airport. For example, the General Plan Update states that the opportunity for housing is proposed in the Airport Area. Specifically, in the Airport Area, Policy LU 6.15.1 would provide for residential neighborhoods that are integrated to assure a quality environment and compatible land uses. Implementation of the proposed Project would represent a change to the existing visual character of the Project site. During grading and construction, construction equipment and activities would be visible from the immediately surrounding uses. However, this visual change would be temporary in nature and typical of construction sites in an urban environment.

Long-term, the Project would result in a multi-level podium apartment building and would remove the existing surface parking on-site to develop an on-grade parking garage with two and a half levels subterranean parking. While the proposed Project would alter the existing visual character of the Project site and views from surrounding vantage points, this change would not be considered a substantial degradation of the Project site or its surroundings, as discussed above. This change includes the introduction of a 100-foot-tall apartment building as opposed to 55-foot permitted height; however, as detailed previously, given the constraints, a 55-foot height limit would physically preclude the development of the proposed 282 dwelling units. Thus, to accommodate the 282 units, the proposed building height is increased to 100 feet, from established grade, based on a development waiver. Additionally, the proposed structure would be aesthetically compatible with existing surrounding uses by complying with applicable regulations governing aesthetic quality. Furthermore, the City's planning process includes the review of developments for conformance with General Plan standards, the NBMC, and as applicable, the Local Coastal Plan. While the Project will change the visual character of the site, General Plan Policy NR22.1 regulates the visual and physical mass of structures consistent with the overall character and visual scale of Newport Beach. Also, even though the visual character and scenic quality would change as development intensity increases within an urban environment, the impact would not be considered significantly adverse. Therefore, while the Project proposes a deviation from what was analyzed in the 2006 EIR, based on the above analysis, the change is not such that would create a new significant impact pertaining to visual character, requiring mitigation.

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

No Substantial Change from Previous Analysis. The Project site is located in a substantially urbanized area of the City that is already subject to ambient lighting from existing and surrounding uses. The site is developed with an office building and associated surface parking lot. Existing sources of light include streetlights, vehicle headlights, and interior and exterior lighting from existing building on site as well surrounding uses. Consistent with existing conditions in the vicinity, the proposed Project would include new exterior light sources that would generate light at levels sufficient for safety and visibility. Additionally, the Project would comply with NBMC Chapter 20.30.070 "Outdoor Lighting" which requires light to be shielded and confined within the site boundaries to prevent spillage, though no sensitive receptors are adjacent to the site. Since the Project site and surrounding areas are largely developed, the lighting associated with the proposed Project would not substantially increase light and glare within the site or surroundings. With compliance with General Plan policies and NBMC 20.30.070, potential impacts would be less than significant. Additionally, regarding glare, the proposed structure would be constructed with non-reflective materials and textured surface on the exteriors in compliance with General Plan Policy LU 5.6.2. Therefore, the Project would not create new significant impacts pertaining to daytime or nighttime lighting and glare that were not previously analyzed, and no mitigation is required.

Standard Conditions and Requirements

SC AES-1 The following City-adopted standard operating conditions of approval would be made conditions of the Site Development Review and would apply to the Project as follows:

a. Lighting shall be in compliance with applicable standards of the Zoning Code. Exterior on-site lighting shall be shielded and confined within site boundaries. No direct rays or glare are permitted to shine onto public streets or adjacent sites or create a public nuisance. "Walpak" type fixtures are not permitted. Parking area lighting shall have zero-cut-off fixtures and light standards shall be the minimum height required to effectively illuminate the parking area and eliminate spillover of light and glare to the adjacent property.

b. The site shall not be excessively illuminated based on the luminance recommendations of the Illuminating Engineering Society of North America, or, if in the opinion of the Community Development Director, the illumination creates an unacceptable negative impact on surrounding land uses or environmental resources. The Community Development Director may order the dimming of light sources or other remediation upon finding that the site is excessively illuminated.

c. Public areas shall be illuminated with a minimum maintained 0.5-foot candle on the driving or walking surface during hours of operation and one hour thereafter.

d. Prior to the issuance of a building permit, the Applicant shall prepare a photometric study in conjunction with a final lighting plan for approval by the Community Development Department.

e. Prior to issuance of the certificate of occupancy or of final building permits, the Applicant shall schedule an evening inspection by the Code and Water Quality Enforcement Division to confirm control of light and glare specified in conditions of approval.

Conclusion

The aesthetics impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the aesthetics analysis provided in the 2006 EIR are required.

3.2 AGRICULTURE AND FORESTRY RESOURCES

3.2.1 2006 EIR

The 2006 EIR identified that the topic of Agricultural Resources was focused out because the City contains no designated farmland by the California Department of Conservation, Farmland Mapping Program, no land designated Farmland would be converted to non-agricultural use as a result of implementation of the 2006 General Plan Update; no sites in the City are zoned for agricultural use; and no sites would be affected by a Williamson Act contract. Therefore, as detailed in the Initial Study (Appendix A of the 2006 EIR), the General Plan Update would result in no impacts pertaining to agriculture resources.

MITIGATION PROGRAM

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. No relevant policies were identified for this topic.

3.2.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
AGRICULTURE AND FORESTRY RESOURCES – Would the project:				
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?	☐	☐	☐	☑

Would the project:

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?***

No Substantial Change from Previous Analysis. The 2006 EIR determined that there would be no impacts related to conversion of Farmland with implementation of the 2006 General Plan Update. Consistent with the findings of the 2006 EIR, there are no designated Farmlands within or near the Project site. No farmland conversion or impacts to agricultural uses would occur with implementation of the proposed Project. The Project would not create a new significant impact on agricultural resources, and no mitigation measures are required.

b) ***Conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Substantial Change from Previous Analysis. The 2006 EIR determined that there would be no impact related to conflict with existing zoning for agricultural use or a Williamson Act contract with implementation of the 2006 General Plan Update. Consistent with the findings of the 2006 EIR, there are no agricultural activities within or near the Project site. Also, the Project area is not zoned for agricultural use, and there are no Williamson Act Contracts. No impacts to agricultural uses would occur with implementation of the proposed Project. The proposed Project would not create a new significant impact on agricultural resources, and no mitigation measures are required.

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])?***

No Substantial Change from Previous Analysis. At the time of approval of the 2006 EIR, rezoning of forest land, timberland, or timberland zoned Timberland Production was not a CEQA Appendix G threshold question. However, no forest land occurs on the site or within the area, and no rezoning of forest land or timberland zoned Timberland Production is proposed as part of the Project. The proposed Project would not create a new significant impact on forest land, and no mitigation measures are required.

d) ***Result in the loss of forest land or conversion of forest land to non-forest use?***

No Substantial Change from Previous Analysis. At the time of approval of the 2006 EIR, loss of forest land or conversion of forest land to non-forest use was not a CEQA Appendix G threshold question. However, no loss of forest land or conversion of forest land to non-forest use is proposed as part of the Project. The proposed Project would not create a new significant impact on forest land, and no mitigation measures are required.

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?

No Substantial Change from Previous Analysis. Consistent with the findings of the 2006 EIR, no conversion of Farmland to a non-agricultural use is proposed as part of the Project. Additionally, there would be no conversion of forest land to a non-forest use with the proposed Project. Therefore, the proposed Project would not create a new significant impact on conversion of Farmland or forest land, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Agriculture and Forestry Resources have been identified for the proposed Project.

Conclusion

The agriculture and forestry resources impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no substantial changes to the agriculture and forestry resources analysis provided in the 2006 EIR are required.

3.3 AIR QUALITY

3.3.1 2006 EIR

The 2006 EIR referenced the South Coast Air Quality Management District's (SCAQMD's) 2003 Air Quality Management Plan (AQMP) to determine if implementation of the General Plan would conflict with or obstruct implementation of an applicable air quality plan. The 2006 EIR found that the General Plan would be consistent with the 2003 AQMP goal to reduce vehicle miles traveled (VMT); however, the 2006 EIR concluded that since the AQMP growth projections are based on Southern California Association of Government (SCAG) population levels, the increase in population growth associated with the General Plan would not have been accounted for in the AQMP. Specifically, the General Plan estimated a net increase of 14,215 residential units and a population increase of approximately 31,131 residents, resulting in a total population of 103,753 persons at General Plan buildout. The SCAG projected population for Newport Beach was 94,167 by 2030. This represents a 43 percent increase in population over prior SCAG assumptions for the City. As such, the 2006 EIR found that implementation of the General Plan would not be consistent with the AQMP. As such, the 2006 EIR identified this inconsistency as a significant and unavoidable impact.

As discussed in the 2006 EIR, implementation of the General Plan would result in new emissions generated by construction activities. The 2006 EIR determined that some projects that would be implemented under the General Plan could individually exceed the SCAQMD thresholds and that the total amount of construction assumed in the General Plan could also exceed the SCAQMD's thresholds of significance. The 2006 EIR identified General Plan Policies NR 8.1 through NR 8.5 to reduce air pollutant emissions from construction activities, which call for the maintenance of construction equipment, the use of non-polluting and non-toxic building equipment, and minimizing fugitive dust. However, the 2006 EIR found that the impact would remain significant and unavoidable.

In addition, the 2006 EIR determined that the General Plan Update may not meet the performance standard for annual emissions reductions and could result in a cumulatively considerable net increase of one or more criteria pollutants for which the Project region is in nonattainment under an applicable federal or State ambient air quality standard, and this impact would be significant and unavoidable. Motor vehicles, and traffic-congested roadways and intersections are the primary source of high localized CO concentrations. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO "hotspots." Based on the General Plan-related traffic, the 2006 EIR determined that implementation of the General Plan Update would not expose existing or future sensitive uses within the City to substantial CO concentrations. This impact was found to be less than significant.

Consumer products and diesel particulate matter (DPM) and other sources of Toxic Air Contaminants (TACs) were not addressed at the General Plan Level.

The 2006 EIR concluded that construction-related odors are limited to the number of people living and working near the source, and due to the temporary nature of such odors, impacts were considered less than significant. In addition, the 2006 EIR found that trash receptacles would be stored in areas and in containers, as required by City and Health Department regulations, and would be emptied on a regular basis, before potentially substantial odors have a chance to develop. As such, the 2006 EIR found that General Plan implementation would not create objectionable odors affecting a substantial number of people within the City, and potential impacts would be less than significant.

The 2006 EIR found that growth under the General Plan is inconsistent with growth under the 2003 AQMP; therefore, the impact of the General Plan is cumulatively considerable. This was considered a significant impact. In addition, the 2006 EIR determined that the General Plan Update would have the potential to contribute to a cumulatively considerable net increase of a criteria as the contribution of daily construction and operational emissions from the proposed project could be cumulatively considerable. This cumulative impact was considered to be significant. The 2006 EIR also found that cumulative development is not expected to expose sensitive receptors to substantial pollutant concentrations. Therefore, the Project's contribution to the impact was considered less than cumulatively considerable, and the cumulative impact would be less than significant. Lastly, the General Plan EIR determined that cumulative development would not have a potentially significant impact in terms of the creation of objectionable odors affecting a substantial number of people. Cumulative odor impacts would thus be less than significant.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **NR 6.1 – Walkable Neighborhoods:** Provide for walkable neighborhoods to reduce vehicle trips by siting amenities such as services, parks, and schools in close proximity to residential areas.
- **NR 6.2 – Mixed-Use Development:** Support mixed-use development consisting of commercial or office with residential uses in accordance with the Land Use Element that increases the opportunity for residents to live in proximity to jobs, services, and entertainment.
- **NR 7.1 – Fuel Efficient Equipment:** Support the use of fuel efficient heating equipment and other appliances.
- **NR 7.2 – Source Emission Reduction Best Management Practices:** Require the use of Best Management Practices (BMP) to minimize pollution and to reduce source emissions.
- **NR 8.1 – Management of Construction Activities to Reduce Air Pollution:** Require developers to use and operate construction equipment, use building materials and paints, and control dust created by construction activities to minimize air pollutants.
- **NR 24.2 – Energy-Efficient Design Features:** Promote energy-efficient design features.
- **NR 24.3 – Incentives for Green Building Program Implementation:** Promote or provide incentives for "Green Building" programs that go beyond the requirements of

Title 24 of the California Administrative Code and encourage energy-efficient design elements as appropriate to achieve "green building" status.

3.3.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	**New Significant Impact**	**More Severe Impacts**	**New Ability to Substantially Reduce Significant Impact**	**No Substantial Change From Previous Analysis**
AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) 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.	☐	☐	☐	☑
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☑
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☑

Air Quality Background

The SCAQMD has established quantitative thresholds for short-term (construction) emissions and long-term (operational) emissions for the following criteria pollutants: ozone, carbon monoxide, nitrogen oxides, sulfur dioxide, and particulate matter 10 and 2.5 microns. The characteristics and health effects of these criteria pollutants are described below:

- Ozone (O_3) is a nearly colorless gas that is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight). Ground-level O_3 exposure can cause a variety of health problems, including lung irritation, wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities; permanent lung damage; aggravated asthma; and increased susceptibility to respiratory illnesses.
- Carbon monoxide (CO) is a colorless and odorless toxic gas which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions.
- Nitrogen oxides (NO_x) are yellowish-brown gases, which at high levels can cause breathing difficulties. NO_x are formed when nitric oxide (NO—a pollutant from internal combustion processes) combines with oxygen.

- Sulfur dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children.
- Particulate Matter 10 (PM10) and Particulate Matter 2.5 (PM2.5) refer to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation. Particulate matter includes both aerosols and solid particles. An example of particulate matter is fugitive dust. Short-term exposure to high PM2.5 levels is associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure to high PM2.5 levels is associated with premature mortality and development of chronic respiratory disease. Short-term exposure to high PM10 levels is associated with hospital admissions for cardiopulmonary diseases, increased respiratory symptoms, and possible premature mortality.
- Lead. Leaded gasoline (phased out in the United States beginning in 1973), paint (on older houses and cars), smelters (metal refineries), and the manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has multiple adverse neurotoxic health effects, and children are at special risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California.
- Volatile Organic Compounds (VOCs) (also known as reactive organic gases [ROGs] and reactive organic compounds [ROCs]) are formed from the combustion of fuels and the evaporation of organic solvents. VOCs are not defined as criteria pollutants, however, because VOCs accumulate in the atmosphere more quickly during the winter, when sunlight is limited and photochemical reactions are slower, they are a prime component of the photochemical smog reaction. There are no attainment designations for VOCs.
- Toxic Air Contaminants (TACs). In addition to the criteria pollutants discussed above, TACs are another group of pollutants of concern. TACs are injurious in small quantities and are regulated by the USEPA and California Air Resources Board (CARB). Some examples of TACs include benzene, butadiene, formaldehyde, and hydrogen sulfide. The identification, regulation, and monitoring of TACs is relatively recent compared to that for criteria pollutants. TACs do not have ambient air quality standards, but are regulated by the USEPA, CARB, and the SCAQMD. In 1998, CARB identified particulate matter from diesel-fueled engines as a TAC. CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines. High-volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic (e.g., distribution centers and truck stops) were identified as posing the highest risk to adjacent receptors. Other facilities associated with increased risk include warehouse distribution centers, large retail or industrial facilities, high-volume transit centers, and schools with a high volume of bus traffic. Health risks from TACs are a function of both concentration and duration of exposure. Unlike TACs emitted from industrial

> and other stationary sources noted above, most DPM is emitted from mobile sources—primarily "off-road" sources such as construction and mining equipment, agricultural equipment, and truck-mounted refrigeration units, as well as "on-road" sources such as trucks and buses traveling on freeways and local roadways.

The SCAQMD regulates air quality in Orange County and is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SoCAB). The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary. The SCAQMD is directly responsible for reducing emissions from stationery (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of AQMPs.

The SCAQMD adopted the 2022 AQMP on December 2, 2022 (SCAQMD 2022). The 2022 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and Southern California Association of Government's (SCAG) latest growth forecasts. The main purpose of an AQMP is to bring an area into compliance with the requirements of federal and State air quality standards. For a project to be consistent with the AQMP, the pollutants emitted from the Project should not (1) exceed the SCAQMD CEQA air quality significance thresholds or (2) conflict with or exceed the assumptions in the AQMP.

In order to be consistent with the AQMP, the Modified Project's construction and operational emissions are compared with the SCAQMD CEQA air quality significance thresholds, as detailed later in this analysis. A Project may have a significant impact where project-related emissions would exceed federal, State, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The SCAQMD has developed construction and operations thresholds to determine whether projects would potentially result in contributing toward a violation of ambient air quality standards. The SCAQMD recommends that projects be evaluated in terms of the quantitative thresholds established to assess both the regional and localized impacts of project-related air pollutant emissions. The City of Newport Beach uses the current SCAQMD thresholds, detailed in Table 3-1, South Coast Air Quality Management District Air Quality Significance Thresholds, to determine whether a Project would have a significant impact.

TABLE 3-1
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AIR QUALITY SIGNIFICANCE THRESHOLDS

Mass Daily Thresholds (lbs/day)		
Pollutant	**Construction**	**Operation**
VOC	75	55
NOx	100	55
CO	550	550
PM10	150	150
PM2.5	55	55
SOx	150	150
Lead	3	3

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SOx: sulfur oxides.

Source: SCAQMD 2019.

Regulatory Background

The U.S. Environmental Protection Agency (USEPA) defines seven "criteria" air pollutants, as described above. These pollutants are called criteria pollutants because the USEPA has established National Ambient Air Quality Standards (NAAQS) for the concentrations of these pollutants (USEPA 2014). The CARB has also established standards for the criteria pollutants, known as California Ambient Air Quality Standards (CAAQS), and the State standards are generally more restrictive than the NAAQS. When a region has air quality that fails to meet the standards, the USEPA and the CARB designate the region as "nonattainment", and the regional air quality agency must develop plans to attain the standards.

Based on monitored air pollutant concentrations, the USEPA and CARB designate an area's status in attaining the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS), respectively, for selected criteria pollutants. These attainment designations for the SoCAB are shown in Table 3-2. As shown, the SoCAB is a nonattainment area for PM10 (State), PM2.5 (State and federal), and O_3 (State and federal).

TABLE 3-2
ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN

Pollutant	State	Federal
O_3 (1 hour)	Nonattainment	No Standards
O_3 (8 hour)	Nonattainment	Extreme Nonattainment
PM10	Nonattainment	Attainment/Maintenance
PM2.5	Nonattainment	Serious Nonattainment
CO	Attainment	Attainment/Maintenance
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	No Standard	Attainment/Nonattainment*
All others	Attainment/Unclassified	No Standards

O_3: ozone; PM10: particulate matter 10 microns or less in diameter; PM2.5: particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; NO_2: nitrogen dioxide; SO_2: sulfur dioxide.

* The Los Angeles County portion of the SoCAB is designated nonattainment for lead; the remainder of the SoCAB is designated attainment.

Source: SCAQMD 2017; USEPA 2022.

CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for coordinating and administering both the federal and State air pollution control programs in California. In this capacity, CARB conducts research, sets the CAAQS (as shown in Table 3-3, California and Federal Ambient Air Quality Standards), compiles emission inventories, develops suggested control measures, oversees local programs, and prepares the State Implementation Plan (SIP). For regions that do not attain the CAAQS, CARB requires the air districts to prepare plans for attaining the standards. These plans are then integrated into the SIP. CARB establishes emissions standards for (1) motor vehicles sold in California, (2) consumer products (e.g., hair spray, aerosol paints, barbecue lighter fluid), and (3) various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

Ozone (O_3) is a secondary pollutant and is created when NO_x and VOCs react in the presence of sunlight. The predominant source of air emissions generated by Project development would be from vehicle emissions. Motor vehicles primarily emit CO, NOx, and VOCs. The NAAQS and CAAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. The NAAQS and CAAQS for O_3, CO, NO_2, SO_2, PM10, PM2.5, and lead are shown in Table 3-3.

TABLE 3-3
CALIFORNIA AND FEDERAL AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary[a]	**Secondary[b]**
O_3	1 Hour	0.09 ppm (180 μg/m^3)	–	–
	8 Hour	0.070 ppm (137 μg/m^3)	0.070 ppm (137 μg/m^3)	Same as Primary
PM10	24 Hour	50 μg/m^3	150 μg/m^3	Same as Primary
	AAM	20 μg/m^3	–	Same as Primary
PM2.5	24 Hour	–	35 μg/m^3	Same as Primary
	AAM	12 μg/m^3	12.0 μg/m^3	15.0 μg/m^3
CO	1 Hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	–
	8 Hour	9.0 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)	–	–
NO_2	AAM	0.030 ppm (57 μg/m^3)	0.053 ppm (100 μg/m^3)	Same as Primary
	1 Hour	0.18 ppm (339 μg/m^3)	0.100 ppm (188 μg/m^3)	–
SO_2	24 Hour	0.04 ppm (105 μg/m^3)	–	–
	3 Hour	–	–	0.5 ppm (1,300 μg/m^3)
	1 Hour	0.25 ppm (655 μg/m^3)	0.075 ppm (196 μg/m^3)	–
Lead	30-day Avg.	1.5 μg/m^3	–	–
	Calendar Quarter	–	1.5 μg/m^3	Same as Primary
	Rolling 3-month Avg.	–	0.15 μg/m^3	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	**No Federal Standards**	
Sulfates	24 Hour	25 μg/m^3		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m^3)		
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m^3)		

O_3: ozone; ppm: parts per million; μg/m^3: micrograms per cubic meter; PM10: respirable particulate matter 10 microns or less in diameter; AAM: Annual Arithmetic Mean; –: No Standard; PM2.5: fine particulate matter 2.5 microns or less in diameter; CO: carbon monoxide; mg/m^3: milligrams per cubic meter; NO_2: nitrogen dioxide; SO_2: sulfur dioxide; km: kilometer.

[a] *National Primary Standards:* The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

[b] *National Secondary Standards:* The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information in the data presented in this table can be found at the CARB website (www.arb.ca.gov).

Source: CARB 2016.

Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Substantial Change from Previous Analysis. Air pollutant emissions associated with the Project would occur over the short term from construction activities and over the long term from operational activities associated with the proposed Project.

CEQA requires a discussion of any inconsistencies between a project and applicable General Plans (GPs) and regional plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed Project includes the SCAQMD's AQMP, as discussed above. A project is considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. Whether the project will exceed the assumptions in the AQMP, or increments based on the year of project buildout and phase.

Both criteria are evaluated for the Project, as shown below.

With respect to determining the proposed Project consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's RTP/SCS regarding population, housing, and growth trends. According to SCAG's 2020—2045 RTP/SCS, the City's population, households, and employment are forecast to increase by approximately 7,100 residents, 2,900 households, and 1,500 jobs, respectively, between 2016 and 2045 (SCAG 2020). The proposed Project would convert 60,675 sf of office building to 282 residential units and associated amenities and parking. The proposed Project would result in an increase of 742 residents (10.5 percent of SCAG's projected population growth for the City from 2016 to 2045 of 7,100 residents) and 282 residential units (8.6 percent of SCAG's projected household growth for the County from 2016 to 2045 of 2,900 households). Therefore, additional units from the Project would not interfere with SCAQMD's goals for improving air quality in the region because the Project would house growth that SCAQMD already projected for the City. Therefore, the Project would not conflict with the 2022 AQMP and, as such, would not jeopardize attainment of the CAAQS and NAAQS in the area under the jurisdiction of the SCAQMD.

Furthermore, as shown in Tables 3-4 and 3-5 below, construction and operation of the Project would not result in an exceedance of the SCAQMD's thresholds for criteria pollutants; therefore, the Project is not expected to result in a violation of air quality standards. Due to these factors, it can be concluded that the proposed Project would be consistent with the projections in the AQMP. Therefore, the Project would not lead to new or substantially more severe significant impacts associated with clean air consistency beyond those identified in the 2006 EIR. Therefore, the Project would not create a new significant impact pertaining to obstruction of an air quality plan that was not previously analyzed, and no new mitigation measures are required.

b) 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?

No Substantial Change from Previous Analysis. The following analysis describes the Project's construction- and operation-related air quality impacts. As explained in the following pages, the Project would result in less-than-significant construction and operational air quality impacts.

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by demolition, grading, paving, building, and other construction related activities. Emissions from construction equipment are also anticipated and would include CO, NOx, VOC, directly emitted particulate matter (PM2.5 and PM10), and TACs such as diesel exhaust particulate matter. If not properly controlled, construction activities, identified above, would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the Applicant to implement measures that would reduce the amount of particulate matter generated during the construction period. In addition to dust related PM10 emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO2, NOx, VOCs, and some soot particulate (PM2.5 and PM10) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles idle in traffic. However, these emissions would be temporary in nature and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the Project using California Emissions Estimator Model version 2022.1.1.0 (CalEEMod) computer program. The proposed Project would require the demolition of the existing on-site buildings and associated surface parking lot, which was included in CalEEMod. Construction-related emissions are presented in Table 3-4, Project Construction Emissions. CalEEMod outputs are included in Appendix A of this Addendum.

TABLE 3-4
MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Project Construction Year	Emissions (lbs/day)					
	VOC	NO_x	CO	SO_x	PM10	PM2.5
2026	6	60	53	<1	14	7
2027	19	13	32	<1	6	2
2028	3	18	36	<1	5	2
Maximum	**19**	**60**	**53**	**<1**	**14**	**7**
SCAQMD Significance Thresholds (Table 3-1)	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District; -- data not provided.

Note: Maximum emissions of VOC and CO occurred during the overlapping building construction and architectural coating phases.

Source: SCAQMD 2023 (thresholds); See Appendix A for CalEEMod outputs.

As shown in Table 3-4, construction emissions associated with the Project would not exceed the SCAQMD thresholds for VOC, NOx, CO, sulfur oxides (SO_X), PM2.5, or PM10 emissions. In addition to the construction period thresholds of significance, the Project is required to comply with regional rules that assist in reducing short-term air pollutant emissions. SCAQMD Rule 403 requires that fugitive dust be controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. With compliance with Rule 403, construction of the proposed Project would not result in emissions that would result in a cumulatively considerable net increase of any criteria pollutant for which the Project regional is nonattainment under an applicable federal or State ambient air quality standard. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with construction-related air quality beyond those identified in the 2006 EIR.

Operations

Long-term air pollutant emission impacts are those typically associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), and stationary sources (e.g., diesel emergency backup generator) related to the Project. PM10 emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM10 occurs when vehicle tires pulverize small rocks and pavement, and the vehicle wakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel powered vehicles.

Energy source emissions result from activities in buildings for which electricity and natural gas are used. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. The primary sources of energy demand for the proposed Project would include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as refrigerators or computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than conventional sources. Typically, area source emissions consist of direct sources of air emissions located at the Project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the Project would include emissions from the use of architectural coatings, consumer products, and landscaping equipment. The residential units would not include wood-burning hearths. The proposed Project would also generate stationary source emissions associated with use of the diesel emergency backup generator. Long-term operation emissions associated with the proposed Project were calculated using CalEEMod. Model results are shown in Table 3-5, Project Operational Emissions, below. CalEEMod outputs are included in Appendix A of this Addendum.

TABLE 3-5
PROJECT MAXIMUM OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	**NOx**	**CO**	**SOx**	**PM10**	**PM2.5**
Existing Emissions						
Mobile	2	1	17	<1	2	<1
Area	2	<1	3	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Total	4	2	20	<1	2	<1
Project Operational Emissions						
Mobile	4	3	38	<1	11	3
Area	9	<1	25	<1	<1	<1
Energy	<1	1	<1	<1	<1	<1
Total	9	3	38	<1	11	3
Net Project Emissions	5	1	18	<1	9	2
SCAQMD Significance Thresholds (Table 3-1)	*55*	*55*	*550*	*150*	*150*	*55*
Significant Impact?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day: pounds per day; VOC: volatile organic compound; NOx: nitrogen oxides; CO: carbon monoxide; SOx: sulfur oxides; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

Source: SCAQMD 2019 (thresholds); see Appendix A for CalEEMod outputs.

The results shown in Table 3-5 indicate the Project would not exceed the significance criteria for VOC, NOx, CO, SOx, PM10, or PM2.5 emissions; thus, it would not have a significant effect on regional air quality. Therefore, operation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project regional is nonattainment under an applicable federal or State ambient air quality standard. As a result, the proposed Project would not lead to new or substantially more severe significant impacts associated with operation-related air quality beyond those identified in the 2006 EIR. Therefore, the Project would not create a new significant impact pertaining to cumulatively considerable air quality emissions that was not previously analyzed, and no new mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Substantial Change from Previous Analysis. A significant impact would occur when a Project generates pollutant concentrations to a degree that would significantly affect sensitive receptors, which include populations that are more susceptible to the effects of air pollution than the population at large.

For the purposes of this analysis, sensitive receptors are areas of population that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include residences, schools, day care centers, hospitals, parks, and similar uses, which are sensitive to air quality. Impacts on sensitive receptors are of particular concern because they are the population most vulnerable to the effects of air pollution. The closest sensitive receptors to the Project site include multifamily residential units located approximately 1,775 feet to the southeast. However, to provide a conservative analysis the shortest LST analysis distance of 25 meters (82 feet) or closer was selected for the significance thresholds.

Project construction and operational emissions were compared to the LST screening tables in Source Receptor Area (SRA) 20. The results of the construction phase LST analysis, summarized in Table 3-6, Localized Construction Emissions, indicate that the Project would not result in an exceedance of the SCAQMD LSTs during Project construction. Table 3-7, Localized Operational Emissions shows that emissions at the Project site would also be below the LSTs. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with localized air quality beyond those identified in the 2006 EIR.

TABLE 3-6
LOCALIZED CONSTRUCTION EMISSIONS (LBS/DAY)

Project Onsite Emissions	**NO_X**	**CO**	**PM10**	**PM2.5**
Maximum Daily Construction Emissions	29	29	6	4
SCAQMD LST[a]	153	1,212	9	6
Exceeds Thresholds	***No***	***No***	***No***	***No***

lbs/day: pounds per day; NO_X: nitrogen oxides; CO: carbon monoxide; SCAQMD: South Coast Air Quality Management District; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; LST: Localized Significance Threshold.

[a] Construction Thresholds for Source Receptor Area 20, Central Coastal Orange County for a 3-acre disturbance area, 25-meter receptor distance (SCAQMD 2022).

Source: Psomas 2023, Appendix A, CalEEMod Outputs.

Construction of the proposed Project may expose surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD rules for standard construction practices. The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short, and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with chronic exposure periods of 9, 30, and 70 years, which do not correlate with the temporary and highly variable nature of construction activities. Construction would be subject to and would comply with California Code of Regulations (e.g., CCR Title 13, Division 3, Article 1, Chapter 10, Sections 2485 and 2449), which reduce DPM and criteria pollutant emissions from in-use off-road diesel-fueled vehicles and limit the idling of heavy-duty construction equipment to no more than five minutes. These regulations further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions.

As shown in Table 3-6 above, the Project would not result in significant localized emissions during Project construction. In addition, as discussed above, given the extremely low level of CO concentrations in the Project area and lack of traffic impacts at any intersections, project-related vehicles are not expected to contribute significantly to, or result in CO concentrations exceeding the State or federal CO standards. Therefore, once the Project is constructed, the Project would not be a source of substantial pollutant emissions and sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction and operation. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts to nearby sensitive receptors beyond those identified in the 2006 EIR.

Localized Criteria Pollutants from On-Site Operations

Project-related air emissions may have the potential to exceed the State and federal air quality standards in the vicinity of the Project site even though these pollutant emissions may not be significant enough to create a regional impact to the SoCAB. Project related on-site operations were analyzed using the SCAQMD's Mass Rate LST Look-up Tables and the

LST Methodology. Table 3-7, Localized Operational Emissions, shows the on-site operational emissions from area sources, energy usage, vehicles operating on-site, and the calculated emissions thresholds.

TABLE 3-7
LOCALIZED OPERATIONAL EMISSIONS

On-Site Emission Source	**Pollutant Emissions (lbs/day)**			
	NOx	**CO**	**PM10**	**PM2.5**
Area Sources	<1	25	<1	<1
Energy Sources	1	<1	<1	<1
Mobile Sources[a]	<1	2	1	<1
Project's total maximum daily on-site emissions	**1**	**27**	**1**	**<1**
SCAQMD Localized Significance Threshold[b]	**153**	**1,212**	**3**	**2**
Exceeds Threshold?	**No**	**No**	**No**	**No**

lbs/day: pounds per day; NOx: nitrogen oxides; CO: carbon monoxide; PM10: respirable particulate matter 10 microns or less in diameter; PM2.5: fine particulate matter 2.5 microns or less in diameter; SCAQMD: South Coast Air Quality Management District.

[a] Onsite vehicle emissions based on 5% of the gross vehicular emissions, which is the estimated portion of vehicle emissions occurring within a quarter mile of the Project Site.

[b] SCAQMD Source Receptor Area 20, Central Coastal Orange County, 25-meter distance, 3 acres.

Source: SCAQMD 2009a (thresholds) and Appendix A, Air Quality and Greenhouse Gas Emissions CalEEMod outputs.

The data provided in Table 3-7, above, show that the ongoing operations of the Project would not exceed the local NOx, CO, PM10, and PM2.5 thresholds of significance. Therefore, operation of the Project would result in a less than significant impact related to this threshold, and no mitigation is required.

Carbon Monoxide Hotspot

Vehicular trips contribute to congestion at intersections and along roadway segments. Localized air quality impacts would occur when emissions from vehicular traffic increase as a result of a proposed project. The primary mobile-source pollutant of local concern is CO, a direct function of vehicle idling time and, thus, of traffic flow conditions. CO transport is extremely limited; under normal meteorological conditions, CO disperses rapidly with distance from the source. However, under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels, affecting local sensitive receptors (e.g., residents, schoolchildren, the elderly, and hospital patients). Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended to determine a project's effect on local CO levels. An assessment of project-related impacts on localized ambient air quality requires that future ambient air quality levels be projected.

Existing CO concentrations in the immediate Project vicinity are not available. Ambient CO levels are being discontinued at numerous locations due to low measured concentrations related improvements in vehicle exhaust control technology. The nearest monitoring station at Saddleback Valley showed a highest recorded 1-hour concentration of 1.7 ppm (the State standard is 20 ppm) and a highest 8-hour concentration of 0.8 ppm (the State standard is 9 ppm) during the past 3 years of published measurements. The highest CO concentrations would normally occur during peak traffic hours; hence, CO impacts calculated under peak traffic conditions represent a worst-case analysis. As described in the Traffic Impact Analysis prepared for the Project (Appendix G of this Addendum), the proposed Project would generate 12 additional AM peak hour trips and 22 additional PM peak-hour trips. Therefore, given the extremely low level of CO concentrations in the Project area, and lack of traffic impacts at any intersections, Project-related vehicles are not expected to contribute significantly to CO concentrations exceeding the State or federal CO standards. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with CO hot spots beyond those identified in the 2006 EIR.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Substantial Change from Previous Analysis. During Project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. The proposed Project would not include any activities or operations that would generate objectionable odors and once operational, the Project would not be a source of odors. Therefore, the proposed Project would not result in other emissions (such as those leading to odors) affecting a substantial number of people. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts related to odors beyond those identified in the 2006 EIR. Therefore, the Project would not create a new significant impact pertaining to other emissions that was not previously analyzed, and no new mitigation measures are required.

Standard Conditions and Requirements

SC AQ-1 **Dust Control.** During construction, the Applicant shall require all construction contractors to comply with South Coast Air Quality Management District's (SCAQMD's) Rules 402 and 403 in order to minimize construction emissions of dust and particulates. SCAQMD Rule 402 requires that air pollutant emissions not be a nuisance off-site. Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 requires that fugitive dust be controlled with Best Available Control Measures so that the presence of such dust does not remain visible beyond the property line of the emission source. This rule is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. This requirement shall be included as notes on the contractor specifications. Table 1 of Rule 403 lists the Best Available Control Measures that are applicable to all construction projects. The measures include, but are not limited to, the following:

a. Portions of a construction site to remain inactive longer than a period of three months shall be seeded and watered until grass cover is grown or otherwise stabilized.
b. All on-site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.
c. All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
d. The area disturbed by clearing, grading, earthmoving, or excavation operations shall be minimized at all times.
e. Where vehicles leave a construction site and enter adjacent public streets, the streets shall be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.

SC AQ-2 **Architectural Coatings.** South Coast Air Quality Management District (SCQMQD) Rule 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gas (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. Architectural coatings shall be selected so that the volatile organic compound (VOC) content of the coatings is compliant with SCAQMD Rule 1113. This requirement shall be included as notes on contractor specifications.

Conclusions

The air quality impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the air quality analysis provided in the 2006 EIR are required.

3.4 BIOLOGICAL RESOURCES

3.4.1 2006 EIR

The 2006 EIR identified Citywide biological resources, including habitat types; sensitive biological resources, special status species; marine resources; and sensitive marine sources. Development could also result in the removal of mature trees that may serve as perching or nesting sites for migratory birds and raptors in both developed and undeveloped areas. Federal and State regulations, including the Migratory Bird Treaty Act, Federal Endangered Species Act, and California Endangered Species Act, restrict activities that may result in the "take" (e.g., kill, harm, harass, etc.) of certain species, including their active nests. The 2006 EIR determined that compliance with these policies and federal and State laws would mitigate potential impacts to a less than significant level.

The 2006 EIR noted several General Plan goals, which would protect wetlands and riparian vegetation. The General Plan policies would serve to regulate indirect impacts future development could have on riparian habitats. Therefore, the impacts associated with riparian habitats were determined to be less than significant.

The 2006 EIR identified several wetland habitats along the coast of Newport Beach between the Santa Ana River and the boundary between the City and unincorporated Orange County. The 2006 EIR noted that development would be confined to previously developed areas and would not be located near wetland areas. Adherence to the identified State and federal laws and regulations would result in less than significant impacts on jurisdictional waters and wetlands.

The 2006 EIR found that there would be no impact to wildlife nursery sites and corridors with implementation of the policies outlined in the General Plan Update. Additionally, the 2006 EIR determined that implementation of the General Plan Update would not conflict with the provisions of an adopted Habitat Conservation Plan.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. No relevant policies were identified for this topic.

3.4.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
BIOLOGICAL RESOURCES – Would the project:				
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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
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 Game or US Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on state or federally protected wetlands (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?	☐	☐	☐	☑

Would the Project:

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?

No Substantial Change from Previous Analysis. The Project site is fully developed, and no special-status plants or native plant communities occur within the Project site boundaries. No special-status plant species were considered to have any potential to occur since the Project site is completely developed with hardscape, structures, and ornamental landscaping. Therefore, no impact related to a substantial adverse effect on any plant species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS) would occur with Project implementation. No mitigation for special status plants is required.

With regard to redevelopment or infill projects in existing developed areas in the City, the 2006 EIR anticipated that "the proposed General Plan Update would allow infill development throughout the Planning Area, following existing land use patterns. The Update would concentrate new development and redevelopment in several specified subareas: Newport Center/Fashion Island, Balboa Village, Balboa Peninsula, West Newport Mesa, West Newport Highway, Mariners' Mile, and the Airport Area." The same section also made clear that "implementation of Policies NR 10.1 and NR 10.2 would ensure that all future development cooperate with federal, State, and private resource protection agencies/organizations..." and further acknowledged that "implementation of the proposed General Plan Update would be subject to all applicable federal, State, and local policies and regulations related to the protection of biological resources". Thus, implementation of the Project is subject to compliance with the federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. In California, the active nests and eggs of all native bird species, except certain game birds, are protected under the California Fish and Game Code Section 3503, which states: "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, the federal MBTA (16 U.S. Code [USC] 703–711) makes it unlawful to take or kill individuals of most bird species found in the United States, unless that taking or killing is authorized pursuant to regulation 16 USC 703, 704. The federal definition of "Take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect" (50 Code of Federal Regulations 10.12). Thus, even if not designated as a special-status or "sensitive" species, most bird species, except exotic birds and game birds, are afforded protection under State and federal laws while they are engaged in breeding activity. However, unless a project may have a substantial adverse effect on a species identified as a candidate, sensitive, or special-status species, impacts involving the loss or destruction of a limited number of nests of non-sensitive species would not normally be categorized as "significant" or regarded as substantially adverse impacts to biological resources, and thus would not warrant mitigation to be imposed and enforced by a lead agency under CEQA.

If any nesting activity occurs in the proposed Project vicinity, Project-related demolition or construction could indirectly affect nesting activity and adversely affect individual birds, if present. In addition, the same demolition and construction activities that could affect raptor species, if present, could also adversely affect other birds during the nesting season. As noted above, the 2006 EIR references the policy that projects are expected to cooperate with regulatory agencies and comply with existing regulations. The City of Newport Beach has a standard condition, which requires avoidance or pre-construction surveys to determine presence of nesting birds prior to construction and potential buffers from nests, which would ensure compliance with State and federal laws that protect nesting birds by conducting preconstruction surveys and requiring implementation of avoidance measures. Therefore, the Project would not create a new significant impact to candidate, sensitive, or special status species that was not previously analyzed, and no mitigation measures are required.

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

No Substantial Change from Previous Analysis. The Project site is developed and within an urbanized area of the City. No riparian habitat or sensitive natural communities occur on the Project site. As such, no impact would occur to any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS. The Project would not create a new significant impact to riparian habitat, or other sensitive natural communities that was not previously analyzed, and no mitigation measures are required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Substantial Change from Previous Analysis. The Project site is fully developed with an existing commercial building and surface parking lot. No wetlands or "waters" subject to State or federal regulatory jurisdiction, such as waters of the United States, pursuant to Clean Water Act (CWA) Section 404, or streams or lakes, pursuant to California Fish and Game Code Section 1600 et al., occur on the Project site. The Project site does not contain any resources that would be regulated under the CWA or California Fish and Game Code Section 1600 et al., and there are no potential offsite impacts that could be regulated under the CWA or California Fish and Game Code Section 1600. Therefore, the Project would not create a new significant impact with respect to a substantial adverse effect on State or federally protected wetlands (including but not limited to marsh, vernal pool coastal) through direct removal, filling, hydrological interruption, or other means for on-site resources that was not previously analyzed, and no mitigation measures are required.

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?

No Substantial Change from Previous Analysis. The Project site does not contribute to or function as part of a migration corridor for terrestrial or avian wildlife species and nor is it part of a regionally important or vital wildlife movement corridor. Also, no known or expected native wildlife nursery sites occur in the Project vicinity, and no such resources would be affected by the Project. Therefore, the Project would not create a new significant impact to movement of any native resident or migratory fish or wildlife species that was not previously analyzed, and no mitigation measures are required.

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

No Substantial Change from Previous Analysis. Trees within the Project site are not on property owned by the City or within a public right-of-way and thus, are not subject to NBMC Sections 13.08 or 13.09 that protect trees in the City. It is possible that the Project may damage or require removal (e.g., for site access) of the trees that occur along the public street adjacent to the Project site. However, the Applicant is required to comply with the applicable NBMC section(s) regarding tree preservation and removal. Therefore, in the event that the Project would encroach into the public right-of-way and require removal of City trees, the Applicant would be required to submit a tree removal form to the Municipal Operations Director, pay all related tree removal and one-for-one replacement costs, and meet all provisions of City Council Policies L-2 and L-6 and NBMC Chapters 13.08 and 13.09, or any successor policies or sections. Therefore, as the result of complying with the relevant NBMC Code Sections, the Project would not conflict with local policies and ordinances protecting biological resources, and no new impact, that was not previously analyzed in the 2006 EIR, would occur, and no mitigation is required.

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?

No Substantial Change from Previous Analysis. The Project site is within an urbanized area and not within any established Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other habitat conservation plans. The Project is in a developed area that lies within the overall planning area that is addressed under the Orange County Central and Coastal NCCP/HCP. The Airport subarea, including the Project site were developed prior to the establishment of the NCCP/HCP, and the Project site is not within or adjacent to any natural areas that comprise the NCCP/HCP Reserve System. Furthermore, the Project site contains no habitat areas or resources subject to the provisions of the NCCP/HCP or any other approved local, regional, or State HCP. Further, the Project would not directly impact any habitat subject to any conservation planning instruments. Therefore, the Project would not create a new significant impact to or conflict with approved HCPs and NCCPs, that was not previously analyzed, and no mitigation measures are required.

Regulatory Requirements

Standard Conditions and Requirements

SC BIO-1 Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting season (September 1 through February 15), a qualified biologist contracted by the Applicant shall conduct a preconstruction survey(s) to identify any active nests in and adjacent to the project site no more than three days prior to initiation of the action. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. However, if the biologist finds an active nest within or directly adjacent to the action area (within 100 feet) and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest using temporary plastic fencing or other suitable materials, such as barricade tape and traffic cones. The buffer zone shall be determined by the biologist in consultation with applicable resource agencies and in consideration of species sensitivity and existing nest site conditions, and in coordination with the construction contractor. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Only specified construction activities (if any) approved by the qualified biologist shall take place within the buffer zone until the nest is vacated. At the discretion of the qualified biologist, activities that may be prohibited within the buffer zone include but not be limited to grading and tree clearing. Once the nest is no longer active and upon final determination by the biologist, the proposed action may proceed within the buffer zone.

The qualified biologist shall prepare a survey report/memorandum summarizing his/her findings and recommendations of the preconstruction survey. Any active nests observed during the survey shall be mapped on a current aerial photograph, including documentation of GPS coordinates, and included in the survey report/memorandum. The completed survey report/memorandum shall be submitted to the City of Newport Beach Community Development Department prior to construction related activities that have the potential to disturb any active nests during the nesting season.

Conclusion

The biological resources impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the biological resources analysis provided in the 2006 EIR are required.

3.5 CULTURAL RESOURCES

3.5.1 2006 EIR

The 2006 EIR indicated that the City has 11 properties listed or designated eligible for listing on the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), or otherwise listed as historic or potentially historic in the California Historic Resources Inventory System, maintained by the Office of Historic Preservation. The City Historical Register also recognizes five structures or properties of local historical or architectural significance, most of which are not listed in the NRHP and CRHR. In addition to the formally recognized resources, the City's Historic Resource Inventory includes 61 properties, while not officially adopted, which serves as a guide to potentially historic properties that may have historic or cultural significance to the City. The 2006 EIR noted that buildout could result in the demolition of historic or potentially historic structures; however, General Plan Policies HR 1.1 through HR 1.5 protect historically significant landmarks, sites, and structures through: requiring that the Historical Resources Inventory be maintained and updated; encouraging the preservation and adaptive reuse of historic structures; promoting the placement of historical landmarks throughout the City; encouraging adaptive reuse; and mandating the incorporation of historical elements in new redevelopment projects in the City. The analysis identified that the Airport Area, Newport Center, West Newport Mesa, and Mariners' Mile do not have historic resources. However, the 2006 EIR determined that as demolition of a historic structure constitutes a physical effect on the environment, the impacts to historical resources were significant and unavoidable.

The 2006 EIR concluded that impacts to archaeological resources would be less than significant, and that General Plan Goal HR 2 and NR 18 would protect archaeological resources. The Newport Beach City Council also established "Archaeological Guidelines (K-5)" requiring the City to prepare and maintain sources of information regarding archaeological sites.

The 2006 EIR concluded that impacts to human remains would be less than significant. Human burials have specific provisions for treatment in Section 5097 of the *California Public Resources Code*. Disturbing human remains would destroy resources and could potentially violate the health code. The *California Health and Safety Code* (Sections 7050.5, 7051, and 7054) contains specific provisions for the protection of human burial remains. PRC Section 5097.98 addresses the disposition of Native American burials, protects such remains, and established the Native American Heritage Commission to resolve any related disputes.

General Plan Policies HR 2.1 and NR 18.1 require that any new development under the General Plan protect and preserve archaeological resources from destruction. Other policies under Goal HR2 and Goal NR 18 ensure that information resources are maintained regarding these resources, such that all grading and excavation activities with potential to affect cultural or archaeological resources be monitored by a qualified archaeologist.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **HR 2.1 - New Development Activities:** Require that, in accordance with CEQA, new development protect and preserve paleontological and archaeological resources from destruction and avoid and mitigate impacts to such resources. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.
- **HR 2.2 - Grading and Excavation Activities:** Maintain sources of information regarding paleontological and archeological sites and the names and addresses of responsible organizations and qualified individuals, who can analyze, classify, record, and preserve paleontological or archeological findings. Require a qualified paleontologist/ archeologist to monitor all grading and/or excavation where there is a potential to affect cultural, archeological or paleontological resources. If these resources are found, the Applicant shall implement the recommendations of the paleontologist/archaeologist, subject to the approval of the City Planning Department.
- **HR 2.3 - Cultural Organizations:** Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow representatives of such groups to monitor grading and/or excavation of development sites.
- **HR 2.4 - Paleontological or Archaeological Materials:** Require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach, or Orange County, whenever possible.
- **NR 18.1 - New Development:** Require new development to protect and preserve paleontological and archaeological resources from destruction and avoid and minimize impacts to such resources in accordance with the requirements of CEQA. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.
- **NR 18.3 - Potential for New Development to Impact Resources:** Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites.
- **NR 18.4 - Donation of Materials:** Require new development, where on-site preservation and avoidance are not feasible, to donate scientifically valuable paleontological or archaeological materials to a responsible public or private

institution with a suitable repository, located within Newport Beach or Orange County, whenever possible.

3.5.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☑
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No Substantial Change from Previous Analysis. The Project site, including the existing 4-story office building (constructed in 1975), and adjacent structures are not listed in the CRHR, the NRHP, California Historical Landmarks, or California Points of Historical Interest lists. Additionally, the Project site is not identified as a historic resource (refer to Figure 4.4-1, Historic Resources, of the City of Newport Beach General Plan EIR), and there are no historical resources or districts near the Project site. Thus, the demolition of the office building and associated site improvements and redevelopment of the Project site with a multi-level podium apartment building with two and a half levels of subterranean parking would not cause any direct or indirect impact to historic resources, nor would it adversely affect the historic significance of historical resources in the City. No new impact pertaining to historic resources, that was not previously identified in the 2006 EIR, would result, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

No Substantial Change from Previous Analysis. The Project site is urban, developed, paved and has been previously disturbed. Nonetheless, the area is potentially sensitive for archaeological and tribal cultural resources. The Project would be required to comply with City Council Policy K-5, which requires preservation of significant archeological and tribal cultural resources in the event of an inadvertent discovery. Compliance with General Plan Policy HR 2.1 and Policy NR 18.1 would require that any new development protect and preserve archaeological and tribal resources from destruction, and that potential impacts to such resources be avoided and minimized through planning policies and permit conditions.

The City also conducted SB18 consultations with Native American Tribal representatives. The Native American Tribal representatives accepted the City's conditions of approval for the Project. As such, compliance with these regulations and standard conditions would ensure impacts to archaeological resources remain less than significant. Therefore, no new significant impacts, that were not previously identified in the 2006 EIR, would result that would require a mitigation measure.

c) Disturb any human remains, including those interred outside of formal cemeteries?

No Substantial Change from Previous Analysis. As stated above, the Project site has been previously disturbed and is currently developed with an office building. There is no indication that there are burials present at the Project site, and it is unlikely that human remains would be discovered during Project development. In the event that human remains are discovered during grading activities, the Project would adhere to all State and local regulations and policies, including *California Health and Safety Code* Section 7050.5, *CEQA* Section 15064.5, and *PRC* Section 5097.98, to address procedures to follow the discovery of human remains. Compliance with these regulations would ensure that impacts to human remains would not occur. Therefore, the proposed Project would not result in a new significant impact related to the disruption of human remains, that was not previously identified, and no mitigation is required.

Standard Conditions and Requirements

SC CULT-1 In compliance with City Council Policy K-5 Paleontological and Archaeological Resource Protection Guidelines, prior to the issuance of a grading permit by the City of Newport Beach, the Applicant shall retain a qualified archaeologist to periodically monitor ground-disturbing activities onsite and provide documentation of such retention to the City of Newport Beach Community Development Director. The archaeologist shall train project construction workers on the types of archaeological resources that could be found in site soils. The archaeologist shall periodically monitor project ground-disturbing activities. During construction activities, if Native American resources (i.e., Tribal Cultural Resources) are encountered, a Cultural Resource Monitoring and Discovery Plan (CRMDP) shall be created and implemented to lay out the proposed personnel, methods, and avoidance/recovery framework for tribal cultural resources monitoring and evaluation activities within the project area. A consulting Native American tribe shall be retained and compensated as a consultant/monitor for the project site from the time of discovery to the completion of ground disturbing activities to monitor grading and excavation activities. If archaeological resources are encountered, all construction work within 50 feet of the find shall cease, and the archaeologist shall assess the find for importance and whether preservation in place without impacts is feasible. Construction activities may continue in other areas. If, in consultation with the City and affected Native American tribe (as deemed necessary), the discovery is determined to not be important, work will be permitted to continue in the area. Any resource that is not Native American in origin and that cannot be preserved in place shall be curated at a public, nonprofit institution with a research interest in the materials, such as the South-Central Information Center at California State University, Fullerton.

SC CULT-2 California Health and Safety Code Section 7050.5, CEQA Guidelines Section 15064.5, and Public Resources Code Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. California Health and Safety Code Section 7050.5 requires that in the event that human remains are discovered within the project site, disturbance of the site shall be halted until the coroner has conducted an investigation into the circumstances, manner and cause of death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Conclusion

The cultural resources impact of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the cultural resources analysis provided in the 2006 EIR are required.

3.6 ENERGY

3.6.1 2006 EIR

The 2006 EIR did not directly address energy impacts, because energy analysis was not part of the required CEQA Checklist analysis at the time that the 2006 EIR was adopted. Effective December 28, 2018, the State adopted amendments to the State CEQA Guidelines requiring the analysis of and mitigation for energy, as separate topic, in CEQA documents.

Although energy resources were not addressed as a standalone section, the 2006 EIR did include an analysis of the impacts on other public services and utilities, which included electricity and natural gas. Specifically, the analysis was in Section 4.14, Utilities and Service Systems, of the 2006 EIR. As concluded in the 2006 EIR, impacts to electricity and natural gas services were found to be less than significant. The electricity and natural gas analysis in the 2006 EIR did not address the specific questions now included in Appendix G of the State CEQA Guidelines. However, the analysis as applicable, is carried through to this new energy section for context, discussion, and comparison purposes.

The 2006 EIR concluded that there would be no impact related to the relocation or construction of new electrical power or natural gas facilities. Additional energy demands resulting from implementation of the General Plan Update would be adequately met by current and planned infrastructure during most of the year as well as compliance with the energy conservation measures contained in the State's Title 24, Building Standards and CALGreen Requirements, which would reduce the amount of energy needed for the operation of any buildings. The projected electrical demand for buildout under the General Plan was expected to be within Southern California Edison's (SCE's) then-current ten-year load forecasts. Southern California Gas Company (SCGC) indicated that an adequate supply of natural gas was available to serve additional development, and that the natural gas service provided to the City would not be impaired by buildout under the General Plan. Any expansion of service necessitated by the General Plan implementation would be in accordance with SCGC policies and extension rules on file with the California Public Utilities Commission (CPUC) at the time contractual agreements are made. Natural gas demand projected for the General Plan would not exceed available or planned supply, and no new infrastructure would be required. Therefore, the 2006 EIR determined that no impact would result.

Lastly, discussion of energy resources does not constitute "new information" requiring additional environmental review nor does it affect the assessment of the Project's environmental impacts or mitigation measures compared to those analyzed in the 2006 EIR. The potential environmental impacts regarding energy resources associated with the General Plan was known at the time the 2006 EIR was certified.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The following relevant policy will be implemented as a condition of approval.

- **NR 24.2 – Energy-Efficient Design Features:** Promote energy-efficient design features.

3.6.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☑
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☑

Would the Project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Substantial Change from Previous Analysis. The following analysis evaluates the Project's potential to increase the demand for energy through construction and operation of the Project, day-to-day operations, and fuel consumption associated with Project construction.

Energy Consumption During Construction

Construction activities would require energy for activities such as the manufacturing and transportation of building materials, demolition and grading activities, building construction, paving, and architectural coatings.

Transportation energy represents the largest energy use during construction and would occur from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use petroleum fuels (e.g., diesel fuel and/or gasoline). Therefore, the analysis of energy use during construction focuses on fuel consumption. Construction trucks and vendor trucks hauling materials to and from the Project site would be anticipated to use diesel fuel, whereas construction workers traveling to and from the Project site would conservatively be anticipated to use gasoline-powered vehicles. Fuel consumption from transportation uses depends on the type and number of trips, VMT, the fuel efficiency of the vehicles, and the travel mode.

Construction emissions were estimated for the Project using the CalEEMod model, as detailed in Section 3.3, Air Quality, of this Addendum. Estimates of fuel consumption (diesel fuel and gasoline) from construction equipment, construction trucks, and construction worker vehicles were based on default construction equipment assumptions and trip estimates from CalEEMod and fuel efficiencies from the EMissions FACtor 2021 model (EMFAC2021). Fuel consumption estimates are presented in Table 3-8, Project Energy Consumption Estimates During Construction. CalEEMod output sheets and detailed energy calculations are included in Appendix B, Energy Data, of this Addendum.

TABLE 3-8
PROJECT ENERGY CONSUMPTION ESTIMATES DURING CONSTRUCTION

Energy Type	Total Energy Consumption (gallons)	Percentage Increase Countywide
Diesel	73,770	0.048%
Gasoline	142,982	0.011%
Source: Psomas 2023, Appendix B, Energy Data.		

As detailed in Table 3-8, above, the Project would consume approximately 73,770 gallons of diesel fuel and approximately 142,982 gallons of gasoline during construction. Based on fuel consumption obtained from EMFAC2021, approximately 154.1 million gallons of diesel and approximately 1.3 billion gallons of gasoline were consumed from vehicle trips in Orange County in 2021. Therefore, construction of the Project would increase the annual construction generated fuel use in Orange County by approximately 0.048 percent for diesel fuel and 0.01 percent for gasoline based on the year 2021. As such, construction of the Project would have a negligible effect on local and regional energy supplies. Furthermore, impacts related to energy use during construction would be temporary and relatively minimal in comparison to Orange County's overall use of the State's available energy resources. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the State. In addition, construction activities are not anticipated to result in an inefficient use of energy as gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the Project. The Project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. In addition, energy used in the construction of the Project's residential uses will comply with the latest energy efficiency standards adopted by the State of the California. As such, fuel consumption during construction would not be inefficient, wasteful, or unnecessary.

Energy Use During Operations

Operational energy use is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips associated with a project. Energy consumption was estimated for the Project using default energy intensities by land use type in CalEEMod for existing conditions and the Project. The Project would generate approximately 1,280 ADTs (Ganddini 2023) which will replace the estimated 658 existing ADTs from the current land use.

Energy use consumed during operation of the Project would be associated with electricity and natural gas consumption for lighting and heating needs. Electricity and natural gas usage estimates associated with the Project and existing conditions are shown in Table 3-9, Energy Consumption Estimates During Operation of the Project, below.

TABLE 3-9
ENERGY CONSUMPTION ESTIMATES DURING OPERATION OF THE PROJECT

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Existing Conditions		
Existing Electricity Consumption (kWh/yr)	1,081,246	--
Existing Natural Gas Consumption (therms/yr)	1,537,897	--
Proposed Project		
Project Electricity Consumption (kWh/yr)	1,776,069	--
Project Natural Gas Consumption (therms/yr)	3,132,130	--
Net Operational Electricity Consumption (kWh/yr)	**694,823**	**<0.01**
Net Operational Natural Gas Consumption (therms/yr)	**1,594,233**	**0.00%**

kWh: kilowatt hour; yr: year.

Source: Psomas 2023, Appendix B, Energy Data.

The Project would comply with the current CALGreen Code and the Energy Efficiency Code regarding energy conservation and green building standards, which is accounted for in this analysis. As shown in Table 3-9, above, the estimated potential net increase in electricity demand associated with the operation of the proposed project is 694,823-kilowatt hours (kWh) per year. Total electricity demand in Orange County in 2020 was approximately 19,733 gigawatt-hours (GWh) (19,733,139,603 kWh). Therefore, operation of the Project would negligibly increase the annual electricity consumption in Orange County by less than 0.01 percent. Based on the negligible increase in annual electricity consumption, it is assumed that SCE has sufficient resources that would be adequate to serve the Project.

As discussed in Section 3.14, Population and Housing, the State of California has declared that the lack of housing is a critical problem that threatens the economic, environmental, and social quality of life in California. The consequences of the housing crisis include the lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commutes, and air quality deterioration. The lack of housing would result in longer vehicle commutes for employment which results in greater amounts of transportation fuel demand within the region. Development of the proposed Project assists in addressing the housing shortage in addition to the lack of affordable housing units.

Electrical and natural gas demand associated with Project operations would not be considered inefficient, wasteful, or unnecessary. The Project would be required to adhere to all federal, State, and local requirements for energy efficiency, which would substantially reduce energy usage. The Project would not cause or result in the need for additional energy facilities or an additional or expanded delivery system. Because the Project would develop residential uses which comply with the latest building energy efficiency measures and assist in addressing the housing supply deficiency within the County, the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. The Project would not lead to new or substantially more severe significant impacts associated with energy demand beyond those identified in the 2006 EIR. The Project would not create a new significant impact pertaining to energy that was not previously analyzed, and no new mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Substantial Change from Previous Analysis. The City has an adopted Energy Action Plan (EAP) that outlines various measures and strategizes numerous methods on how the City's long-term vision can be achieved. The EAP goals include the following: meet and exceed AB 32 energy reduction goals; be an example for energy efficiency and sustainability at City facilities; continue interacting, educating, and informing the community about energy efficiency and GHG emissions; explore the newest green technologies and methods to decrease future energy dependency; explore renewable energy recourses (not limited to solar) and possible financing based on available grants/rebates; enhance energy efficiency and operations in existing buildings through systematic commissioning strategies or independent energy efficiency studies; and evaluate all the suggested energy efficiency action measures presented in this EAP, establish a priority for implementation, and determine possible funding sources.

The Project would meet the latest California CALGreen Code, which includes the latest in energy efficiency standards, consistent with the goals of the City's EAP. The City's EAP goals are primarily applicable to City facilities; therefore, the Project was analyzed for consistency with the State's 2020 Integrated Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for ZEVs and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access. In addition, the Integrated Energy Policy Report provides the results of the California Energy Commission's (CEC's) assessments of a variety of energy issues facing California. As indicated above, energy usage on the Project site during construction would be temporary in nature and relatively small in comparison to the overall use in the County. In addition, energy usage associated with operation of the Project would be relatively minimal in comparison to the overall use in Orange County, and the State's available energy resources. Therefore, energy impacts at the regional level would be negligible. Because California's energy conservation planning actions are conducted at a regional level, and because the proposed Project's total impact on regional energy supplies would be minor, the Project would not conflict with or obstruct California's energy conservation plans as described in the CEC's Integrated Energy Policy Report. Additionally, the Project would not result in the inefficient, wasteful, and unnecessary consumption of energy, as detailed above. Therefore, the Project would not lead to new or substantially more severe significant impacts associated with consistency with plans for renewable energy or energy efficiency. The Project would not create a new significant impact pertaining to energy that was not previously analyzed, and no new mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Energy have been identified for the proposed Project.

Conclusion

The energy impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the energy analysis provided in the 2006 EIR are required.

3.7 GEOLOGY AND SOILS

The following analysis summarizes the "Preliminary Geotechnical Investigation for Feasibility Purposes, 1600 Dove Street, Newport Beach, California, 92260" (Preliminary Geotechnical Investigation), prepared for the Project by Kling Consulting Group, Inc. (KCG), dated January 13, 2023 (KCG 2023). This Preliminary Geotechnical Investigation is included in Appendix C of this Addendum.

3.7.1 2006 EIR

The 2006 EIR concluded that implementation of the General Plan would not expose people or structures to adverse effects involving rupture of a fault located in an Alquist-Priolo Fault Zone. The Newport-Inglewood fault zone, the Whittier fault zone, the San Joaquin Hills fault zone, and the Elysian Park fault zone, all have potential to cause moderate to large earthquakes that would result in ground shaking in Newport Beach and nearby communities. However, none of these faults has been zoned under the guidelines of the Alquist-Priolo Earthquake Fault Zoning Act. As such, there are no Alquist-Priolo zones in the City and more specifically in the JWA subarea, and no impact would result. The General Plan policies (i.e., S 4.1, S 4.2, S 4.4, and S 4.5) ensure that adverse effects caused by seismic and geologic hazards such as strong seismic ground shaking are minimized. Additionally, new development would be required to comply with the building design standards of the California Building Code (CBC). Compliance with applicable regulations and the policies contained in the General Plan would ensure that impacts related to strong seismic ground shaking remain at a less than significant level.

Portions of the City that are susceptible to liquefaction and related ground failure (i.e., seismically induced settlement) include areas along the coastline that includes Balboa Peninsula, in and around the Newport Bay and Upper Newport Bay, in the lower reaches of major streams in Newport Beach, and in the floodplain of the Santa Ana River. A considerable part of the City mapped liquefiable areas are already built. The City Safety Element Policies S 4.1 through S 4.6 require new development to be in compliance with geologic hazard safety standards for seismic design of structures in the City.

Further, the 2006 EIR concluded that implementation of the General Plan would have a less than significant impact associated with soil erosion or topsoil. All demolition and construction activities would be required to comply with CBC Chapter 70 standards. General Plan Policies NR 3.11, NR 3.12, and NR 3.13 would require compliance with applicable local, State, or federal laws. Compliance with the CBC and the National Pollutant Discharge Elimination System (NPDES) permits would minimize effects from erosion and ensure consistency with the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan. Impacts were determined to be less than significant, and no mitigation is required.

The 2006 EIR also concluded that implementation of the General Plan would have a less than significant impact related to unstable soils, or compressible and expansive soils, as a result of collapse, subsidence, differential settlement, lateral spreading, or heaving. Adherence to the NBMC and General Plan policies, including S 4.4 and S 4.6 would ensure that development is not located on unstable soils or geologic units, and no significant impacts would occur. Impacts would be less than significant, and no mitigation is required.

Additionally, the 2006 EIR concluded that implementation of the General Plan would have a less than significant impact related to unstable soils or geologic units. Development would be required to comply with all applicable provisions of the CBC related to soil hazard-related design. Also, General Plan Policies S 4.4 and S 4.6 would require that development not be located on unstable soils or geologic units. Impacts were determined to be less than significant, and no mitigation is required.

The 2006 EIR determined that the JWA subarea is almost entirely built out with established utility services and new development would not require the use of septic tanks.

Furthermore, the 2006 EIR identified that potential impacts to paleontological resources would be less than significant with compliance with General Plan policies and Newport Beach City Council Paleontological Guidelines (K-4). The City has known significant paleontological resources, including portions of the Vaqueros formation that underlie the Newport Coast, Newport Banning Ranch, the Topanga and Monterey Formations, and Fossil Canyon in the North Bluffs area. Ground disturbing activities would have the potential to damage or destroy paleontological resources that may be present below the surface. The Newport Beach City Council Paleontological Guidelines (K-4) requires the City to prepare and maintain sources of information regarding paleontological sites. Compliance with policies within Goal NR 18 and the policies under Goal HR 2 would reduce this impact to a less than significant level.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

Geology and Soils

- **S 4.7 – New Development:** Conduct further seismic studies for new development in areas where potentially active faults may occur. Note: A geotechnical evaluation was prepared for the proposed Project to identify potential geotechnical hazards associated with the project site. This report serves as compliance with Safety Element Policy 4.7.
- **NR 3.9 – Water Quality Management Plan:** Require new development applications to include a Water Quality Management Plan (WQMP) to minimize runoff from rainfall events during construction and post-construction.
- **NR 3.10 – Best Management Practices:** Implement and improve upon Best Management Practices (BMPs) for residences, businesses, development projects, and City operations.
- **NR 3.11 – Site Design and Source Control:** Include site design and source control BMPs in all developments. When the combination of site design and source control

BMPs are not sufficient to protect water quality as required by the National Pollutant Discharge Elimination System (NPDES), structural treatment BMPs will be implemented along with site design and source control measures.

- **NR 3.14 - Runoff Reduction on Private Property:** Retain runoff on private property to prevent the transport of pollutants into natural water bodies, to the maximum extent practicable.
- **NR 3.15 – Street Drainage Systems:** Require all street drainage systems and other physical improvements created by the City, or developers of new subdivisions, to be designed, constructed, and maintained to minimize adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize impacts to water bodies.
- **NR 3.20 – Impervious Surfaces:** Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible.
- **NR 4.4 – Erosion Minimization:** Require grading/erosion control plans with structural BMPs that prevent or minimize erosion during and after construction for development on steep slopes, graded, or disturbed areas.

Paleontological Resources

- **HR 2.1 – New Development Activities:** Require that, in accordance with CEQA, new development protect and preserve paleontological and archaeological resources from destruction and avoid and mitigate impacts to such resources. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.
- **HR 2.2 – Grading and Excavation Activities:** Maintain sources of information regarding paleontological and archeological sites and the names and addresses of responsible organizations and qualified individuals, who can analyze, classify, record, and preserve paleontological or archeological findings. Require a qualified paleontologist/ archeologist to monitor all grading and/or excavation where there is a potential to affect cultural, archeological or paleontological resources. If these resources are found, the Applicant shall implement the recommendations of the paleontologist/archaeologist, subject to the approval of the City Planning Department.
- **HR 2.4 – Paleontological or Archaeological Materials:** Require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach, or Orange County, whenever possible.
- **NR 18.1 – New Development:** Require new development to protect and preserve paleontological and archaeological resources from destruction and avoid and minimize impacts to such resources in accordance with the requirements of CEQA.

Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.

- **NR 18.4 – Donation of Materials:** Require new development, where on-site preservation and avoidance are not feasible, to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach or Orange County, whenever possible.

3.7.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause 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 direct or indirect risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑

Would the Project:

a) Directly or indirectly cause 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?

   ii) Strong seismic groundshaking?

No Substantial Change from Previous Analysis. According to the Geotechnical Investigation prepared for the Project, the site is not located within a State of California Earthquake Fault Zone (formerly known as Alquist-Priolo Zones). The property is not located where a site-specific investigation to determine the locations of any active faults would be required. Active and potentially active faults within Southern California are capable of producing seismic shaking at the site. It is anticipated that the site would periodically experience ground acceleration due to exposure to moderate to large magnitude earthquakes occurring on distant faults.

However, no active faults are known to exist at the site, and the risk of surface fault rupture is considered low. The closest active fault zones to the subject site are the San Joaquin Hills fault located approximately 1.8 miles from the site and the Newport-Inglewood Fault Zone, located approximately 5.2 miles from the site (KCG 2023).

The Preliminary Geotechnical Investigation (Appendix C) includes site seismic parameters utilizing generic geologic, seismic, and geotechnical data gathered for the site using the ASCE 7 Hazard Tool web-based tool. All structures should be designed for earthquake-induced strong ground motions in accordance with the 2022 CBC procedures utilizing the said parameters. Furthermore, project construction would comply to seismic design standards required by the 2022 California Building Code (CBC) (or applicable adopted code at the time of plan submittal or grading and building permit issuance for construction). Compliance with the CBC requires proper construction of building footings and foundations so that it would withstand the effects of potential ground movement. The CBC also includes provisions to reduce impacts caused by potential major structure failures or loss of life resulting from geologic hazards. As set forth in SC GEO-1, NBMC Section 15.10.060 (Excavation and Grading Code), approval of soils engineering report and engineering geology report is required before a grading or building permit is issued for a project. The Excavation and Grading Code also requires that recommendations included in the reports and approved by the building officials be incorporated in grading plans or specifications.

Therefore, the Project would not create a new significant impact pertaining to rupture of a known earthquake fault, that was not previously analyzed, and no mitigation measures are required.

iii) Seismic-related ground failure, including liquefaction?

No Substantial Change from Previous Analysis.

Liquefaction Potential

Liquefaction occurs when ground water pressure in loose sandy soil becomes greater than overburden pressure due to seismic-induced cyclic shear stresses from earthquakes. The result is a near complete loss of soil shear strength and ground settlement. The California Geological Survey (CGS), Seismic Hazard Zone Map for the Tustin Quadrangle indicates the site is not situated in a liquefaction zone. Review of the Seismic Hazard Zone Report for the Tustin Quadrangle indicates the historic groundwater is reported to be approximately 10 feet from existing grades in the vicinity of the site. The liquefaction analysis conservatively incorporates the historic high groundwater depth of 10 feet. the geotechnical evaluation indicated that localized and isolated sandy layers within the Old Paralic Deposits that underlie the site are susceptible to relatively minor amounts of liquefaction due to a design-level earthquake along a nearby fault. Overall seismic induced liquefaction settlement would be reduced with the removal of materials for the subterranean excavations. The portions of the site that appear to be susceptible to liquefaction and the magnitudes of seismic-induced settlement described above appear to be somewhat localized. The State of California has not established a seismic hazard zone for the area (KCG 2023).

Liquefaction Settlement Analysis

The total earthquake-induced liquefaction settlement potential was calculated using the software program "Cliq v.1.7" by GeoLogismiki. The analysis indicated the estimated settlement due to earthquake-induced liquefaction ranges between approximately 0.366 to 2.566 inches. These settlement values are considered preliminary, and further geotechnical investigation would be required to provide refinement of the estimated differential settlement of the site. The results of the analysis are included in Appendix C, Preliminary Geotechnical Investigation, of this Addendum.

Seismically Induced Settlement

The liquefaction analyses result for seismically induced vertical ground settlement is presented below:

CPT	Vertical Settlements (Inches)	Liquefaction Potential Index (LPI)
1	0.366	7.183 (high risk)
2	0.709	4.231 (low risk)
3	2.566	2.257 (low risk)

Based on this analysis, the seismic induced settlements range from approximately 0.366 inches to 2.566 inches. It should be noted the majority of the vertical ground settlement occurs in the upper 10 to 12 feet of the soil column. Vertical ground settlements between 12 and 50 feet are less than 0.5 inches, which could be applied to one subterranean level. Additionally, seismically induced differential settlement is variable across the site, with a worst-case differential of 2.2-inches over a horizontal distance of 300 feet. The amount of differential at one level of subterranean would be much less (KGC).

As such, no risk of loss, injury, or death would be anticipated. In the absence of liquefiable soils within the Project area, the Project would not result in a new significant impact pertaining to seismic-related ground failure that was not previously analyzed, and no mitigation measures are required.

iv) Landslides?

No Substantial Change from Previous Analysis. Earthquake-induced landslides occur in areas where previous landslides have occurred and in areas where the topographic, geologic, geotechnical, and subsurface groundwater conditions are conducive to permanent ground displacements. Due to the flat topography of the site and of the rea surrounding the site, landslides are not anticipated. The Project site is not mapped as susceptible to seismically induced landslides, based on the California Department of Mines and Geology (CDMG) Seismic Hazards Maps (CDMG 2023). Therefore, the Project would not create a new significant impact pertaining to landslides that was not previously analyzed, and no mitigation measures are required.

f) Result in substantial soil erosion or the loss of topsoil?

No Substantial Change from Previous Analysis. Due to the location of the site in a relatively flat and developed area, the proposed Project is not anticipated to result in substantial erosion or loss of topsoil. According to the Preliminary Water Quality Management Plan (pWQMP), with implementation of the proposed Project, impervious surfaces on the Project site would decrease from 86 percent under existing conditions to 79 percent impervious upon Project completion (TAIT 2024). This decrease in impervious surface area would occur primarily due to the decrease in development area associated with the proposed Project, as discussed previously in Section 2.0, Project Description and Setting. Once construction is complete, the Project site will comply with Best Management Practices (BMPs) identified in the pWQMP prepared for the proposed Project to reduce erosion effects to less than significant levels as discussed in Section 3.10, Hydrology and Water Quality, of this Addendum. Furthermore, construction activities would be performed pursuant to the current NPDES permit requirements. Therefore, the Project would not create a new significant impact pertaining to substantial erosion or the loss of topsoil that was not previously analyzed, and no mitigation measures are required.

g) 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?

No Substantial Change from Previous Analysis. As discussed above, the Project site is not located in a potential landslide or a potential liquefaction area. Seismic-related ground failure, including liquefaction and settlement, is addressed under Threshold 3.7(a-ii). In addition, as addressed under Threshold 3.7(a-iv), the site is not located within a landslide zone.

Lateral spreading, a phenomenon associated with seismically induced soil liquefaction, is the lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. Lateral spreading generally occurs on gently sloping ground or level ground with nearby free surface faces such as a drainage or stream channel. No open channels or free face surfaces are known to be located in close proximity to the site. According to the Geotechnical Investigation, lateral displacements occur between 300 and 1000 feet from a "free face" (KCG 2023). As such, the potential for lateral spreading would be unlikely to occur within the Project site. Therefore, the Project would not create new significant impacts pertaining to onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse that were not previously analyzed, and no mitigation measures are required.

Subsidence is a lowering or settlement of the ground surface through collapse of subsurface void space. This condition can occur in areas where soil or groundwater has moved out of an area and has created a void space unable to sustain the materials above it or in areas where subsurface materials are dissolved, leaving little or no support for surface soils or features. The 2006 EIR concluded that implementation of the General Plan would have a less than significant impact related to subsidence. According to the United States Geological Survey (USGS), the Project site is located within an area of land subsidence that is primarily caused by groundwater pumping (USGS 2023). This geotechnical issue can be addressed through adherence to typical design and construction practices (such as design in accordance with the CBC). The Project would also require all recommendations from the Geotechnical Investigation prepared for the Project to be included in site preparation and building design specifications. As such, the proposed Project would have a less than significant impact associated with the exposure of people or structures to hazards associated with unstable geologic units or soils. Therefore, the Project would not create a new significant impact pertaining to soil instability that was not previously analyzed, and no mitigation measures are required.

h) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Substantial Change from Previous Analysis. Expansive soils are materials that, when subject to a constant load, are prone to expansion when exposed to water. As discussed in the 2006 EIR, the City contains soils that are highly expansive, and subject to significant volume changes due to moisture fluctuations. According to the Geotechnical Investigation prepared for the Project, subsurface soils would consist of interbedded sand, silt, and clay. While sandy soils are generally not susceptible to expansion, the potential exists that layers of expansive clay could be present at the foundation elevation. These layers should not be left in place or used as fill if any clay beds are encountered. Laboratory testing to evaluate expansion potential would be recommended as part of a design-level exploration of the site. Until future testing is performed, the soil should be considered as having "moderate" potential for expansion (KGC 2023). Implementation of current codes and regulations identified in the NBMC would ensure that potential impacts related to expansive soils would be less than significant. Therefore, the Project would not create a new significant impact that was not previously analyzed, and no mitigation measures are required.

i) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Substantial Change from Previous Analysis. Similar to the discussion in the 2006 EIR, there would be no impact regarding the Project site having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. The Project site is within the JWA subarea, which is a highly developed and urbanized area of the City. As such, sewers have been and are available for disposal of wastewater. The Project would not require the inclusion of septic tanks or alternative wastewater disposal systems. Therefore, the Project would not create a new significant impact regarding septic tanks or alternative wastewater disposal systems that was not previously analyzed, and no mitigation measures are required.

j) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Substantial Change from Previous Analysis. The 2006 EIR indicated that the site was not recognized as being a location for potential discovery of subsurface paleontological resources. The proposed Project would adhere to the General Plan policies under Goals HR 2 and NR 18 during ground disturbing activities that may impact previously undisturbed grounds. Additionally, the Project would comply with the City's "Paleontological Guidelines (K-5)," which requires the Applicant to retain a qualified paleontologist to be available on-call during ground-disturbing activities onsite and provide protocols in the event of an inadvertent discovery of a paleontological resource. Therefore, the Project would not create a new significant impact regarding paleontological resources that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

SC GEO-1 The Project is required to comply with City of Newport Beach Municipal Code, Chapter 15.10, Excavation and Grading Code. Prior to the issuance of any grading permits, the City of Newport Beach Deputy Community Development Director or Building Official or his/her designee shall review the grading plan for conformance with the conceptual grading shown on the approved site development plan submittal. The grading plans shall be accompanied by geological and soils engineering reports and shall incorporate all information as required by the City.

SC GEO-2 In compliance with Newport Beach Council Policy Manual, Paleontological and Archaeological Resource Protection Guidelines (K-5), prior to the issuance of a grading permit by the City of Newport Beach, the Applicant shall retain a qualified paleontologist to be available on-call during ground-disturbing activities on site and provide documentation of such retention to the City of Newport Beach Community Development Director. If paleontological resources are encountered, all construction work within 50 feet of the find shall cease, and the paleontologist shall assess the find for importance.

Construction activities may continue in other areas. If, in consultation with the City, the discovery is determined to not be important, work will be permitted to continue in the area. Any resource shall be curated at a public, nonprofit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Cooper Center (a partnership between California State University, Fullerton and the County of Orange).

Conclusions

The geology and soils, including paleontological resources, impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the geology and soils and paleontological resources analysis provided in the 2006 EIR are required.

3.8 GREENHOUSE GAS EMISSIONS

3.8.1 2006 EIR

Although the topic of greenhouse gas emissions was not part of the Appendix G of CEQA Guidelines at the time the 2006 EIR was prepared, the issue of GHG emissions and climate change impacts is not new information that was not known or could not have been known at the time of the certification of the 2006 EIR. The United Nations Framework Convention on Climate Change (UNFCCC) was established in 1992. The regulation of GHG emissions to reduce climate change impacts was extensively debated and analyzed throughout the early 1990s. The studies and analyses of this issue resulted in the adoption of the Kyoto Protocol in 1997. Many EIRs from 2006 and earlier described how climate change (often called global warming) would result in sea-level rise and other environmental changes. At the time of approval of the 2006 EIR, the contribution of GHG emissions to climate change was a prominent issue of concern. Therefore, the fact that GHG emissions could have a significant adverse environmental impact was known at the time the General Plan was approved and the 2006 EIR was certified. When the Housing Element was updated in 2013, the City analyzed GHG emissions and found that the Housing Element would have less than significant impacts with respect to this topic. Although the City finds that the issue of GHG impacts and climate change is not "new information" that was not known or could not have been known at the time the 2006 EIR was certified (PRC Section 21166), the following analysis for the proposed Project is provided for informational purposes. The 2006 EIR did not evaluate the effects of GHG emissions or consistency with GHG reduction plans.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **NR 6.1 – Walkable Neighborhoods:** Provide for walkable neighborhoods to reduce vehicle trips by siting amenities such as services, parks, and schools in close proximity to residential areas.
- **NR 6.2 – Mixed-Use Development:** Support mixed-use development consisting of commercial or office with residential uses in accordance with the Land Use Element that increases the opportunity for residents to live in proximity to jobs, services, and entertainment.
- **NR 7.1 – Fuel Efficient Equipment:** Support the use of fuel efficient heating equipment and other appliances.
- **NR 7.2 – Source Emission Reduction Best Management Practices:** Require the use of Best Management Practices (BMP) to minimize pollution and to reduce source emissions.

- **NR 8.1 – Management of Construction Activities to Reduce Air Pollution:** Require developers to use and operate construction equipment, use building materials and paints, and control dust created by construction activities to minimize air pollutants.
- **NR 24.2 – Energy-Efficient Design Features:** Promote energy-efficient design features.
- **NR 24.3 – Incentives for Green Building Program Implementation:** Promote or provide incentives for "Green Building" programs that go beyond the requirements of Title 24 of the California Administrative Code and encourage energy-efficient design elements as appropriate to achieve "green building" status.

3.8.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
GREENHOUSE GAS EMISSIONS – Would the project:				
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?	☐	☐	☐	☑

Would the Project:

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

No Substantial Change from Previous Analysis. This section describes the proposed Project's construction- and operational-related GHG emissions and contribution to global climate change. The SCAQMD has not addressed emission thresholds for construction in their CEQA Handbook; however, the SCAQMD requires quantification and disclosure. Thus, construction emissions are discussed in this section.

Construction Greenhouse Gas Emissions

Demolition and construction activities associated with the proposed Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. The SCAQMD does not have an adopted threshold of significance for construction related GHG emissions. For the purpose of this analysis, the proposed Project is compared to the adjusted screening level Tier 3 Numerical Screening Threshold of 3,000 metric tons of carbon dioxide equivalent per year (MTCO2e/yr) for all land use types, detailed further in Appendix A of this Addendum. Under the Tier 3 Numerical Screen Threshold, a Project would have less than significant GHG emissions if it would result in operational-related GHG emissions of less than 3,000MT CO2e/yr. However, lead agencies are required to quantify and disclose GHG emissions that would occur during construction. The SCAQMD then requires the construction GHG emissions to be amortized over the life of the Project, defined by the SCAQMD as 30 years, added to the operational emissions, and compared to the applicable interim GHG significance threshold tier. Using CalEEMod, it is estimated that the Project would generate approximately 2,814 MTCO2e during construction of the Project (see Appendix A of this Addendum for CalEEMod outputs). When amortized over the 30-year life of the Project, annual emissions would be 94 MTCO2e, as shown in Table 3-10, Project Greenhouse Gas Emissions.

Operational Greenhouse Gas Emissions

In developing methods for GHG impact analysis, there have been suggestions of quantitative thresholds, often referred to as screening levels, which define an emissions level below which it may be presumed that climate change impacts would be less than significant. Neither the SCAQMD, the City of Newport Beach nor the County of Orange have adopted a significance threshold for the GHG emissions from non-industrial development projects.

Beginning in April 2008, the SCAQMD convened a Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold of 10,000 metric tons of CO_2 equivalent per year ($MTCO2_e$/yr) for projects where the SCAQMD is the lead agency (SCAQMD 2008). In September 2010, the Working Group presented a revised tiered approach to determining GHG significance for residential and commercial projects wherein Tier 1 determines if a project qualifies for an applicable CEQA exemption; Tier 2 determines consistency with GHG reduction plans; and Tier 3 proposes a numerical screening value as a threshold. At their September 28, 2010 meeting, the Working Group suggested a Tier 3 threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year for all land use types (SCAQMD 2010).

Long-term operational GHG emissions are typically associated with mobile, area, and stationary sources as well as indirect emissions from sources associated with energy consumption, waste sources, and water sources. Mobile sources are due to the Project's increase in vehicle trips. Area source emissions would be associated with activities such as landscaping and maintenance on the Project site, and other sources. Energy source emissions would result at off-site utility providers as a result of increased electricity demand generated by the Project. Waste source emissions produced by the proposed Project include energy generated by land filling and other methods of disposal related to transporting and managing Project waste. Water source emissions associated with the proposed Project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment. The proposed Project would also produce stationary source emissions associated with the diesel emergency backup generator. Following guidance from the SCAQMD, GHG emissions were estimated for the operational year of 2026 using CalEEMod. Table 3-10 shows the calculated GHG emissions for the proposed Project.

TABLE 3-10
PROJECT GREENHOUSE GAS EMISSIONS

Source	Emissions ($MTCO_2e$/yr)
Existing Emissions	
Mobile	547
Area	1
Energy	253
Water	26
Waste	18
Total	845
Project Emissions	
Mobile	1,676
Area	10
Energy	447
Water	26
Waste	50
Total	2,214
Amortized Construction Emissions	**94**
Net Project Emissions	**1,463**
SCAQMD Tier 3 Threshold	**3,000**
Exceeds Threshold?	**No**

$MTCO_2e$/yr: metric tons of carbon dioxide equivalent per year.
Source: Psomas 2023, Appendix A, CalEEMod Outputs.

Based on the analysis, the proposed Project would not exceed the SCAQMD Tier 3 threshold of 3,000 MTCO2e/yr. As such, operation of the proposed Project would not generate significant GHG emissions that would have a significant effect on the environment. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with operational GHG emissions, and no new mitigation measures are required.

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

No Substantial Change from Previous Analysis. An evaluation of the proposed Project's consistency with the City's EAP, the 2017 Scoping Plan, and the 2020–2045 RTP/SCS is provided below.

City of Newport Beach Energy Action Plan

The City of Newport Beach has an EAP, which identifies the City's vision and goals on achieving energy efficiency in local government facilities and in the community. The driving force for City of Newport Beach's energy efficiency efforts include demonstrating leadership through the implementation of cost-effective energy efficiency improvements in their own facilities, minimizing costs associated with energy and utilities, and protecting the environment. The EAP is intended to guide the City to reduce GHG emissions by lowering municipal and community wide energy use.

The proposed Project would meet the latest California CALGreen Code and Energy Efficiency Code, which include the latest in energy efficiency standards, consistent with the goals of the Scoping Plan and the City's EAP.

2022 Scoping Plan

The 2022 Scoping Plan implements the reduction target adopted under SB 32 and seeks to reduce GHG emissions through a number of measures. The measures applicable to the proposed Project from the 2022 Scoping Plan include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as discussed below. Energy efficiency measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed above, the proposed Project would comply with the CALGreen Code and the Energy Efficiency Code regarding energy conservation and green building standards. Therefore, the proposed Project would comply with applicable energy measures. Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As noted above, the Project would comply with the CALGreen Code and Title 24, which includes a variety of different measures, including reduction of wastewater and water use. In addition, the proposed Project would include water-efficient irrigation systems and use water efficient landscape. Therefore, the proposed Project would not conflict with any of the water conservation and efficiency measures. The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Vehicles traveling to the Project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed Project would not conflict with the identified transportation and motor vehicle measures. Lastly, the Project is an infill residential development and near large employment areas such as Koll Center Newport and Newport Center, which could eliminate the need to travel long distances for some residents and thus reduce associated GHG emissions. The Project is therefore consistent with the 2022 Scoping Plans' greenhouse gas reduction strategies related to high density infill residential development.

2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, the Southern California Association of Governments (SCAG) adopted Connect SoCal–The 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled (VMT) from automobiles and light-duty trucks and thereby reduce GHG emissions from these sources. For the SCAG region, CARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The RTP/SCS lays out a strategy for the region to meet these targets. Overall, the SCS is meant to provide growth strategies that would achieve the regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high-quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles. However, the SCS does not require that local General Plans, Specific Plans, or zoning be consistent with the SCS; SCAG is required to consider local land use controls when drafting the SCS.

The Project would include the demolition of 60,675 sf of office space and would construct a 6-story apartment building comprised of 282 residential units and associated parking. As discussed above, the Project would result in an increase of 640 residents (9 percent of SCAG's projected population growth for the City from 2016 to 2045 of 7,100 residents) and 282 residential units (10 percent of SCAG's projected household growth for the County from 2016 to 2045 of 2,900 households). Implementing SCAG's RTP/SCS would greatly reduce the regional GHG emissions from transportation, helping to achieve Statewide emissions reduction targets. As stated above, the Project would result in fewer daily trips than under existing conditions and would not conflict with the stated goals of the RTP/SCS; therefore, the Project would not interfere with SCAG's ability to achieve the region's GHG reduction target of 19 percent below 2005 per capita emissions level by 2035. Furthermore, the proposed Project is not regionally significant per State CEQA Guidelines Section 15206 and as such, it would not conflict with the SCAG's RTP/SCS targets since those targets were established and are applicable on a regional level. Given the nature of the proposed Project, it is anticipated that Project implementation would not interfere with SCAG's ability to implement the regional strategies outlined in the RTP/SCS.

As discussed in Section 3.14, Population and Housing, the State of California has declared that the lack of housing is a critical problem that threatens the economic, environmental, and social quality of life in California. The consequences of the housing crisis include the lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commutes, and air quality deterioration. The lack of housing would result in longer vehicle commutes for employment which results in higher levels of GHG emissions for the region. Development of the proposed Project assists in addressing the housing shortage in addition to the lack of affordable housing units. As such, the Project would assist in the goals of GHG reduction by addressing GHG emissions related to vehicle travel.

Overall, the proposed Project would comply with existing State regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32 and would be consistent with applicable plans and programs designed to reduce GHG emissions. Therefore, the proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. The impacts would be less than significant, and no new mitigation measures are required.

Standard Conditions and Requirements

SC GHG-1 Prior to issuance of building permits, the Applicant shall be required to demonstrate to the Community Development Department, Building Division that building plans meet the applicable Title 24 Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations [CCR], Title 24, Part 6). These standards are updated, nominally every three years, to incorporate improved energy efficiency technologies and methods.

SC GHG-2 Prior to issuance of building permits, the Applicant shall be required to demonstrate to the Community Development Department, Building Division that building plans meet the applicable California Green Building Standards (CALGreen) Code (24 CCR 11).

Conclusion

In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the analysis provided in the 2006 EIR are required.

3.9 HAZARDS AND HAZARDOUS MATERIALS

The following analysis is derived from the "Phase I Environmental Site Assessment" (Phase I ESA), prepared for the Project by AES Due Diligence, Inc. (AES), dated April 22, 2021 (AES 2021). This Phase I ESA is included in Appendix D of this Addendum.

3.9.1 2006 EIR

As identified in the 2006 EIR, implementation of the General Plan would have a less than significant impact with respect to hazardous materials. Oversight by the appropriate federal, State, and local agencies and compliance with applicable regulations related to the handling and storage of hazardous materials would minimize the risk of the public's potential exposure to these substances. Therefore, impacts were considered less than significant.

The 2006 EIR concluded that compliance with existing regulations of the County Environmental Health Division, County Department of Toxic Substances Control, and RWQCB and General Plan Policies S 7.1 and S 7.4 would reduce impacts related to the release of hazardous materials into the environment. Additionally, compliance with Titles 8, 22, 26, and 49 of the CCR would ensure that this impact is less than significant.

Further, the 2006 EIR noted the areas of concerns for hazardous materials sites near schools. Compliance with the provisions of the City's Fire Code and implementation of Policy S 7.5 in the Safety Element of the General Plan in addition to the California Health and Safety Code would minimize the risks associated with the exposure of sensitive receptors to hazardous materials. Impacts were considered less than significant.

Additionally, the 2006 EIR identified that JWA is the nearest airport to JWA subarea. JWA generates nearly all aviation traffic directly above the City of Newport Beach due to flight paths. All land uses surrounding the airport are required to comply and be compatible with the land use standards established in the NBMC and the ALUC's AELUP for JWA. It should be noted that the northern inland portions of the City extending south just past Fashion Island, are included within the AELUP's height restriction zone for JWA.

The City of Newport Beach Emergency Management Plan guides responses to emergency situations associated with natural disasters, technological incidents, and nuclear defense operations. Implementation of General Plan policies S 9.1, S 9.2, and S 9.3 would reduce impacts associated with emergency response and evacuation in the City to a less than significant level.

Furthermore, according to the 2006 EIR, the City defines a wildland fire hazard area as any geographic area that contains the type and condition of vegetation, topography, weather, and structure density that potentially increases the possibility of wildland fires. The eastern portion of the City and surrounding areas to the north, east, and southeast include grass- and brush-covered hillsides with significant topographic relief that facilitate the rapid spread of fire, especially if fanned by coastal breezes or Santa Ana winds. The 2006 EIR noted that even though implementation of the proposed General Plan Update could result in development in urbanized areas adjacent to or intermixed with wildlands, this impact would be less than significant.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **S 7.4 – Implementation of Remediation Efforts:** Minimize the potential risk of contamination to surface water and groundwater resources and implement remediation efforts to any resources adversely impacted by urban activities.

3.9.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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 which 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 a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☑
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☑

Would the Project:

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

No Substantial Change from Previous Analysis. Construction activities associated with the proposed Project would require the transport and use of standard construction equipment and materials, some of which may involve a hazardous component such as transport and storage of fuels.

The severity of these potential effects varies by type of activity, concentration, and/or type of hazardous materials or wastes, and proximity to sensitive receptors. Given these activities would be associated with construction, they would be temporary in nature. Additionally, the proposed Project, similar to all development pursuant to the General Plan, would be required to comply with regulations and standards established by the applicable federal and State regulatory agencies, including the Department of Toxic Substances Control, the USEPA, and Occupational Safety and Health Administration and their standards of safety. All hazardous substances (e.g., paint, adhesives, finishing materials, cleaning agents, and fuels) would be handled in accordance with the same regulations. Compliance with applicable laws and requirements governing the use, storage, transportation, and disposal of hazardous materials would ensure that the proposed Project would not create a significant hazard to the public or the environment through the routine transport, storage, production, use, or disposal of hazardous materials.

Long-term, operational hazards to the environment or the public through the transport, use, or disposal of hazardous materials are typically associated with the operation of non-residential uses, such as industrial and some commercial uses. The Project proposes development of an apartment complex. Hazardous materials are not expected to be associated with the Project in substantial quantities once it is implemented. Use of hazardous materials would be limited to standard household chemicals such as cleansers and solvents and would be limited in household quantities. Because these materials would be used in very limited quantities, they are not considered a significant hazard to the public. Furthermore, these substances would be contained, stored, and used in accordance with manufacturers' instruction and handled in compliance with applicable standards and regulations. The proposed Project's impact on creating long-term significant hazards to the public or the environment through the routine transport, use, or disposal of hazardous materials would be less than significant. Thus, the Project would not create a new significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials that was not previously analyzed, and no mitigation measures are required.

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?***

No Substantial Change from Previous Analysis.

A Phase I ESA was prepared for the proposed Project site and is included as Appendix D to this Addendum. No evidence of recognized environmental conditions (RECs), current recognized environment conditions (CRECs), business environmental risk (BER), or historical recognized environmental conditions (HRECs) associated with the site were identified. The Phase I ESA identified two *de minimis* conditions at the Project site. These are suspected or confirmed presence of asbestos and lead based paints. Given that an Asbestos Operations and Maintenance (O&M) Plan is in place, and the site was not used for residential purposes at that time, these conditions were considered *de minimis*. No additional investigation is recommended at this time. With demolition of the commercial building in light of the O&M Plan in place, the said conditions would no longer be an issue. Therefore, the Project would not create a new significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, that was not previously analyzed, and no mitigation measures are required.

c) ***c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

No Substantial Change from Previous Analysis. The Project site is not proximate to a school; no school is located within one-quarter mile of the site. Eastbluff Elementary School located at 2627 Vista Del Oro is approximately 1.8 miles from the Project site. Temporary construction activities may require the use of materials listed as hazardous; however, these materials would be routine construction materials and would not be required in large quantities. Additionally, the contractor would be required to use standard construction controls and safety procedures, which would avoid and minimize the potential for accidental release or spill of such substances into the environment.

Further, residential activities associated with occupancy of the proposed apartment building would not generate hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste in quantities that may impact students at schools within one-quarter mile of the site, if one existed within that distance. The Project would not create a new significant impact regarding hazardous materials near schools, during construction and operation, that was not previously analyzed, and no mitigation measures are required.

d) ***Be located on a site which 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?***

No Substantial Change from Previous Analysis.

The project site is not identified on the Cortese List, which is the list of hazardous materials sites that is compiled pursuant to California Government Code Section 65962.5. In addition to the Cortese List, federal, State, and local governmental agencies maintain other lists of sites where hazardous materials may be present or used. Phase I ESA determined that the project site was not listed on hazardous materials databases. As previously addressed, a number of listings in proximity to the site were identified but were determined not to pose an environmental concern. Accordingly, no new impacts or a substantial increase in the severity of a previously identified significant impact evaluated in the 2006 EIR would occur. Additionally, no new information of substantial importance that was not known and could not have been known at the time the 2006 EIR was certified is available that would impact the prior finding of less than significant impact.

Therefore, the Project would not create a new significant impact related to hazardous materials sites, that was not previously analyzed would occur, and no new mitigation measures are required.

d) 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 or excessive noise for people residing or working in the project area?

No Substantial Change from Previous Analysis. As stated previously, the Project site is located approximately 0.5 mile southeast of the southernmost JWA runway. The Project site is located within the 60-65 dBA CNEL Noise Contours identified in the Airport Environs Land Use Plan (AELUP) and outside of the 65-70 dba CNEL Contours identified in the AELUP and the City's General Plan. Pursuant to the AELUP, the 60 dBA CNEL contour is normally consistent with residential land use (single and multi-family residences) and no special noise reduction requirements are necessary to reduce hazards related to noise. The project site falls within JWA Safety Zone 6 (Traffic Pattern Zone), where the likelihood of an accident is low. Safety Zone 6 allows for residential uses and most nonresidential uses; however, certain non-residential uses such as schools, stadiums, and health care facilities are not permitted (OCALUC 2008). The General Plan identifies a goal to protect residents, property, and the environment from aviation-related hazards, and lists General Plan Policies S 8.1 through S 8.4 to minimize risk in the case of an aviation accident. The entire airport area is within the Height Restriction Zone designated by the AELUP. Should the ALUC find a project inconsistent with the AELUP, the City Council may make appropriate findings for an override in accordance with applicable law.

As indicated in the AELUP for JWA, the Project site is located within the AELUP Part 77 Notification Area for JWA. Within the Notification Area boundary, the Airport Land Use Commission (ALUC) must be notified of any proposed construction or structural alterations involving a land use or legislative amendment in the AELUP Planning Area, development that exceeds 200 feet above ground level, and all heliports or helistops, among other criteria. The FAA has issued a "Determination of No Hazard to Air Navigation" for the Project finding that the proposed structure would not exceed obstruction standards and would not be a hazard to air navigation.

Based on the height analysis, the proposed apartment building has a maximum height of 100 feet from established grade and would not meet the above listed criteria. As such, the Project site is not subject to substantial risks from aviation hazards and would not result in a safety hazard. Therefore, the Project would not create a new significant impact related to safety hazards that was not previously analyzed, and no new mitigation measures are required.

e) f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Substantial Change from Previous Analysis. The proposed Project would not impair or physically interfere with an adopted emergency response or evacuation plan, including the City of Newport Beach Emergency Operations Plan (EOP). The EOP identifies evacuation routes, emergency facilities, and City personnel and describes the overall responsibilities of federal, State, regional, Operational Area, and City entities. No revisions to the adopted EOP would be required as a result of the proposed Project. Primary access to all major roads would be maintained during construction of the Project, and no evacuation routes would be impacted during Project implementation. Adherence to all applicable regulations and General Plan policies would result in a less than significant impact with respect to interference with an adopted emergency response plan or emergency evacuation plan. Therefore, the Project would not create a new significant impact related to emergency response, evacuation, or disaster plans that were not previously analyzed, and no mitigation measures are required.

f) g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Substantial Change from Previous Analysis. The proposed Project is not within a State Responsibility Area (SRA) or designated Very High Fire Hazard Severity Zones (VHFHSZ), as defined by the California Department of Forestry and Fire Prevention (CAL FIRE). The nearest VHFHSZ designated by CAL FIRE is located 5.51 miles southeast of the Project site, within the hillside and open space areas within the City (CAL FIRE 2022). The site is in a highly urbanized area and surrounded by developed land on all sides. The proposed apartment building would be constructed to meet current building and fire codes requirements. Therefore, the Project would not create a new significant impact to emergency response plans or emergency evacuation plans, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Hazards and Hazardous Materials have been identified for the proposed Project.

Conclusions

The hazards and hazardous materials impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the hazards and hazardous materials analysis provided in the 2006 EIR are required.

3.10 HYDROLOGY AND WATER QUALITY

The information in this section is derived from the "County of Orange/Santa Ana Region Priority Project Preliminary Water Quality Management Plan, 1600 Dove Street, Newport Beach, CA 92660" (pWQMP) prepared for the proposed Project by Tait & Associates, Inc. (2024). The report is included as Appendix E in this Addendum.

3.10.1 2006 EIR

The 2006 EIR determined that the implementation of development set forth in the 2006 General Plan could result in an increase in pollutants in storm water and wastewater. However, water quality standards and waste discharge requirements would not be violated with compliance with regulations including, but not limited to, the State Water Resources Control Board Construction General Permit and preparation and implementation of Stormwater Pollution Prevention Plan (SWPPP) required for compliance with the NPDES General Construction Stormwater Activity Permit. Impacts to violation of any water quality standards or waste discharge requirements were deemed less than significant.

Further, the 2006 EIR identified that implementation of the General Plan could create additional impervious surfaces which could interfere with groundwater recharge, and that development could substantially deplete groundwater supplies. However, the 2006 EIR also noted that as the four subareas are currently developed, there would be no substantive change in the amount of impervious surfaces. Thus, the 2006 EIR identified that new development would not substantially affect groundwater recharge and that potential impacts to groundwater recharge would be less than significant.

Regarding drainage and erosion, the 2006 EIR stated that development under the proposed General Plan Update could alter the existing drainage pattern of the Planning Area and potentially result in erosion and siltation. However, General Plan Update policies, including preparation of a WQMP and implementation of BMPs would reduce the risk of short-term erosion resulting from drainage alterations during construction and operations to less than significant. The General Plan Update could also alter the existing drainage pattern of the Planning Area and potentially result in increased downstream flooding through the addition of impervious surfaces, exceeding the capacity of existing or planned stormwater drainage systems, or providing substantial additional sources of polluted runoff. However, General plan Update policies, such as preparation of a WQMP, implementation of BMPs, incorporation of stormwater detention facilities, design of drainage facilities to minimize adverse effects on water quality, and minimization of increases in impervious areas, would reduce impacts to less than significant.

Furthermore, although the increase in stormwater runoff from implementation of the General Plan Update could increase stormwater runoff, which would require expansion of existing or construction of new storm drain facilities, impacts would be less than significant, as upgrades, expansion, and construction of necessary utilities to accommodate new development would be subject to project-specific environmental review.

Development of the General Plan Update anticipated placing housing or structures within a 100-year flood zone. However, the JWA subarea does not contain 100-year flood zone areas within its boundaries. This impact was deemed less than significant. Additionally, implementation of the flood protection policies contained in the General Plan Update and existing NBMC would minimize the impact of flooding. These protective measures would also reduce impacts from flooding as a result of dam failure to the extent feasible. Thus, risks associated with flooding, including dam failure inundation, were deemed less than significant.

The 2006 EIR also noted that development under the proposed General Plan Update would increase the exposure of people to low probability but high-risk events such as seiche, tsunami, and mudflows. However, the JWA subarea was not included as a probable area for these impacts. This impact was deemed less than significant with implementation of flood protection policies contained in the Safety Element of the proposed General Plan Update.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **NR 3.3 - Ground Water Contamination:** Suspend activities and implement appropriate health and safety procedures in the event that previously unknown groundwater contamination is encountered during construction. Where site contamination is identified, implement an appropriate remediation strategy that is approved by the City and the state agency with appropriate jurisdiction.
- **NR 3.4 - Storm Drain Sewer System Permit:** Require all development to comply with the regulations under the City's municipal separate storm drain system permit under the National Pollutant Discharge Elimination System.
- **NR 3.9 - Water Quality Management Plan:** Require new development applications to include a Water Quality Management Plan (WQMP) to minimize runoff from rainfall events during construction and post-construction.
- **NR 3.10 - Best Management Practices:** Implement and improve upon Best Management Practices (BMPs) for residences, businesses, development projects, and City operations.
- **NR 3.11 - Site Design and Source Control:** Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Discharge Elimination System (NPDES), structural treatment BMPs will be implemented along with site design and source control measures.
- **NR 3.14 - Runoff Reduction on Private Property:** Retain runoff on private property to prevent the transport of pollutants into natural water bodies, to the maximum extent practicable.

- **NR 3.15 - Street Drainage Systems:** Require all street drainage systems and other physical improvements created by the City, or developers of new subdivisions, to be designed, constructed, and maintained to minimize adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize impacts to water bodies.
- **NR 3.17 - Parking Lots and Rights-of-Way:** Require that parking lots and public and private rights of way be maintained and cleaned frequently to remove debris and contaminated residue.
- **NR 3.19 - Natural Drainage Systems:** Require incorporation of natural drainage systems and stormwater detention facilities into new developments, where appropriate and feasible, to retain stormwater in order to increase groundwater recharge.
- **NR 3.20 - Impervious Surfaces:** Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible.
- **NR 4.4 - Erosion Minimization:** Require grading/erosion control plans with structural BMPs that prevent or minimize erosion during and after construction for development on steep slopes, graded, or disturbed areas.

3.10.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☑
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☑
i) result in substantial erosion or siltation on- or off-site;				
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
iii) 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; or				
iv) impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☑
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☑

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Substantial Change from Previous Analysis. According to the pWQMP, potential pollutant sources associated with the construction and operation of the proposed Project may include suspended solid/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris (TAIT 2024). Construction and operation of the proposed Project would increase the potential for storm water runoff to transport these pollutants into the storm drain system, thus contributing to the degradation of water quality and the potential violation of water quality standards or waste discharge requirements.

Short-term construction impacts from the proposed Project would be minimized through compliance with the NPDES Construction General Permit. This permit, which requires filing a notice of intent (NOI) with the State Water Resources Control Board, requires the development and implementation of a SWPPP, which must include (1) erosion and sediment-control BMPs that meet or exceed measures required by the Construction General Permit and (2) BMPs that control other potential construction-related pollutants. A SWPPP would be developed as required by, and in compliance with, the NPDES Construction General Permit. In addition to the requirements of the NPDES Construction General Permit, the *California Building Code* and grading permit requirements include provisions that require reduction of erosion and sedimentation impacts during construction. Full compliance with applicable local, State, and federal regulations would ensure that water quality impacts associated with construction would be less than significant.

As indicated in the pWQMP prepared for the Project, the following structural source control BMPs would achieve long-term water quality enhancement through proposed drainage and treatment systems: providing storm drain stenciling and signage; designing and constructing trash and waste storage areas to reduce pollution introduction; using efficient irrigation systems and landscape design, water conservation, smart controllers, and source control;

protecting slopes and channels and providing energy dissipation; and washing water control for food and preparation areas. Non-structural BMPs (also identified in the pWQMP) would reduce pollutant loading into storm water runoff (TAIT 2024). Therefore, with compliance with the recommendations set forth in the pWQMP for the Project, potential impacts related to storm water would be less than significant. Therefore, the Project would not create a new significant impact pertaining to potential short- and long-term water quality-related impacts that was not previously analyzed, and no mitigation measures are required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project impede sustainable groundwater management of the basin?

No Substantial Change from Previous Analysis. Under existing conditions, the Project site is currently 86 percent impervious and does not contribute significantly to groundwater recharge due to the small amounts of unpaved areas or pervious surfaces, which are subject to surface water infiltration. As identified in the pWQMP, the surface of the site would decrease the impervious condition to approximately 79 percent. Due to the nominal decrease in impervious surface area, development of the proposed Project would not interfere with groundwater recharge through the elimination of surface water infiltration.

The proposed Project would not withdraw directly from the groundwater basin; rather, water resources would be provided by the City (Section 3.19, Utilities and Service Systems). The proposed Project would connect to existing water mains (i.e., 8-inch domestic water main in Dolphin Striker-Way, or the existing 12-inch water main in Dove Street for the proposed domestic, irrigation, and fire water flows) that are serviced by the City of Newport Beach. The City has indicated that there is adequate water capacity to serve the proposed Project. Therefore, the Project would not create a new significant impact pertaining to groundwater that was not previously analyzed, and no mitigation measures are required.

c) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) result in substantial erosion or siltation on- or off-site;

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii) 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; or

iv) impede or redirect flood flows?

No Substantial Change from Previous Analysis. The Project site is located within the Newport Bay Watershed. The site drains to Newport Bay. As described in Section 3.0, Project Description, the proposed Project would include construction of a multi-level podium apartment building with two and a half levels of subterranean parking. The Project is expected to maintain the existing drainage pattern of the site. The site currently drains towards Dove Street, with approximately 60 percent of the drainage running towards the northwest and 40 percent to the southwest. The site is considered relatively flat at 1 percent to 2 percent to provide sheet flow within the existing parking lots. The parking lot drainage is collected by a series of concrete swales, which are collected by onsite private catch basins. The drainage is then conveyed to the public curb and gutter via various curb drains located along Dove Street. The drainage is then conveyed to the north and is collected by an existing public catch basin, which discharges the stormwater to an existing 54-inch storm drain owned and maintained by the City. The drainage is eventually discharges to the San Diego Creek and finally to the Newport Bay.

According to the pWQMP, development of the proposed Project would not alter the course of a stream or river. Under proposed conditions, approximately 0.52 acre of the 2.49-acre site would be landscaped or have a pervious surface. The impervious surface includes walkway areas in the podium area and roads to be paved with asphalt or decorative pavement, that allow for vehicular traffic. The roof drainage would be collected by a series of roof drains that would be routed to proposed bioretention basins via storm drain system. The bioretention basins would be sized for the design capture volume (DCV). The Project proposes two connections to the existing 54-inch storm drain in Dove Street. Once the DCV is achieved, the water quality flows and 25-year storm events would be discharged to the existing 54-inch storm drainpipe. Also, the Project proposes individual parkway drains for each bioretention basin designed for the 100-year storm events.

Since the impervious percentage is decreased, runoff volume is decreased and would not exceed the allowable 5 percent, therefore no hydrologic conditions of concern (HCOC) are anticipated. The Project would not create a new significant impact pertaining to substantial erosion, runoff water, or flood flows that were not previously analyzed, and no mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

According to the 2006 EIR, the probability of dam failure affecting the City is low. The potential for secondary seismic hazards, such as tsunami and seiche, is also considered very low to none because the Project site is located away from the ocean at an elevation of over 45 feet above mean sea level and outside of mapped tsunami inundation zones. Further, the Project site is not located adjacent to a confined body of water; therefore, the potential for seismic hazard of a seiche (an oscillation of a body of water in an enclosed basin) is considered very low to none. Therefore, the Project would not result in new significant impacts pertaining to flood hazard, tsunami, or seiche that would release pollutants due to inundation, that were not previously analyzed, and no mitigation measures are required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Substantial Change from Previous Analysis. As discussed above under Threshold 3.10(a), the Project would comply with applicable water quality regulations for long-term impacts. Specifically, the Project would comply with the NPDES Permit requirements. For long-term water quality impacts, in accordance with the NPDES program, the Project would continue to operate in accordance with the Orange County Municipal Storm Water Permit.

As detailed in the 2006 EIR, there are no groundwater wells on the Project site, and no wells are proposed as part of the Project. The proposed Project would not involve direct withdrawals of groundwater, nor would it interfere with groundwater recharge such that it would result in a net deficit in aquifer volume or lowering of the local groundwater table. Therefore, the Project would not create a new significant impact pertaining to sustainable groundwater management plan that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

SC WQ-1	Prior to the issuance of a grading permit, an SWPPP and Notice of Intent (NOI) to comply with the General Permit for Construction Activities shall be prepared, submitted to the State Water Resources Control Board (SWRCB), and made part of the construction program. This SWPPP shall detail measures and practices that would be in effect during construction to minimize the Project's impact on water quality and stormwater runoff volumes.
SC WQ-2	Prior to issuance of a grading permit, the Applicant shall prepare and submit a Water Quality Management Plan (WQMP) for the Project, subject to the approval of the Community Development Department. The WQMP shall include appropriate BMPs to ensure project runoff is adequately treated.
SC WQ-3	During construction, if groundwater is unexpectedly encountered, the Applicant shall apply for dewatering coverage and adhere to the monitoring and reporting program under the Santa Ana Regional Water Quality Control Board National Pollutant Discharge Elimination System (NPDES).

Conclusion

The hydrology and water quality impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the hydrology and water quality analysis provided in the 2006 EIR are required.

3.11 LAND USE AND PLANNING

3.11.1 2006 EIR

The Project site is located within the JWA subarea. The Airport Area encompasses the properties abutting and east of JWA and is in close proximity to the Irvine Business Complex and University of California, Irvine. This proximity has influenced the area's development with uses that support the airport and University, such as research and development, high technology industrial and visitor-serving uses, such as hotel and car rental agencies. This subarea could be reconfigured to include new residential neighborhoods that could result in the extension of present residential development of the Irvine Business Complex to the north. These uses would occur in addition to the maintenance and/or limited expansion of the currently developed mix of office, airport-supporting commercial, hotel, and public uses. Industrial uses would decrease upon implementation of residential uses allowed in the proposed General Plan Update. The General Plan Update contains policies for the various types of proposed land uses and specifies the parameters by which these land uses should be developed to ensure compatibility with both existing development in the area or future land uses. Policy LU 6.15.8 encourages commercial development that supports the JWA, the existing office uses, and the future residential development under the proposed General Plan Update. Policy LU 6.15.9 allows new multi-family uses to be developed in mixed use buildings that support local commercial land uses. General Plan Update Policy LU 6.15.1 calls for the provision of distinct business park, commercial, and airport-serving districts and residential neighborhoods that are integrated to assure a quality environment and compatible land uses.

It should be noted that the 2006 EIR over analyzed the number of residential units in the JWA subarea. Although the adopted General Plan approved a maximum of 2,200 residential units in the Airport Area, at a maximum density of 50 dwelling units per net acre (du/net acre), the General Plan Program EIR evaluated 4,300 residential units in the Airport Area. As set forth in the General Plan Land Use Element, of the 2,200 residential units allocated to the Airport Area, 1,650 of the units must replace existing office, retail, and/or industrial uses so that there is no net gain in vehicular trips. The remaining 550 units of the 2,200 units allocated to the Airport Area (2,200 minus 1,650) are "additive" units that may be developed as infill on existing surface parking lots or areas not used as occupiable buildings on properties within the Conceptual Development Plan Area provided that parking is replaced onsite.

Development in the Airport Area has been historically restricted due to the noise impacts of JWA. Much of the southwestern portion of the area is located in the 65 A-weighted decibels (dBA) CNEL, which is unsuitable for residential and other "noise-sensitive" uses without noise attenuation. Additionally, building heights are currently restricted for aviation safety. Uses outside of the 65 dBA CNEL noise contour are generally considered to be a sufficient distance from airport land uses and associated activities to minimize land use conflicts, with incorporation of appropriate design techniques. Policy LU 6.15.24 requires that all development be constructed within the height limits and residential uses be located outside of areas exposed to the 65 dBA CNEL noise contour specified by the AELUP, unless the City

Council makes appropriate findings for an override in accordance with applicable law. As such, the possibility exists for residential development to occur within the 65 dBA CNEL noise contour, potentially exposing residents to exterior noise levels of 65 dBA or greater and daily aircraft overflight. Airport uses are considered by design to be incompatible with adjacent residential uses. As such, according to the analysis in the 2006 EIR, if residential developments were constructed within the 65 dBA CNEL noise contour, land use conflicts could occur, and impacts would be significant per the said analysis.

The introduction of residential uses to the Airport Area would represent a departure from the prior commercial/industrial character of the area and a change in the land use pattern of the area. Residential units would be implemented in tracts of land generally a minimum of 10 acres in size, although projects could be as small as 5 acres if certain conditions are met, as specified in Policy LU 6.15.10. The requirements for development on this scale would ensure master planning accompanies the introduction of residential units, and clustering of residential units in a manner to minimize conflicts with existing adjacent uses to the extent feasible. Further, the first phase of residential development in the area would be 50 units per net acre, with subsequent developments at 30 units per net acre. Development of high-density units would result in retention of the existing urban character of the area.

The proposed General Plan Update policies described above, which set forth requirements for mixed use developments, would ensure that development is designed to be compatible with adjacent non-residential units. Where development occurs outside of the 65 dBA CNEL noise contour, the introduction of residential uses consistent with the land use pattern set forth in the General Plan update would be less than significant. The 2006 EIR concluded that the General Plan would not include any roadway extensions or other development features through currently developed areas; instead, it would allow limited infill development in select subareas of the City. The 2006 EIR did not include any extensions of roadways or other development features through currently developed areas that could physically divide an established community. Therefore, the 2006 EIR would not physically divide an established community and impacts were identified as less than significant.

The 2006 EIR analyzed land use incompatibility with regard to introducing new land uses and structures that could result in intensification of development in the City. The 2006 EIR concluded that the majority of land use changes proposed would not result in incompatibilities or nuisances that would rise to a level of significance and impacts were considered less than significant. The 2006 EIR was found to be consistent with all applicable land use plans for the City.

Mitigation Program

General Plan policies for Land Use and Planning are included in Table 4.11, below.

3.11.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☑
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Would the Project:

a) Physically divide an established community?

No Substantial Change from Previous Analysis. The Project site is currently developed with an office building and is bound by Dove Street to the west and surrounded by office, restaurant, and commercial uses and associated surface parking lot to the east and north, and Dolphin-Striker Way to the south. Overall, the Project site is within a largely mixed-use area of the City characterized by low rise light industrial, office, and commercial uses. The nearest residential use to the Project site is approximately 1,775 feet to the southeast. The Project proposes the development of an apartment building. Therefore, the Project would not physically divide an established community as none exists on the site. No new impact that was not previously discussed would occur, and no mitigation is required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Substantial Change from Previous Analysis. As stated in Section 2.2, Existing Site and Area Characteristics, the proposed Project site has a General Plan designation of MU-H2, and a Zoning designation of PC-11 (Newport Place) and is within the Residential Overlay. PC-11 and associated development standards were adopted by the City of Newport Beach on December 21, 1970. Multiple amendments have been prepared, with Amendment No. 1 dated December 13, 1971, and the most recent Amendment No. 39 dated November 30, 2021. Due to its central location, topography, accessibility to four freeways, two railroads, and its relation to Orange County Airport, the 81.74-acre PC-11 was deemed appropriate for commercial and light industrial uses. Additionally, the area was identified in the 2006 General Plan as a key area for future housing opportunities.

The Project proposes a General Plan Amendment (GPA) to obtain additional density allocated to the Airport Area (Statistical Area L4). Thus, with approval of the proposed GPA, the Project would be consistent with the densities allocated to the Airport Area.

Table 3-11, below, includes analysis of the proposed Project consistency with the General Plan goals and policies.

As such, implementation of the proposed Project would not result in significant land use impacts related to conflict with any land use plan, policy, or regulation. Therefore, the Project would not create a new significant impact pertaining to land use that was not previously analyzed, and no mitigation measures are required.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Land Use Element	
Goal LU 2 – A living, active, and diverse environment that complements all lifestyles and enhances neighborhoods, without compromising the valued resources that make Newport Beach unique. It contains a diversity of uses that support the needs of residents, sustain and enhance the economy, provide job opportunities, serve visitors that enjoy the City's diverse recreational amenities, and protect its important environmental setting, resources, and quality of life.	
Policy LU 2.1 Residential-Serving Land Uses. Accommodate uses that support the needs of Newport Beach's residents including housing, retail, services, employment, recreation, education, culture, entertainment, civic engagement, and social and spiritual activity that are in balance with community natural resources and open spaces.	Consistent: The proposed Project would support the needs of Newport Beach since it would develop a multi-story residential project with 282 residential units, inclusive of 28 units affordable to very low-income households. The Project is an infill development and would not adversely impact the community's natural resources and open spaces, particularly because the Airport Area is an urbanized area of the City.
Policy LU 2.2 Sustainable and Complete Community. Emphasize the development of uses that enable Newport Beach to continue as a self-sustaining community and minimize the need for residents to travel outside of the community for retail, goods and services, and employment.	Consistent: The proposed Project would develop residential uses in Newport Place. By integrating residential uses adjacent and proximate to other commercial, restaurant, and office uses and in the vicinity of two six-story approved but not yet constructed multi-unit residential developments at 1300 and 1400 Bristol Street, the proposed Project would provide residents with opportunities for employment in the many businesses in and around Newport Place and other nearby business and employment centers in Newport Beach and surrounding communities.
Policy LU 2.3 Range of Residential Choices. Provide opportunities for the development of residential units that respond to community and regional needs in terms of density, size, location, and cost. Implement goals, policies, programs, and objectives identified within the City's Housing Element.	Consistent: The proposed Project would have 282 residential units, including studio, 1-bedroom, 2-bedroom, and potentially 3-bedroom units. The Project includes 28 affordable units. The Project provides a mix of residential dwelling units (both in terms of size and affordability levels) in furtherance of the City's General Plan and 6th Cycle 2021-2029 Housing Element.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy LU 2.8 Adequate Infrastructure. Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, storm drainage, energy, and so on) and public services (schools, parks, libraries, seniors, youth, police, fire, and so on).	Consistent: The proposed Project would be adequately served by the necessary public services and utilities and service systems. Refer to Sections 3.15, Public Services, and 3.19, Utilities and Service Systems, for further information and analysis regarding public services and utility infrastructure, respectively.
Goal LU 3 – A development pattern that retains and complements the City's residential neighborhoods, commercial and industrial districts, open spaces, and natural environment.	
Policy LU 3.2 Growth and Change. Enhance existing neighborhoods, districts, and corridors, allowing for re-use and infill with uses that are complementary in type, form, scale, and character. Changes in use and/or density/intensity should be considered only in those areas that are economically underperforming, are necessary to accommodate Newport Beach's share of projected regional population growth, improve the relationship and reduce commuting distance between home and jobs, or enhance the values that distinguish Newport Beach as a special place to live for its residents. The scale of growth and new development shall be coordinated with the provision of adequate infrastructure and public services, including standards for acceptable traffic level of service.	Consistent: The Project requires a General Plan Amendment to obtain additional base density allocated to the Airport Area (Statistical Area L4). . The proposed Project is an infill residential development that would replace the existing four-story office buildings with 282 multi-unit residences, inclusive of 28 affordable units. The Airport Area, inclusive of Newport Place, includes a mix of existing and planned office, commercial, hotel, and residential uses. Therefore, the Project would be compatible with existing and future uses. The seven-story building would be located adjacent and proximate to existing office, restaurant, and commercial buildings and the six-story approved but not yet constructed mixed-use development adjacent to the site ("Newport Crossings") that includes commercial floor area and 350 apartment units. Proximity to one of Newport Beach's job centers can reduce commute distances between home and jobs. The Project provides a mix of residential dwelling units (both in terms of size and affordability levels) in furtherance of the City's 6th Cycle 2021-2029 Housing Element. Additionally, as concluded in Addendum Section 3.15, Public Services, Section 3.17, Transportation, and Section 3.19, Utilities and Service Systems, the Project would not adversely impact public services, traffic, or utilities.
Policy LU 3.3. Opportunities for Change. Provide opportunities for improved development and enhanced environments for residents in the following districts and corridors, as specified in Polices 6.3.1 through 6.22.7: John Wayne Airport Area: reuse of underperforming industrial and office properties and development of cohesive residential neighborhoods in proximity to jobs and services.	Consistent: The Project would redevelop and reuse a site featuring an underperforming office use and would develop residential uses in a cohesive design near existing jobs and services.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy LU 3.8 Project Entitlement Review with Airport Land Use Commission. Refer the adoption or amendment of the General Plan, Zoning Code, specific plans, and Planned Community development plans for land within the John Wayne Airport planning area, as established in the JWA Airport Environs Land Use Plan (AELUP), to the Airport Land Use Commission (ALUC) for Orange County for review, as required by Section 21676 of the California Public Utilities Code. In addition, refer all development projects that include buildings with a height greater than 200 feet above ground level to the ALUC for review.	Applicable. The proposed Project will be referred to the ALUC for a determination of consistency with the AELUP for JWA because the Project requires a General Plan Amendment to obtain additional base density allocated to the Airport Area (Statistical Area L4).
Goal LU 4 – Management of growth and change to protect and enhance the livability of neighborhoods and achieve distinct and economically vital business and employment districts, which are correlated with supporting infrastructure and public services and sustain Newport Beach's natural setting.	
Policy LU 4.1 Land Use Diagram. Accommodate land use development consistent with the Land Use Plan. Figure LU1 depicts the general distribution of uses throughout the City and Figure LU2 through Figure LU15 depict specific use categories for each parcel within defined Statistical Areas. Table LU1 (Land Use Plan Categories) specifies the primary land use categories, types of uses, and, for certain categories, the densities/intensities to be permitted. See page 3-11 of the City's General Plan for the full policy.	Consistent: The Project requires a General Plan Amendment to obtain additional base density allocated to the Airport Area (Statistical Area L4). The Project proposes 188 "base" units on a 2.49-acre parcel, which equates to density of 64 du/ac. The Project's 188 base units are comprised of 139 units from the conversion of the office buildings to residential use and 49 additional units allocated to the Airport Area (Statistical Area L4) under the General Plan.
Goal LU 5.6 – Neighborhoods, districts, and corridors containing a diversity of uses and buildings that are mutually compatible and enhance the quality of the City's environment	
Policy LU 5.6.1 Compatible Development. Require that buildings and properties be designed to ensure compatibility within and as interfaces between neighborhoods, districts, and corridors.	Consistent: The proposed Project would develop additional residential uses in Newport Place. By integrating residential uses adjacent and proximate to other commercial, restaurant, and office uses as well as the approved but not yet constructed mixed-use Newport Crossings development, the proposed Project would provide residents with opportunities for employment in the many businesses in and around Newport Place and other nearby business and employment centers in Newport Beach and surrounding communities. Additionally, the Project's building mass is compatible to the existing and planned land uses in the area, where these building are variable in height.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy LU 5.6.2 Form and Environment. Require that new and renovated buildings be designed to avoid the use of styles, colors, and materials that unusually impact the design character and quality of their location such as abrupt changes in scale, building form, architectural style, and the use of surface materials that raise local temperatures, result in glare and excessive illumination of adjoining properties and open spaces, or adversely modify wind patterns.	Consistent: The architectural style of the Project would be compatible with existing and planned development in Newport Place and surrounding areas with respect to materials and colors. The Project would use building glass and glazing with minimal reflective characteristics. The building material, style, and colors would not raise local temperatures through glare or excessive illumination.
Policy LU 5.6.3 Ambient Lighting. Require that outdoor lighting be located and designed to prevent spillover onto adjoining properties or significantly increase the overall ambient illumination of their location.	Consistent: Exterior lighting would be designed, arranged, directed downward, or shielded to contain direct illumination on-site to prevent excess illumination and light spillover onto adjoining land uses and/or roadways. Development of the Project would also be required to adhere to all applicable City lighting as set forth in NBMC Section 20.30.070, Outdoor Lighting. It is also noted that development of the Project would be required to comply with California's Building Energy Efficiency Standards for Residential Buildings, Title 24, Part 6, of the CCR, which outlines mandatory provisions for lighting control devices and luminaries.
Policy LU 6.1.1 Adequate Community Supporting Uses. Accommodate schools, government administrative and operational facilities, fire stations and police facilities, religious facilities, schools, cultural facilities, museums, interpretative centers, and hospitals to serve the needs of Newport Beach's residents and businesses.	Consistent: As addressed in Section 3.15, Public Services, of this Addendum, the Project would not adversely impact community services. The Project would comply with applicable conditions and requirements, including the payment of the Property Excise Tax to the City of Newport Beach, as set forth in NBMC Section 2.12 et seq. and used for public improvements and facilities associated with the Fire Department, public libraries, and public parks.
Goal LU 6.2 — Residential neighborhoods that contain a diversity of housing types and supporting uses to meet the needs of Newport Beach's residents and are designed to sustain livability and a high quality of life.	
Policy LU 6.2.1 Residential Supply. Accommodate a diversity of residential units that meets the needs of Newport Beach's population and fair share of regional needs in accordance with the Land Use Plan's designations, applicable density standards, design and development policies, and the adopted Housing Element.	Consistent: The General Plan 2021-2029 Housing Element identifies the Airport Area as one of the key areas for future housing opportunities. The Project would have 282 multi-unit rental apartments, inclusive of 28 affordable to very low-income households. This development would support the City's 6th Cycle Regional Housing Needs Assessment (RHNA) allocation.
Policy LU 6.2.3. Residential Affordability. Encourage the development of residential units that are affordable for those employed in the City.	Consistent: The Project would have 28 units (15% of total base units) that are reserved as affordable to very low-income households. As revised by Council Resolution No. 2023-13 on July 25, 2023, the minimum percent of affordable units for residential development in the Newport Place Planned Community (PC-11) residential overlay was revised from 30 percent to 15

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
	percent of the base units[4]. Therefore, the Project is consistent with the City's affordability requirements. To illustrate compliance with the Residential Overlay affordable housing requirements and density bonus allowances of the City Zoning Code and State law, the Project Applicant will submit an AHIP for the City's review and approval at a future date when project design approvals are sought.
Policy LU 6.2.9 Private Open Spaces and Recreational Facilities. Require the open space and recreational facilities that are integrated into and owned by private residential development are permanently preserved as part of the development approval process and are prohibited from converting to residential or other types of land uses.	Consistent: The Project would offer on-site amenities and open space including a podium level amenity space, potential roof-top common area. The Applicant would also contribute funds for off-site development of a public park. Recreational amenities would not be converted to residential or other types of land uses on the site.
Goal LU 6.15 – A mixed-use community that provides jobs, residential, and supporting services in close proximity, with pedestrian-oriented amenities that facilitate walking and enhance livability.	
Policy LU 6.15.1 Land Use Districts and Neighborhoods. Provide for the development of distinct business park, commercial, and airport-serving districts and residential neighborhoods that are integrated to ensure a quality environment and compatible land uses.	Consistent: See consistency analysis for Policies LU 5.6.1 and 5.6.2. The Project will provide 282 additional residential dwelling units (including affordable units) to the Airport Area in proximity to other approved developments including Newport Crossings (adjacent) and the Residences at 1300 and 1400 Bristol Street projects (approved but not yet constructed). The Project would advance the City's General Plan policies that provide for a mix of integrated uses in the Airport Area.
Policy LU 6.15.3 Airport Compatibility. Require that all development be constructed in conformance with the height restrictions set forth by the Federal Aviation Administration (FAA), Federal Aviation Regulations (FAR) Part 77, and Caltrans Division of Aeronautics, and that residential development shall be allowed only on parcels with noise levels of less than the John Wayne Airport 65 dBA CNEL noise contour area as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within the 65 dBA CNEL noise contour shown in Figure N5 are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are, however, encouraged on parcels located wholly within the 65 dBA CNEL contour area.	Consistent: The Project is a seven-story apartment development with podium level amenity space, a leasing office, potential roof-top common space, and parking within an on-grade parking garage with two and a half levels of subterranean parking. The Project site is in Safety Zone 6 of the JWA AELUP, the FAR Part 77 Obstruction Imaginary Surface Zone, and the FAR Part 77 Notification Area. The building is proposed to be 100 feet high, measured from the established grade to the top of the rooftop parapet, which is consistent with the allowable uses under the AELUP Safety Zone 6 and is under the 200 feet height limit for the AELUP and for FAA Part 77 notification. Therefore, the Project would not exceed obstruction standards and would not be a hazard to air navigation. Further, the Project site is outside of the 65 dBA CNEL noise contour identified by the City of Newport Beach for JWA as set forth in the 2014 JWA Settlement

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[4] A minimum of 15 percent of base units in a residential development are required to be affordable to lower income households.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
	Agreement Amendment EIR No. 617 as well as the AELUP. Therefore, the Project is consistent with the land use and noise-related policies of the General Plan including LU 6.15.3.
Policy LU 6.15.5 Residential and Support Uses. Accommodate the development of a maximum of 2,200 multi-family residential units, including workforce housing, and mixed-use buildings that integrate residential with ground level office or retail uses, along with supporting retail, grocery stores, and parklands. Residential units may be developed only as the replacement of underlying permitted nonresidential uses. When a development phase includes a mix of residential and nonresidential uses or replaces existing industrial uses, the number of peak hour trips generated by cumulative development of the site shall not exceed the number of trips that would result from development of the underlying permitted nonresidential uses. However, a maximum of 550 units may be developed as infill on surface parking lots or areas not used as occupiable buildings on properties within the Conceptual Development Plan Area depicted on Figure LU22 provided that the parking is replaced on-site.	Consistent: The proposed Project would be adjacent and proximate to existing office, restaurant, and commercial land uses as well as the mixed-use Newport Crossings development, approved but not yet constructed, that provide jobs and supporting services within the Airport Area. More specifically, the Project proposes 282 residential units. The Project would be within the 2,200 maximum multi-unit count for the Airport Area. LU 6.15.5 established a development limit of 2,200 maximum dwelling units for the Airport Area, exclusive of density bonuses permitted under SDBL. The Project's 139 residential units converted from the office buildings onsite area within the 2,200 maximum for the Airport Area established by the General Plan. The Project includes a General Plan Amendment to obtain additional base density allocated to the Airport Area (Statistical Area L4). With approval of the General Plan Amendment the Project would be consistent with this policy.
Policy LU 6.15.6 Size of Residential Villages. Allow development of mixed-use residential villages, each containing a minimum of 10 acres and centered on a neighborhood park and other amenities (as conceptually illustrated in Figure LU23).	Consistent: Newport Place Planned Community Development Plan Amendment No. PD2011-005 was adopted creating the Residential Overlay in the Planned Community, which permitted residential developments less than 10 acres in size, subject to Site Development Review, provided they include: (1) a minimum of 30 percent of the units affordable to lower-income households; and (2) include densities between 30 du/acre and 50 du/acre consistent with the General Plan land use designation and policies for the Airport Area. As revised by Council Resolution No. 2023-13 on July 25, 2023, the minimum percentage of affordable units was revised from 30 percent to 15 percent of the base units within a residential development are required to be affordable to lower income households. The affordable housing requirement for the proposed Project is 28 units (15 percent of 188 base units). The Project meets the affordability criteria, in lieu of the 10-acre minimum project site development.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy LU 6.15.7. Overall Density and Housing Types. Require that residential units be developed at a minimum density of 30 units and maximum of 50 units per net acre averaged over the total area of each residential village. Net acreage shall be exclusive of existing and new rights-of-way, public pedestrian ways, and neighborhood parks. Within these densities, provide for the development of a mix of building types ranging from townhomes to high-rises to accommodate a variety of household types and incomes and to promote diversity of building masses and scales.	Consistent: The Project's base density consists of 188 units (139 units from the conversion of the office building to a residential and 49 additional units allocated to the Airport Area [Statistical Area L4]), via a General Plan Amendment. The proposed Project qualifies for a 50 percent density bonus (i.e., 94 units) in exchange for providing the necessary level of affordable housing. The 49 additional base units referenced above, do not constitute a "major amendment" (individually or cumulatively) for purposes of Section 423 of the City's Charter, and a vote of the electorate is not required. Inclusive of only the conversion units, the proposed density of 55.8 dwelling units per acre would exceed the maximum density of 50 dwelling units per acre. Including the proposed GPA units, conversion units, and density bonus units, the Project would not comply at a density of 113 dwelling units per acre and a waiver is necessary to implement the Project. The development standard waiver has been requested pursuant to the AHIP.
Policy LU 6.15.8 First Phase Development Density. Require a residential density of 45 to 50 units per net acre, averaged over the first phase for each residential village. This shall be applied to 100 percent of properties in the first phase development area whether developed exclusively for residential or integrating service commercial horizontally on the site or vertically within a mixed-use building. On individual sites, housing development may exceed or be below this density to encourage a mix of housing types, provided that the average density for the area encompassed by the first phase is achieved.	Consistent: The Project would be developed in two phases.
Policy LU 6.15.13 Standards. To provide a focus and identity for the entire neighborhood and to serve the daily recreational and commercial needs of the community within easy walking distance of homes, require dedication and improvement of at least 8 percent of the gross land area (exclusive of existing rights-of-way) of the first phase development in each neighborhood, or ½ acre, whichever is greater, as a neighborhood park. This requirement may be waived by the City where it can be demonstrated that the development parcels are too small to feasibly accommodate the park or inappropriately located to serve the needs of local residents, and when an in-lieu fee is paid to the City for the acquisition and improvement of other	Consistent: The Project includes a request for a waiver of the City's park dedication requirements associated with the provision of affordable housing and density bonus. Pursuant to General Plan Policy LU 16-15.13, a public park equal to 8 percent of the gross land area of the total development, or a minimum 0.5-acre, whichever is greater, shall be provided. This requirement would mandate a 0.5-acre park on the 2.49-acre project site. The General Plan allows a waiver of its park dedication requirement where it can be demonstrated that the development parcels are too small to feasibly accommodate the park or inappropriately located to serve the needs of local residents and when in-lieu park fees are paid to the City. Here, the 2.49-acre Project site is too small to feasibly

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
properties as parklands to serve the Airport Area. In every case, the neighborhood park shall be at least 8 percent of the total Residential Village Area or one acre in area, whichever is greater, and shall have a minimum dimension of 150 feet. Park acreage shall be exclusive of existing or new rights-of-way, development sites, or setback areas. A neighborhood park shall satisfy some or all of the requirements of the Park Dedication Ordinance, as prescribed by the Recreation Element of the General Plan.	accommodate a 0.5-acre park. Further, the Applicant will pay at least a portion of the 0.5-acre equivalent in-lieu fee and request a portion of the in-lieu park fee to be waived as a concession, as allowed under the SDBL. With approval of the parkland dedication waiver and concession related to partial payment of in-lieu park fees, the Project is considered consistent with LU 6.15.13. The Project would also be consistent with the policy if the Applicant pays the full in-lieu fee for parkland or develops a portion of the 0.5-acre park along with the provision of a smaller in-lieu fee. The Project would offer on-site amenities and open space, including podium level amenity space and roof-top common space.
Policy LU 6.15.17 Street and Pedestrian Grid. Create a pattern of streets and pedestrian ways that breaks up large blocks, improves connections between neighborhoods and community amenities, and is scaled to the predominantly residential character of the neighborhoods.	Consistent: The Project site is 2.49 net acres bordered by Dove Street to the west, a commercial development to the north, an existing parking lot to the east, and Dolphin-Striker Way to the south, and is located in the vicinity of three existing developments including the planned Newport Crossings mixed use project and the Residences at 1300 and 1400 Bristol residential projects (approved but not yet constructed). The Project would continue to provide sidewalks and pedestrian connections to the public street system and adjacent properties. The proposed pattern of development would provide connectivity to employment, transportation, recreation and open space, and retail uses.
Policy LU 6.15.22 Building Massing. Require that high-rise structures be surrounded with low- and mid-rise structures fronting public streets and pedestrian ways or other means to promote a more pedestrian scale.	Consistent: The proposed apartment building would be seven stories and will include landscaping. The seven-story building would be located adjacent and proximate to existing office, restaurant and commercial buildings as well as the two six-story approved but not yet constructed Newport Crossings mixed-use development. Therefore, the proposed building would be compatible with surrounding structures and would provide a variety of scale.
Policy LU 6.15.23 Sustainability Development Practices. Require that development achieves a high level of environmental sustainability that reduces pollution and consumption of energy, water, and natural resources. This may be accomplished through the mix and density of uses, building location and design, transportation modes, and other techniques. Among the strategies that should be considered are the integration of residential with jobs-generating uses, use of alternative transportation modes, maximized walkability, use of recycled materials, capture and re-use of storm water on-site, water-conserving	Consistent: The Project would be required to comply with the provisions of the Building and Energy Efficiency Standards and the Green Building Standards Code (CALGreen). Additionally, the Project would implement water-efficient landscaping; electric vehicle (EV) charging infrastructure; and water quality best management practices to treat surface runoff from the Project site. The Project site is also near office buildings and commercial (retail) centers in the Airport Area and would provide housing near employment and shopping opportunities.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
fixtures and landscapes, and architectural elements that reduce heat gain and loss.	
Housing Element	
Goal H 3 – A variety of housing types, designs, and opportunities for all social and economic segments.	
Policy H 3.1. Encourage preservation of existing and provision of new housing affordable to extremely low-, very low-, low-, and moderate-income households.	Consistent: The Project includes 28 units of housing that is affordable to very low-income households.
Policy H 3.2. Encourage housing developments to offer a wide spectrum of housing choices, designs, and configurations.	Consistent: The Project proposes 282 multi-unit rental residences, which include a mix of studios, one-, two-, and potentially three-bedroom units.
Goal H 4 – Housing opportunities for as many renter- and owner-occupied households as possible in response to the market demand and RHNA obligations for housing in the City.	
Policy H 4.2. Enable construction of new housing units sufficient to meet City quantified goals by identifying adequate sites for their construction.	Consistent: The General Plan 2021-2029 Housing Element identifies the Airport Area as one of the key areas for future housing opportunities. The Project would have 282 multi-unit rental apartments, inclusive of 28 affordable to very low-income units. This development would support the City's 6th Cycle RHNA allocation.
Goal H 7 – Equal housing opportunities in the City for all people.	
Policy H 7.1. Support fair and equal housing opportunities, and environmental justice considerations for all housing opportunities in the City.	Consistent: The Project includes 28 affordable to very low -income affordable units and would not prevent the City from implementing the policy actions associated with this goal and policy.
Historical Resources Element	
Goal HR 2 – Identification and protection of important archeological and paleontological resources within the City.	
Policy HR 2.1 New Development Activities. Require that, in accordance with CEQA, new development protect and preserve paleontological and archaeological resources from destruction, and avoid and mitigate impacts to such resources. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.	Consistent: The Addendum identifies standard conditions to comply with potential impacts to unknown archaeological and paleontological resources found during ground-disturbing activities.
Policy HR 2.2 Grading and Excavation Activities. Require a qualified paleontologist/archeologist to monitor all grading and/or excavation where there is a potential to affect cultural, archeological or paleontological resources. If these resources are found, the applicant shall implement the recommendations of the	Consistent: See consistency analysis for Policy HR 2.1 of Goal HR 2.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
paleontologist/archeologist, subject to the approval of the City Planning Department.	
Policy HR 2.3 Cultural Organizations. Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow representatives of such groups to monitor grading and/or excavation of development sites.	Consistent: The City conducted Native American tribal consultation in compliance with the requirements of SB 18. Please also see the consistency analysis for Policy HR 2.1 of Goal HR 2.
Policy HR 2.4 Paleontological or Archaeological Materials. Require new development to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach, or Orange County, whenever possible.	Consistent: See consistency analysis for Policy HR 2.1 of Goal HR 2.
Circulation Element	
Goal CE 1.1 – An overall transportation system that facilitates the movement of people and goods within and through the City of Newport Beach and accommodates conservative growth within the City of Newport Beach but is not expanded primarily to accommodate growth in the surrounding region.	
Policy CE 1.1.3 Levels of Service Related to Community Character. Maintain level of service standards that reflect the character of the various unique districts and neighborhoods of Newport Beach.	Consistent: The Traffic Impact Analysis prepared for the proposed Project identifies no significant impact to traffic study area intersections.
Goal CE 2.1 – A roadway system with no significant gaps that provides for the efficient movement of goods and people in the City of Newport Beach, while maintaining the community’s character and its residents’ quality of life.	
Policy CE 2.1.1 Level of Service Standards. Plan the arterial roadway system to accommodate projected traffic at the following level of service standards: Level of Service (LOS) “D” throughout the City, unless otherwise noted. LOS “E” at any intersection in the Airport Area shared with Irvine, and in Corona del Mar (subject to findings of the most recent General Plan update traffic study)	Consistent: The Traffic Impact Analysis prepared for the proposed Project identifies no significant impact to traffic study area intersections.
Goal CE 2.2 – A safe and efficient roadway system.	
Policy CE 2.2.4 Traffic Control. Design traffic control measures to ensure City streets and roads function with safety and efficiency for vehicles, bicycles, and pedestrians.	Consistent: Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The Project driveways at Dove Street and Dolphin Striker Way would continue to provide full access. The Traffic Impact Analysis prepared for the proposed Project identifies no significant impact to traffic study area intersections. On-street bicycle facilities are not provided in the Project

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
	area along Dove Street or Dolphin Striker Way. Dove Street adjacent to the Project site does not have bikeway classification. Roadways that provide on-street bicycle facilities near the Project site include Bristol Street North, Bristol Street South, Birch Street, and intermittent areas of Jamboree Road and Campus Drive. Existing pedestrian facilities in the Project vicinity would be retained.
Policy CE 2.2.5 Driveway and Access Limitations. Limit driveway and local street access on arterial streets to maintain a desired quality of traffic flow and limit hazards to active transportation modes. Wherever possible, consolidate and/or reduce the number of driveways and implement access controls during redevelopment of adjacent parcels.	Consistent: Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The Project driveways at Dove Street and Dolphin Striker Way would continue to provide full access. Based on review of the adjacent development and lane configurations along Dove Street and Dolphin Striker Way, the existing lane configurations are anticipated to provide adequate circulation.
Policy CE 2.2.7 Emergency Access. Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles. An emergency evacuation map shall be prepared as part of an updated Safety Element.	Consistent: To address emergency access needs, the Project's internal circulation has been designed in accordance with City of Newport Beach Fire Department (Fire Department) design standards for emergency access. Additionally, the Project would be required to incorporate all applicable design and safety requirements in the most current adopted fire codes, building codes, and fire and life safety standards. During the building plan check and development review process, the City would continue to coordinate with the Public Works Department, Fire Department, and Newport Beach Police Department (Police Department) to ensure that adequate circulation and access are provided.
Goal CE 2.3 – Optimal roadway system operations.	
Policy CE 2.3.3 New Development Maintenance Responsibility. Ensure minimization of traffic congestion impacts and parking impacts and ensure proper roadway maintenance through review and approval of Construction Management Plans associated with new development proposals in residential neighborhoods.	Consistent: The Traffic Impact Analysis prepared for the proposed Project identifies no significant impact to traffic study area intersections. The Applicant has prepared a Construction Management Plan to minimize the Project impact to the surrounding uses. The construction team will adhere to the provisions of the CMP from start of demolition through issuance of Certificate of Occupancy.
Goal CE 5.2 – Convenient bicycle trail systems that satisfy recreational desires and transportation needs.	
Policy CE 5.2.4 Trail System. Promote construction of a comprehensive trail system as shown on Figure CE3 to connect bicycle trails with hiking trails and transit routes. (Updated figure in process)	Consistent: The City is updating its Bikeways Master Plan, which was adopted in 2014. Implementation of the Project would not preclude future bikeway improvements.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy CE 5.2.6 Pedestrian Improvements in New Development Projects. Require new development projects to include safe and attractive sidewalks, walkways, and bike lanes in accordance with the Master Plan, and, if feasible, trails.	Consistent: Existing pedestrian facilities are located in the Project vicinity. On-street bicycle facilities are not provided in the Project area along Dove Street or Dolphin Striker Way. Dove Street adjacent to the Project site does not have bikeway classification. Roadways that provide on-street bicycle facilities near the Project site include Bristol Street North, Bristol Street South, Birch Street, and intermittent areas of Jamboree Road and Campus Drive. The City is updating its Bikeways Master Plan, which was adopted in 2014. Implementation of the Project would not preclude future bikeway improvements.
Policy CE 5.2.11 Bicycle Supporting Amenities. Require bicycle facilities such as bike racks, bike stations, or lockers according to national standards for long-term and short-term bicycle utilization on City property and with new development and encourage the addition of such bicycle facilities within existing development.	Consistent: The Project will include bike storage in the parking structure.
Goal CE 5.4 – Completion of pedestrian infrastructure where planned and necessary.	
Goal CE 7.1 – Promote strategies to reduce the use of internal combustion passenger cars and the attendant greenhouse gas emissions.	
Policy CE 7.1.1 Vehicle Miles Traveled (VMT Analysis). Follow the analysis methodology for vehicle miles traveled according to the Newport Beach VMT thresholds policy and as required in Senate Bill 743 and the revised California Environmental Quality Act (CEQA) Guidelines.	Level of Service was the applicable threshold when the City certified the General Plan Program EIR in 2006. The mandate requiring lead agencies to use VMT as a threshold for evaluating traffic impacts was adopted in 2018 and effective in 2020. Settled CEQA case law supports reliance on level of service as the appropriate threshold by which to measure traffic impacts of proposed Project. For informational purposes, the Traffic Impact Analysis addressed VMT. The proposed Project was assessed in accordance with guidance provided by the City of Newport Beach SB 743 Implementation (VMT Guidelines). The proposed Project is in an area with low residential VMT per capita. Therefore, the proposed Project is presumed to have a less than significant impact on VMT since it satisfies the City established screening criteria.
Policy CE 7.1.2 VMT Mitigation Measures. Require implementation of CEQA project related VMT mitigation measures when warranted and monitor reductions in VMT from new development.	Consistent: See consistency analysis for Policy CE 7.1.1. The proposed Project would not result in VMT impacts that would require mitigation.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy CE 7.1.4 Alternative Transportation Modes and Practices. Promote and encourage the use of alternative transportation modes, such as ridesharing, carpools, vanpools, public transit, bicycles, walking, and telecommuting programs, through the planning and development of a Complete Streets master plan and design guide.	Consistent: On-street bicycle facilities are not provided in the Project area along Dove Street or Dolphin Striker Way. Dove Street adjacent to the Project site does not have bikeway classification. Roadways that provide on-street bicycle facilities near the Project site include Bristol Street North, Bristol Street South, Birch Street, and intermittent areas of Jamboree Road and Campus Drive. There are existing transit routes and pedestrian facilities available in the Project vicinity
Policy CE 7.1.5 Support Facilities for Alternative Modes: Require new development projects to provide facilities commensurate with development type and intensity to support alternative modes, such as preferential parking for carpools, bicycle lockers, showers, commuter information areas, rideshare vehicle loading areas, water transportation docks, and bus stop improvements.	Consistent. See the consistency analysis for Policy CE 7.1.4. The Project is a multi-unit residential infill development. The Project includes bike storage in the parking structure.
Policy CE 7.1.7 Project Site Design Supporting Alternative Modes. Encourage increased use of public transportation by requiring project site designs that facilitate the use of public transportation and walking. (	Consistent: See the consistency analysis for Policy CE 7.1.4.
Policy CE 7.1.8 Electric Vehicle (EV) Charging Stations. Install additional EV charging stations on City properties, support existing private development to add new EV charging stations and develop incentives for the installation of EV charging stations and other alternative fuels systems as part of new development.	Consistent. The Project will include EV capable parking spaces, consistent with the California Building Code.
Policy CE 7.1.7 Project Site Design Supporting Alternative Modes. Encourage increased use of public transportation by requiring project site designs that facilitate the use of public transportation and walking.	Consistent: See the consistency analysis for Policy CE 7.1.4.
Goal CE 8.1 – An adequate supply of convenient parking throughout the City.	
Policy CE 8.1.1 Required Parking. Require that new development provide adequate, convenient parking for residents, guests, business patrons, and visitors.	Consistent: The proposed Project will include at least the minimum required number of parking spaces to meet State Density Bonus Law and NBMC Section 2.32 (Density Bonus) standards ensuring that sufficient parking is available. Parking will be provided in a convenient location for residents and guests within an on-grade parking garage with two and a half subterranean levels.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Recreation Element	
Goal R 3: Accessibility of Facilities – Accessible parks and recreation facilities to persons with disabilities.	
Policy R3.1 Adequate Access. Ensure that parks and recreation facilities include provisions for adequate access for persons with disabilities and that existing facilities are appropriately retrofitted to include such access as required by the Americans with Disabilities Act.	Consistent: All resident recreation facilities would be designed and constructed to include provisions for adequate access for persons with disabilities in accordance with the Americans with Disabilities Act.
Natural Resources Element	
Goal NR 1 – Minimized water consumption through conservation methods and other techniques.	
Policy NR 1.1 Water Conservation in New Development. Enforce water conservation measures that limit water usage, prohibit activities that waste water or cause runoff, and require the use of water–efficient landscaping and irrigation in conjunction with new construction projects.	Consistent: Section 3.19, Utilities and Service Systems, identifies that the Project would be required to comply with the water-efficient landscape requirements outlined in NBMC Chapter 14.17 (Water Efficient Landscape Requirements). The Project would also be required to comply with the provisions of the Green Building Standards Code, which contains requirements for indoor water use reduction and site irrigation conservation. The Project would implement a number of environmentally sustainable practices, including but not limited to water-efficient landscaping; water quality best management practices to treat surface runoff from the Project site; and low impact development practices.
Policy NR 1.2 Use of Water Conserving Devices. Establish and actively promote use of water-conserving devices and practices in both new construction and major alterations and additions to existing buildings. This can include the use of rainwater capture, storage, and reuse facilities.	Consistent: See consistency analysis for Policy NR 1.1 of Goal NR1.
Policy NR 1.6 Services for Lower Income Households. New developments which provide housing for lower income households that help meet regional needs shall have priority for the provision of available and future resources or services, including water and sewer supply and services.	Consistent: The proposed Project would provide 28 units that are affordable to very low-income households. Because the Project site is located in an existing developed urban area, the Project can be served by water and other services.
Goal NR 3 – Enhancement and protection of water quality of all natural water bodies, including coastal waters, creeks, bays, harbors, and wetlands.	
Policy NR 3.3 - Ground Water Contamination. Suspend activities and implement appropriate health and safety procedures in the event that previously unknown groundwater contamination is encountered during construction. Where site contamination is identified, implement an appropriate remediation strategy that is approved by the City and the state agency with appropriate jurisdiction.	Consistent: The proposed Project would comply with all applicable regulatory requirements should any contaminated groundwater be encountered.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy NR 3.4 Storm Drain Sewer System Permit. Require all development to comply with the regulations under the City's municipal separate storm drain system permit under the National Pollutant Discharge Elimination System.	Consistent: The proposed Project would be required to comply with the City's NPDES permit requirements, including the submittal and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and best management practices (BMPs). The proposed Project would use BMPs throughout the site to capture and treat storm water. The Project would result in the conveyance of less water to the storm drain system because the new development would reduce the impervious area at the Project site. The reduction of water to the storm drain system and use of best management practices would incrementally improve water quality on the Project site. The Project is expected to maintain the existing drainage pattern of the site. The site currently drains towards Dove Street, with approximately 60 percent of the drainage running towards the northwest and 40 percent to the southwest. The site is considered relatively flat at 1 percent to 2 percent to provide sheet flow within the existing parking lots. The parking lot drainage is collected by a series of concrete swales, which are collected by onsite private catch basins. The drainage is then conveyed to the public curb and gutter via various curb drains located along Dove Street. The drainage is then conveyed to the north and is collected by an existing public catch basin, which discharges the stormwater to an existing 54-inch storm drain owned and maintained by the City. The drainage is eventually discharged to the San Diego Creek and finally to the Newport Bay. Approximately 0.52 acre of the 2.49-Project site would be landscaped or have pervious surfaces. The roof drainage would be collected by a series of roof drains that would be routed to proposed bioretention basins via storm drain system. More information regarding drainage and water quality is discussed in Section 3.10, Hydrology and Water Quality.
Policy NR 3.9 Water Quality Management Plan. Require new development applications to include a Water Quality Management Plan (WQMP) to minimize runoff from rainfall events during construction and post-construction.	Consistent: See consistency analysis for Policy NR 3.4. As discussed in Section 3.10, Hydrology and Water Quality, a Preliminary Water Quality Management Plan (pWQMP) has been prepared which identifies site-design, and source- and treatment-control BMPs. Implementation of hydraulic and drainage design features would assist in the retention of storm water. Collectively, the BMPs outlined in the pWQMP and the required preparation of a SWPPP would address the anticipated and expected pollutants of concern from the operational and construction phases of the proposed

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
	Project. Additionally, through the development review process, the City complies with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from pollution by contaminated storm water runoff. Storm water runoff generated from within the project site would be managed in accordance with all applicable federal, State, and local water quality rules and regulations to effectively minimize the Project's impact on water quality.
Policy NR 3.10 Best Management Practices. Implement and improve upon Best Management Practices (BMPs) for residences, businesses, development projects, and City operations.	Consistent: See consistency analysis for Policies NR 3.4 and NR 3.9 of Goal NR 3.
Policy NR 3.11 Site Design and Source Control. Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Discharge Elimination System (NPDES), structural treatment BMPs will be implemented along with site design and source control measures.	Consistent: See consistency analysis for Policies NR 3.4 and NR 3.9 of Goal NR 3 and Section 3.10, Hydrology and Water Quality.
Policy NR 3.14 Runoff Reduction on Private Property. Retain runoff on private property to prevent the transport of pollutants into natural water bodies, to the maximum extent practicable.	Consistent: See consistency analysis for Policies NR 3.4 and NR 3.9 of Goal NR 3 and Section 3.10, Hydrology and Water Quality.
Policy NR 3.15 Street Drainage Systems. Require all street drainage systems and other physical improvements created by the City, or developers of new subdivisions, to be designed, constructed, and maintained to minimize adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize impacts to water bodies.	Consistent: See consistency analysis for Policies NR 3.4 and NR 3.9 of Goal NR 3 and Section 3.10, Hydrology and Water Quality.
Policy NR 3.17 Parking Lots and Rights-of-Way. Require that parking lots and public and private rights-of-way be maintained and cleaned frequently to remove debris and contaminated residue.	Consistent: The Project would be required to comply with all applicable City codes and regulations regarding the maintenance and keeping of public and private rights-of-way, including NBMC Sections 6.04.210, Persons Required to Clean Sidewalks, and 10.50.020, Nuisance.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy NR 3.19 Natural Drainage Systems. Require incorporation of natural drainage systems and stormwater detention facilities into new developments, where appropriate and feasible, to retain stormwater in order to increase groundwater recharge.	Consistent: See consistency analysis for Policies NR 3.4 and NR 3.9 of Goal NR 3. Additionally, the proposed storm drain system would largely maintain the same existing drainage patterns. As addressed, approximately 0.52 acre of the 2.49-net-acre Project site would be landscaped areas and have pervious surfaces. The roof drainage would be collected by a series of roof drains that would be routed to proposed bioretention basins via storm drain system. More information regarding drainage and water quality is discussed under Section 3.10, Hydrology and Water Quality.
Policy NR 3.20 Impervious Surfaces. Require new development and public improvements to minimize the creation of and increases in impervious surfaces, especially directly connected impervious areas, to the maximum extent practicable. Require redevelopment to increase area of pervious surfaces, where feasible.	Consistent: The Project will increase the pervious surface, if feasible.
Goal NR 4 – Maintenance of water quality standards through compliance with the total maximum daily loads (TMDLs) standards.	
Policy NR 4.4 Erosion Minimization. Require grading/ erosion control plans with structural BMPs that prevent or minimize erosion during and after construction for development on steep slopes, graded, or disturbed areas.	Consistent: See consistency analysis for Policies NR 3.4 and 3.9 of Goal NR 3. Collectively, implementation of the BMPs outlined in the SWPPP and the Project's proposed water quality design features would address the anticipated and expected erosion impacts during the construction and operational phases of the Project.
Goal NR 6 – Reduced mobile source emissions.	
Policy NR 6.1 Walkable Neighborhoods. Provide for walkable neighborhoods to reduce vehicle trips by siting amenities such as services, parks, and schools in close proximity to residential areas.	Consistent: See consistency analyses for Policy LU 6.15.5 and Policies CE 5.2.6, CE 5.2.11, and CE 7.1.4
Policy NR 6.2 Mixed-Use Development. Support mixed-use development consisting of commercial or office with residential uses in accordance with the Land Use Element that increases the opportunity for residents to live in proximity to jobs, services, and entertainment.	Consistent: See consistency analysis for Policy LU 2.2 of Goal LU 2 and Policy LU 6.15.5 of Goal 6.15.
Goal NR 7 - Reduced air pollutant emissions from stationary sources.	
Policy NR 7.1 – Fuel Efficient Equipment. Support the use of fuel-efficient heating equipment and other appliances.	Consistent: The Project would comply with the energy efficiency requirements of Title 24.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy NR 7.2 – Source Emission Reduction Best Management Practices. Require the use of Best Management Practices (BMP) to minimize pollution and to reduce source emissions.	Consistent: The Project would comply with the energy efficiency requirements of Title 24. As addressed in Section 3.3, Air Quality, the Project would be required to adhere to all applicable SCAQMD regulations that help reduce air pollutants from construction-related activities. Additionally, the Project would be required to comply with the construction-related measures.
Goal NR 8 – Reduced air pollutant emissions from construction activities.	
Policy NR 8.1 Management of Construction Activities to Reduce Air Pollution. Require developers to use and operate construction equipment, use building materials and paints, and control dust created by construction activities to minimize air pollutants.	Consistent: See consistency analysis for Policy NR 7.2.
Goal NR 18 – Protection and preservation of important paleontological and archaeological resources.	
Policy NR 18.1 New Development. Require new development to protect and preserve paleontological and archaeological resources from destruction, and avoid and minimize impacts to such resources in accordance with the requirements of CEQA. Through planning policies and permit conditions, ensure the preservation of significant archeological and paleontological resources and require that the impact caused by any development be mitigated in accordance with CEQA.	Consistent: See consistency analysis for Policies HR 2.1 through HR 3.4 of Goal HR 2.
Policy NR 18.3 Potential for New Development to Impact Resources. Notify cultural organizations, including Native American organizations, of proposed developments that have the potential to adversely impact cultural resources. Allow qualified representatives of such groups to monitor grading and/or excavation of development sites.	Consistent: See consistency analysis for Policies HR 2.1 through HR 3.4 of Goal HR 2.
Policy NR 18.4 Donation of Materials. Require new development, where on-site preservation and avoidance are not feasible, to donate scientifically valuable paleontological or archaeological materials to a responsible public or private institution with a suitable repository, located within Newport Beach or Orange County, whenever possible.	Consistent: See consistency analysis for Policies HR 2.1 through HR 3.4 of Goal HR 2.
Policy NR 22.1 - Regulation of Structure Mass. Continue to regulate the visual and physical mass of structures consistent with the unique character and visual scale of Newport Beach.	Consistent. See consistency analysis for Policy LU 6.15.22 of Goal LU 6.15.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Goal NR 24 – Increased energy efficiency in City facilities and operations and in private developments	
Policy NR 24.2 – Energy-Efficient Design Features: Promote energy-efficient design features.	Consistent. The Project would comply with all applicable building energy efficiency standards.
Policy NR 24.3 – Incentives for Green Building Program Implementation. Promote or provide incentives for "Green Building" programs that go beyond the requirements of Title 24 of the California Administrative Code and encourage energy-efficient design elements as appropriate to achieve "green building" status.	Consistent: The current building energy efficiency standards are substantially more stringent than were in effect when the General Plan Program EIR was certified. For example, the 2016 standards for residential buildings are 28 percent more energy-efficient and nonresidential buildings are 5 percent more energy efficient than under the 2013 Standards and buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) more energy efficient than the 2008 Standards as a result of better windows, insulation, lighting, ventilation systems, and other features. The 2019 Standards improved upon the 2016 Standards and the current 2022 Standards are applicable to the proposed Project and require additional mandatory efficiency and design improvements.
Safety Element	
Goal S 4 – Adverse effects caused by seismic and geologic hazards are minimized by reducing the known level of risk to loss of life, personal injury, public and private property damage, economic and social dislocation, and disruption of essential services.	
Policy S 4.7 Conduct further seismic studies for new development in areas where potentially active faults may occur.	Consistent: A geotechnical evaluation was prepared for the proposed Project to identify potential geotechnical hazards associated with the project site, including active faults, liquefaction, subsidence, landslide, lateral spreading, collapse, expansive soils, and other ground failure hazards. According to the study, like most of California, the site is in a seismically active area; however, no active faults are known to cross the site. Additionally, the Project would not exacerbate ground shaking on the site. The design and construction of all structures would comply with seismic design parameters in the geotechnical evaluation, including the seismic design requirements under the California Building Code and Chapter 15.10 of the NBMC, Excavation and Grading in effect at the time grading and building permits are issued for construction.
Goal S 7 – Exposure of people and the environment to hazardous materials associated with methane gas extraction, oil operations, leaking underground storage tanks, and hazardous waste generators is minimized.	
Policy S 7.1 Known Areas of Contamination. Require proponents of projects in known areas of contamination from oil operations or other uses to perform comprehensive soil and groundwater contamination assessments in accordance with American Society for Testing and Materials	Consistent: A Phase I Environmental Site Assessment was prepared as part of the proposed Project to determine soil and groundwater contamination. There are no known or suspected Recognized Environmental Conditions (RECs), Current Recognized Environmental Conditions (CRECs), Business Environmental Risk

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standards, and if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, County Department of Toxic Substances Control, or Regional Water Quality Control Board (depending upon the nature of any identified contamination).	(BER), and Historical Recognized Environmental Conditions (HRECs), at the Project site. Two *de minimis* conditions were identified at the Project site. These were suspected or confirmed presence of asbestos and lead based paints. Given that an Asbestos O&M Plan was in place, and the site was not used for residential purposes at that time, these conditions were considered *de minimis* conditions. With the demolition of the commercial building in light of the O&M Plan in place, the said conditions would no longer be an issue. The Project is consistent with General Plan Policy S 7.1.
Policy S 7.5 Siting of Sensitive Uses. Develop and implement strict land use controls, performance standards, and structure design standards including development setbacks from sensitive uses such as schools, hospitals, day care facilities, elder care facilities, residential uses, and other sensitive uses that generate or use hazardous materials.	Consistent: Development of the proposed Project would involve demolition of the existing office building and associated surface parking and landscaping to accommodate the residential development. The Phase I ESA indicates that no known or suspected RECs were identified at the Project site. Further, no evidence of contamination, distressed vegetation, petroleum hydrocarbon surface staining, waste drums, USTs, ASTs, illegal dumping, or improper waste storage/handling was noted during site reconnaissance. The Project would be required to comply with state and local health and safety requirements, including the City's Fire Code and Fire Department Guidelines dictating requirements related to emergency access, fire protection, building construction, and storage and handling of hazardous materials. Potential safety hazards related to hazardous materials are addressed in Section 3.9, Hazards and Hazardous Materials. Because the Project proposes residential land uses and would not generate or use hazardous materials in such a manner as to present a hazard to sensitive uses, setbacks from such sensitive users are not required.
Noise Element	
Goal N 1 Noise Compatibility – Minimized land use conflicts between various noise sources and other human activities.	
Policy N 1.1 Noise Compatibility of New Development. Require that all proposed projects are compatible with the noise environment through use of Table N2, and enforce the interior and exterior noise standards shown in Table N3.	Consistent: The Project site is outside of the 65 dBA CNEL noise contour identified by the City of Newport Beach for JWA as set forth in the 2014 JWA Settlement Agreement Amendment EIR No. 617 and the AELUP. General Plan Noise Element Table N2 characterizes residential development as "normally compatible" up to 65 dBA. The Addendum noise analysis demonstrates that the Project would comply with the requirements as outlined in the City's Noise Ordinance.

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Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Policy N 1.2 Noise Exposure Verification for New Development. Applicants for proposed residential or mixed-use projects located in areas projected to be exposed to 65-70 dBA CNEL or greater, as shown on Figure N5 must conduct a noise study to provide evidence that the depicted noise contours do not adequately account for local noise exposure circumstances due to such factors as, topography, variation in traffic speeds, and other applicable conditions. These findings shall be used to determine the level of exterior or interior, noise attenuation needed to attain an acceptable noise exposure level and the feasibility of such mitigation when other planning considerations are taken into account consistent with Title 21 of the California Code of Regulations.	Consistent: On-site noise impacts are evaluated in Section 3.13, Noise, of this Addendum. As indicated above, the Project site is outside of the 65 dBA CNEL for JWA and the AELUP. Additionally, the Project site is outside of the 60 dBA CNEL noise contours developed for roadway noise exposure within the Noise Element of the General Plan. For additional detail, please see response to Policy N 1.8, below.
Policy N 1.4 New Development in Urban Areas. Require that applicants of residential portions of mixed-use projects and high-density residential developments in urban areas (such as the Airport Area and Newport Center) demonstrate that the design of the structure will adequately isolate noise between adjacent uses and units (common floor/ceilings) in accordance with the California Building Code.	Consistent: The Project would comply with all applicable building code requirements.
Policy N 1.5A Airport Area Infill Projects. Allow infill residential projects proximate to John Wayne Airport to have a higher exterior noise level standard (65-70 dBA CNEL) if it can be shown that there are no practical mechanisms or designs to meet the exterior noise levels. The interior standard of 45 dBA CNEL shall be enforced for any residential component of projects. No residential units may be located on parcels wholly within the John Wayne Airport 65 dBA CNEL noise contour area as shown in Figure N5, of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are encouraged on parcels located wholly within the 65 dBA CNEL contour area, shown in Figure N5.	Consistent: The Project site is wholly outside of the existing and future 65 dBA CNEL noise contour identified by the City of Newport Beach for JWA as set forth in the 2014 John Wayne Airport Settlement Agreement Amendment EIR No. 617 and the AELUP. Additionally, the Project site is outside of the 60 dBA CNEL noise contours developed for roadway noise exposure within the Noise Element of the General Plan. Further, the Addendum noise analysis demonstrates that the Project would comply with the requirements as outlined in the City's Noise Ordinance and building code requirements.

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<table>
<tr><th>Applicable City of Newport Beach General Plan Goals and Policies</th><th>Project Consistency</th></tr>
<tr><td>Policy N 1.8 Significant Noise Impacts. Require the employment of noise mitigation measures for existing sensitive uses when a significant noise impact is identified. A significant noise impact occurs when there is an increase in the ambient CNEL produced by new development impacting existing sensitive uses. The CNEL increase is shown in the table below.
<table>
<tr><td>CNEL dBA</td><td>dBA increase</td></tr>
<tr><td>55</td><td>3</td></tr>
<tr><td>60</td><td>2</td></tr>
<tr><td>65</td><td>1</td></tr>
<tr><td>75</td><td>1</td></tr>
<tr><td>Over 75</td><td>Any increase is considered significant</td></tr>
</table></td><td>Consistent: Addendum Section 3.13, Noise, identifies the onsite noise sources generated by operation of the Project, and these include HVAC, interior courtyard activities, landscape maintenance and trash collection. The HVAC and landscaping activities are regulated by NBMC Sections 10.26.045 and 10.28, respectively. The noise from interior courtyard activities would be attenuated by the Project structure, which will act as a six-story sound barrier to offsite uses. In terms of traffic noise, the Project would displace traffic generated by existing use. The Project would result in an increase of 622 trips per day (the corresponding increase in traffic noise would be from 0.0 to 2.5 dBA). The increase is below the 5 dBA noise increase threshold and would not be perceptible or substantial. Thus, the impact would be less than significant. With respect to construction noise, refer to Policy N 4.6, Maintenance or Construction Activities. The 2006 EIR finds that with compliance with applicable City requirements, construction noise is a less than significant impact.</td></tr>
<tr><td colspan="2">Goal N 2 – Minimized motor vehicle traffic and boat noise impacts on sensitive noise receptors.</td></tr>
<tr><td>Policy N 2.1 New Development. Require that proposed noise-sensitive uses in areas of 60 dBA and greater, as determined the analyses stipulated by Policy N1.1, demonstrate that they meet interior and exterior noise levels.</td><td>Consistent: The Project site is outside of the 65 dBA CNEL noise contour identified by the City of Newport Beach for JWA as set forth in the 2014 JWA Settlement Agreement Amendment EIR No. 617 and the AELUP. General Plan Noise Element Table N2 characterizes residential development as “normally compatible” up to 65 dBA. The Project would comply with the requirements as outlined in the NBMC and the City’s Noise Ordinance.</td></tr>
<tr><td>Policy N 2.2 Design of Sensitive Land uses. Require the use of walls, berms, interior noise insulation, double-paned windows, advanced insulation systems, or other noise mitigation measures, as appropriate, in the design of new residential developments to attenuate noise levels to not exceed 45 dBA CNEL interior. Other new noise-sensitive land uses that are adjacent to major arterials and located proximate to John Wayne Airport (e.g., infill residential) and within the 65-70 dBA CNEL noise contour area are required to be indoor-oriented to reduce noise impacts on outdoor living or recreational areas. Application of the Noise Standards in Table N2 shall govern this requirement.</td><td>Consistent: Based on standard attenuation rates, interior noise levels would not exceed noise levels set forth in General Plan Policy N2.2. Because the Project is in an area which is below the 65 dBA CNEL noise contours for both roadways and aircraft, the interior noise level limits can be met with standard construction designs. To address the potential for activity or sleep disturbance from single-event aircraft flyovers the Project will comply with Standard Policies related to building design discussed. Thus, the Project would not lead to new or substantially more severe significant impacts beyond those identified in the 2006 EIR.</td></tr>
</table>

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Goal N 3 – Protection of Newport Beach residents from the adverse noise impacts of commercial air carrier operations at John Wayne Airport as provided in the City Council Airport Policy.	
Policy N 3.1 New Development. Ensure new development is compatible with the noise environment proximate to John Wayne Airport by not allowing residential units on parcels located wholly within the John Wayne Airport 65 dBA CNEL noise contour, as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate.	Consistent: The Project site is wholly outside of the existing and future 65 dBA CNEL noise contour identified by the City of Newport Beach for JWA as set forth in the 2014 John Wayne Airport Settlement Agreement Amendment EIR No. 617 and the AELUP. The Addendum noise analysis demonstrates that the Project would comply with the requirements as outlined in the NBMC and the City's Noise Ordinance.
Policy N 3.2 Residential Development. Require that residential development proximate to John Wayne Airport shall not be located on parcels wholly within the John Wayne Airport 65 dBA CNEL noise contour shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Require developers of residential or mixed-use land uses with a residential component to notify prospective purchasers or tenants of aircraft noise. Additionally, require outdoor common areas or recreational areas of residential or mixed-used developments to be posted with signs notifying users regarding the proximity to John Wayne Airport and the presence of operating aircraft and noise.	Consistent: The Project site is wholly outside the existing and future 65 dBA CNEL noise contour. The Applicant would be required to notify prospective tenants of aircraft noise and require signage notifying users regarding the proximity to JWA and operating aircraft noise. Thus, the proposed Project would not expose people residing or working in the project area to excessive noise levels, and impacts would be less than significant.
Goal N 4: Minimization of Non-Transportation-Related Noise – Minimized non-transportation-related noise impacts on sensitive noise receptors.	
Policy N 4.1 Stationary Noise Sources. Enforce interior and exterior noise standards outlined in Table N3, and in the City's Municipal Code to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as heating, ventilation, and air conditioning equipment.	Consistent: See responses above to Policy N 1.8 of Goal N 1 and Policy N 2.2 of Goal N 2.
Policy N 4.6 Maintenance or Construction Activities. Enforce the Noise Ordinance noise limits and limits on hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work-related activities.	Consistent: As discussed in Section 3.13, Noise, Section 10.28.040 identifies that construction is permitted on weekdays between the hours of 7:00 AM and 6:30 PM and Saturdays between the hours of 8:00 AM and 6:00 PM. No construction is permitted outside of these hours or on Sundays or any federal holiday.

TABLE 3-11
GENERAL PLAN CONSISTENCY ANALYSIS

Applicable City of Newport Beach General Plan Goals and Policies	Project Consistency
Goal N 5 – Minimized excessive construction-related noise.	
Policy N 5.1 Limiting Hours of Activity. Enforce the limits on hours of construction activity.	Consistent: See response above to Policy N 4.6 of Goal N 4.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Land Use and Planning have been identified for the proposed Project.

Conclusion

The land use and planning impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the land use and planning analysis provided in the 2006 EIR are required.

3.12 MINERAL RESOURCES

3.12.1 2006 EIR

Regarding mineral resources, the 2006 EIR determined that the Planning Area contained areas with Mineral Resource Zones 1 and 3. The Project site, including potions within the JWA subarea, is located within MRZ-1, as designated by the CGS. The MRZ-1 designation represents areas where available geologic information indicates there is little or no likelihood for presence of significant mineral resources. Most of the active oil wells are currently located in the West Newport and Newport production areas, and the 2006 EIR did not identify any oil or gas production facilities within the JWA subarea or the Project site. The 2006 EIR determined that implementation of the proposed General Plan Update would not result in the loss of the availability of known mineral resources that would be of value to the region and the residents of the State. Regarding the loss of availability of a locally important mineral resource recovery site, the 2006 EIR indicated that implementation of the General Plan Update would not 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.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. No relevant policies were identified for this topic.

3.12.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
MINERAL RESOURCES – Would the project:				
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?	☐	☐	☐	☑

Would the Project:

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?

No Substantial Change from Previous Analysis. The 2006 EIR determined that there would be no impact regarding the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. As indicated above, the Project site was determined to be within MRZ-1, which is an area with no significant mineral deposits.

Therefore, the proposed Project would not disturb mineral resources, nor would it change the availability of resources on or near the Project site. The proposed Project would not create a new significant impact related to mineral resources of value to the region and residents of the State that was not previously analyzed, and no mitigation measures are required.

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?

No Substantial Change from Previous Analysis. The 2006 EIR determined that there would be no impact regarding the loss of availability of a locally important mineral resources recovery site delineated on a local general plan, specific plan, or other land use plan. The proposed Project would not require mineral resources, nor would it change the availability of resources on or near the Project site. Additionally, as the Project site is located within MRZ-1, the area does not contain significant mineral deposits. Therefore, the proposed Project would not create a new significant impact related to loss of availability of mineral resources recovery sites, not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Mineral Resources have been identified for the proposed Project.

Conclusion

The mineral resources impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no substantial changes to the mineral resources analysis provided in the 2006 EIR are required.

3.13 NOISE

3.13.1 2006 EIR

The 2006 EIR found that under the General Plan, the primary source of temporary or periodic noise within the City would be construction activities and maintenance work, including both construction-site activities and the transport of workers and equipment to and from the construction sites. The 2006 EIR determined that construction noise is not subject to the noise standards in the NBMC but would only occur during limited hours of the day and days of the week. Therefore, the 2006 EIR determined that since construction noise would be exempt from the City code, impacts were considered less than significant.

The 2006 EIR evaluated future roadway noise levels within the City with the implementation of the General Plan. The 2006 EIR found that the 24 roadway segments along Birch Street, Campus Drive, Coast Highway, Irvine Avenue, Jamboree Road, MacArthur Boulevard, and Newport Coast Drive would have a significant increase in noise at 100 feet from the centerline. As identified in the 2006 EIR, the changes in motor vehicle trips and circulation patterns would increase noise levels within the City by a maximum of 3.7 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL), although most increases in noise would be between 1 and 3 dBA. The 2006 EIR concluded that while there are a number of policies in the General Plan under Goal N2 that would help mitigate the impact of traffic noise on receptors, impacts would remain significant and unavoidable. The 2006 EIR did not evaluate long-term noise impacts associated with other sources associated with Project operation.

As discussed in the 2006 EIR, locations throughout the City would experience changes in noise levels due to an increase in vehicular traffic. The 2006 EIR found that based on the information in the existing and future noise contours, noise levels in excess of standards established by the City could occur where schools, libraries, health care facilities, and residential uses are located in the City and will continue to be, exposed to exterior noise levels that exceed the City's standard of 60 dBA CNEL. As such, the 2006 EIR concluded that implementation of General Plan policies associated with Goals N1 and N2 (requiring that all remodeling/additions to structures comply with the General Plan noise standards, requiring the use of walls, berms, interior noise insulation, double paned windows, or other noise mitigation measures in new residential or other new land uses) would reduce noise impacts to future land uses, but would do little to remediate noise effects on existing land uses. As such, the exposure of existing land uses to noise levels in excess of City standards as a result of future growth un the General Plan was considered significant.

As identified in the 2006 EIR, construction activities that would occur under the General Plan would have the potential to generate groundborne vibration. As such, the 2006 EIR found that construction activities would occur at discrete locations in the City and vibration from such activity may impact existing buildings and their occupants if they are located close enough to the construction sites. The 2006 EIR determined that vibration levels could be problematic if sensitive uses are located within about 100 feet of potential Project construction sites, where sensitive receptors would experience vibration levels that exceed the Federal Transit Administration's (FTA's) vibration annoyance impact threshold of 72 vibration velocity in decibels (VdB). The 2006 EIR found that if impacts occur, the only mitigation that could eliminate the vibration impact is ensuring a distance of approximately 150 feet between construction and existing sensitive receptors. However, the 2006 EIR concluded that it is not feasible to prohibit construction within 150 feet of all existing receptors, thus, when construction vibration occurs, impacts would be significant. The 2006 EIR did not evaluate potential long-term vibration impacts.

The 2006 EIR stated that implementation of the General Plan Update would expose sensitive receptors in proximity to the JWA to excessive noise levels if the receptors were located within the AELUP "High Noise Impact Zones". Overall, impacts on interior noise levels at new land uses in the vicinity of the JWA would be less than significant. However, if residences were to be developed within the 65 dBA CNEL noise contour, exterior noise would exceed allowable noise levels for residential areas and impacts would be significant and unavoidable.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **N 1.1 Noise Compatibility of New Development:** Require that all proposed projects are compatible with the noise environment through use of Table N2, and enforce the interior and exterior noise standards shown in Table N3.
- **N1.2 Noise Exposure Verification for New Development:** Applicants for proposed residential or mixed-use projects located in areas projected to be exposed to 65-70 dBA CNEL or greater, as shown on Figure N5, must conduct a noise study to provide evidence that the depicted noise contours do not adequately account for local noise exposure circumstances due to such factors as, topography, variation in traffic speeds, and other applicable conditions. These findings shall be used to determine the level of exterior or interior noise, attenuation needed to attain an acceptable noise exposure level and the feasibility of such measures when other planning considerations are taken into account, consistent with Title 21 of the California Code of Regulations.
- **N 1.4 New Developments in Urban Areas:** Requires that applicants of residential portions of mixed-use projects and high-density residential developments in urban areas (such as the Airport Area and Newport Center) demonstrate that the design of the structure will adequately isolate noise between adjacent uses and units (common floor/ceilings) in accordance with the California Building Code.
- **N 1.5A Airport Area Infill Projects:** Allow infill residential projects proximate to John Wayne Airport to have a higher exterior noise level standard (65- 70 dBA CNEL) if it can be shown that there are no practical mechanisms or designs to meet the exterior noise levels. The interior standard of 45 dBA CNEL shall be enforced for any residential component of projects. No residential units may be located on parcels

wholly within the John Wayne Airport 65 dBA CNEL noise contour area as shown in Figure N5, of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are encouraged on parcels located wholly within the 65 dBA CNEL contour area, shown in Figure N5.

- **N 2.1 New Development:** Require that proposed noise-sensitive uses in areas of 60 dBA and greater, as determined the analyses stipulated by Policy N1.1, demonstrate that they meet interior and exterior noise levels.
- **N 2.2 - Design of Sensitive Land Uses:** Require the use of walls, berms, interior noise insulation, double-paned windows, advanced insulation systems, or other noise measures, as appropriate, in the design of new residential developments to attenuate noise levels to not exceed 45 dBA CNEL interior. Other new noise-sensitive land uses that are adjacent to major arterials and located proximate to John Wayne Airport (e.g., infill residential) and within the 65-70 dBA CNEL noise contour area are required to be indoor-oriented to reduce noise impacts on outdoor living or recreational areas. Application of the Noise Standards in Table N2 shall govern this requirement.
- **N 3.1 - New Development:** Ensure new development is compatible with the noise environment proximate to John Wayne Airport by not allowing residential units on parcels located wholly within the John Wayne Airport 65 dBA CNEL noise contour, as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate.
- **N 3.2 - Residential Development:** Require that residential development proximate to John Wayne Airport shall not be located on parcels wholly within the John Wayne Airport 65 dBA CNEL noise contour shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within such contour area are needed for the City to satisfy its Sixth Cycle RHNA mandate. Require developers of residential or mixed-use land uses with a residential component to notify prospective purchasers or tenants of aircraft noise. Additionally, require outdoor common areas or recreational areas of residential or mixed-used developments to be posted with signs notifying users regarding the proximity to John Wayne Airport and the presence of operating aircraft and noise.
- **N 4.1 - Stationary Noise Sources:** Enforce interior and exterior noise standards outlined in Table N3 of the Noise Element and in the City's Municipal Code to ensure that sensitive noise receptors are not exposed to excessive noise levels from stationary noise sources, such as heating, ventilation, and air conditioning equipment.
- **N 4.6 - Maintenance or Construction Activities:** Require the enforcement of the Noise Ordinance noise limits and limits hours of maintenance or construction activity in or adjacent to residential areas, including noise that results from in-home hobby or work-related activities.
- **LU 6.15.3 - Airport Compatibility:** Require that all development be constructed in conformance with the height restrictions set forth by the Federal Aviation

Administration (FAA), Federal Aviation Regulations (FAR) Part 77, and Caltrans Division of Aeronautics, and that residential development shall be allowed only on parcels with noise levels of less than the John Wayne Airport 65 dBA CNEL noise contour area as shown in Figure N5 of the Noise Element of the General Plan, unless and until the City determines, based on substantial evidence, that the sites wholly within the 65 dBA CNEL noise contour shown in Figure N5 are needed for the City to satisfy its Sixth Cycle RHNA mandate. Nonresidential uses are, however, encouraged on parcels located wholly within the 65 dBA CNEL contour area.

State

California Noise Insulation Standards

Title 24 of the *California Code of Regulations*, also known as the California Building Standards Code or, more commonly, the California Building Code, requires that residential structures other than detached single-family dwellings be designed to prevent exterior noise intrusion so that the interior Day-Night Average Sound Level (L_{dn}) or Community Noise Equivalent Level (CNEL) attributable to exterior sources does not exceed 45 dBA in any habitable room with closed windows (CBSC 2015).

Newport Beach

The City of Newport Beach has established guidelines, policies and NBMC regulations to ensure that Newport Beach residents will be protected from excessive noise exposure.

General Plan

General Plan Noise Element

The City of Newport Beach is affected by several different sources of noise, including, automobile traffic, commercial activity, entertainment establishments, water vehicles, and aircraft operations from the JWA. The Noise Element is a tool for including noise control in the planning process in order to maintain compatible land use with environmental noise levels. The Noise Elements highlights the following goals:

- Goal N1 Noise Compatibility—Minimize land use conflicts between various noise sources and other human activities
- Goal N2 Minimized motor vehicle traffic and boat noise impacts on sensitive noise receptors
- Goal N3 Protection of Newport Beach residents from the adverse noise impacts of comer air carrier operations at John Wayne Airport as provided in the City Council Airport Policy
- Goal N4 Minimization of Nontransportation-Related Noise—Minimized nontransportation-related noise impacts on sensitive noise receptors
- Goal N5 Minimized excessive construction-related noise

Table N2 of the City's Noise Element presents criteria used to assess the compatibility of proposed land uses with the noise environment. At different exterior noise levels, individual land uses are identified as "clearly compatible", "normally compatible", "normally incompatible", or "clearly incompatible". The residential land use noise compatibility zone is shown in Table 3-12.

TABLE 3-12
LAND USE NOISE COMPATIBLITY MATRIX

Land Use Categories		**Community Noise Equivalent Level (CNEL)**						
Categories	**Uses**	**<55**	**55-60**	**60-65**	**65-70**	**70-75**	**75-80**	**>80**
Residential	Single Family, Two Family, Multiple Family	A	A	B	C	C	D	D
Residential	Mixed Use	A	A	A	C	C	C	D
Residential	Mobile Home	A	A	B	C	C	D	D
Commercial Regional, District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial **Industrial** **Institutional**	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Recreational **Institutional** Civic Center	Amphitheatre, Concert Hall Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D

TABLE 3-12
LAND USE NOISE COMPATIBLITY MATRIX

Land Use Categories		Community Noise Equivalent Level (CNEL)						
Categories	**Uses**	**<55**	**55-60**	**60-65**	**65-70**	**70-75**	**75-80**	**>80**
Commercial General, Special **Industrial, Institutional**	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional	Hospital, Church, Library, Schools' Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A
Zone A Clearly Compatible	Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.							
Zone B Normally Compatible	New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.							
Zone C Normally Incompatible	New construction of development should generally be discouraged. If new construction of development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features must be included in the design.							
Zone D Clearly Incompatible	New construction or development should generally not be undertaken.							
Source: Newport Beach 2006a.								

Noise Ordinance

Chapter 10.26 (Community Noise Control) of the NBMC is the City's Noise Ordinance.

<u>Construction</u>

Section 10.26.035(D) exempts noise sources associated with construction, repair, remodeling, demolition, or grading of any real property from the quantitative Noise Ordinance standards. Construction activities are subject to the provisions of Chapter 10.28 (Loud and Unreasonable Noise), Section 10.28.040, which prohibits construction activities

that generate loud noise that disturbs, or could disturb, a person of normal sensitivity who works or resides in the vicinity except during weekdays between the hours of 7 a.m. to 6:30 p.m., and Saturdays between the hours of 8 a.m. to 6 p.m. The NBMC does not set specific noise level limits on construction-related activities.

<u>Non-Construction Noise from One Property to Another</u>

Section 10.26.025 (Exterior Noise Standards) provides maximum exterior noise exposure levels for various types of land uses. Table 3-13 identifies the noise standards that, unless otherwise specifically indicated, shall apply to all property with a designated noise zone. If the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

TABLE 3-13
ALLOWABLE EXTERIOR NOISE LEVELS

Noise Zone	Type of Land Use	Allowable Interior Noise Level (L_{eq})	
		7 AM to 10 PM	10 PM to 7 AM
I	Single-, two-or multiple-family residential	55 dBA	50 dBA
II	Commercial	65 dBA	60 dBA
III	Residential portions of mixed-use properties	60 dBA	50 dBA
IV	Industrial or manufacturing	70 dBA	70 dBA
Source: Newport Beach 2017.			

Section 10.26.030 (Interior Noise Standards) provides maximum interior noise exposure levels. Table 3-14 identifies the noise standards that, unless otherwise specifically indicated, shall apply to all residential property within all noise zones. If the ambient noise level exceeds the resulting standard, the ambient shall be the standard.

TABLE 3-14
ALLOWABLE INTERIOR NOISE LEVELS

Noise Zone	Type of Land Use	Allowable Interior Noise Level (L_{eq})	
		7 AM to 10 PM	10 PM to 7 AM
I	Residential	45 dBA	40 dBA
III	Residential portions of mixed-use properties	45 dBA	40 dBA
Source: Newport Beach 2017.			

Heating, Ventilation, and Air Conditioning (HVAC) Units

Noise generated by HVAC equipment is regulated by the NBMC, Section 10.26.045(A) requires the following:

> New HVAC Equipment. New permits for heating, venting and air conditioning (HVAC) equipment in or adjacent to residential areas shall be issued only where installations can be shown by computation, based on the sound rating of the proposed equipment, not to exceed an A-weighted sound pressure level of fifty (50) dBA or not to exceed an A-weighted sound pressure level of fifty-five (55) dBA and be installed with a timing device that will deactivate the equipment during the hours of ten p.m. to seven a.m. The method of computation used shall be that specified in "Standard Application of Sound Rated Outdoor Unitary Equipment," Standard 275, Air conditioning and Refrigeration Institute, 1984 or latest revision thereof.

Section 10.28.045 of the NBMC limits the hours when persons performing real property maintenance, including landscape maintenance and trash collection, can "operate any tool, equipment or machine in a manner which produces loud noise that disturbs, or could disturb, a person of normal sensitivity who works or resides in the vicinity." The hours of operation are limited to 7 a.m. to 6:30 p.m. Monday through Friday and, 8 a.m. to 6 p.m. Saturday, with no disturbing work on Sundays or federal holidays. Mechanical blowers are required to have noise levels that do not exceed 65 dBA at a distance of 50 feet.

Sound-Amplifying Equipment

10.26.050 Sound-Amplifying Equipment. Loudspeakers, sound amplifiers, public address systems or similar devices used to amplify sounds shall be subject to the provisions of Chapter 10.32 of this title. Such sound-amplifying equipment shall not be construed to include electronic devices, including but not limited to, radios, tape players, tape recorders, compact disc players, electric keyboards, music synthesizers, record players or televisions, which are designed and operated for personal use, or used entirely within a building and are not designed or used to convey the human voice, music or any other sound to an audience outside such building, or which are used in vehicles and heard only by occupants of the vehicle in which installed, which shall be subject to the provisions of Chapter 10.28 of this title. (Ord. 95-38 Section 11 [part]), 1995

3.13.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
NOISE – Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c) For a project located within the vicinity of a private airstrip or 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?	☐	☐	☐	☑

Would the Project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Temporary Increases in Ambient Noise

Two types of temporary noise impacts would occur during Project construction (i.e., temporary increases in ambient noise levels): (1) equipment delivery and construction worker commutes; and (2) Project construction operations. The first type of temporary (short-term) construction noise would result from transport of construction equipment and materials to the Project site and construction worker commutes. Construction is anticipated to be completed in approximately 28 months from the start of demolition. This timeline includes approximately 3 months of demolition, 3 months of site preparation, 3 months of grading/excavation, approximately 23 months of construction of the new subterranean parking structure and residential building, paving would take approximately 2 months, and the application of architectural coatings would occur over 5 months. More specifically, the proposed Project would require the haul-out of approximately 50,000 cy of demolition material, and a total of approximately 65,000 cy of soil. Project construction specifications would include the following elements for all construction work associated with the Project:

- Construction equipment, fixed or mobile, will be equipped with properly operating and maintained noise mufflers consistent with manufacturers' standards.
- Construction staging areas will be located away from off-site sensitive uses during the later phases of Project development.

- The Project contractor will place all stationary construction equipment so that emitted noise is directed away from the sensitive receptors nearest the proposed Project site whenever feasible.
- The construction contractor will schedule high-noise-producing activities between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption to sensitive uses.
- A "noise disturbance coordinator" will be established. The disturbance coordinator will be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler) and will be required to implement reasonable measures to reduce noise levels.

In typical construction projects (such as the proposed Project), demolition and grading activities generate the highest noise levels since these phases involve use of the largest equipment. During demolition and grading, persons in the immediate vicinity of the construction site would experience short-term noise impacts related to the operation of heavy construction equipment such as bulldozers, hoe-rams, excavators, and dump trucks. Noise levels would fluctuate depending on equipment type, duration of use, and distance between noise source and receiver. The operation of heavy equipment may occur adjacent to existing commercial and office buildings.

Local commercial and office uses would be subject to elevated noise levels due to the operation of Project-related construction equipment. Construction activities are carried out in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise levels surrounding the construction site as work progresses. Construction noise levels reported in the USEPA's *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances* were used to estimate future construction noise levels for the Project (USEPA 1971). Typically, the estimated construction noise levels are governed primarily by equipment that produces the highest noise levels. Construction noise levels for each generalized construction phase (ground-clearing/demolition, excavation, foundation construction, building construction, paving, and site cleanup) are based on a typical construction equipment. Impact pile drivers may be implemented for temporary shoring for building foundations.

The degree to which noise-sensitive receptors are affected by construction activities depends heavily on their proximity. Estimated noise levels attributable to the development of the proposed Project are shown in Table 3-15, Construction Noise Levels at Noise Sensitive Uses, and calculations are included in Appendix F, Noise Data (Psomas 2019c).

TABLE 3-15
CONSTRUCTION NOISE LEVELS AT NOISE-SENSITIVE USES

Construction Phase	Noise Levels (L_{eq} dBA)							
	Commercial Uses to the North of the Project Site		Office Uses to the West of the Project Site		Parking Structure to the South of the Project Site		Commercial Use to the East of the Project Site	
	Max (20 ft)	*Avg (180 ft)*	*Max (60 ft)*	*Avg (190 ft)*	*Max (60 ft)*	*Avg (245 ft)*	*Max (20 ft)*	*Avg (165 ft)*
Ground Clearing/ Demolition	91	72	81	71	81	69	91	73
Excavation	96	77	86	76	86	74	96	78
Foundation Construction	89	70	79	69	79	67	89	71
Building Construction	89	70	79	69	79	67	89	71
Paving and Site Cleanup	96	77	86	76	86	74	96	78

L_{eq} dBA: Average noise energy level; Max: maximum; avg: average; ft: feet

Note: Noise levels from construction activities do not take into account attenuation provided by intervening structures.

Source: USEPA 1971.

Table 3-14 shows both the maximum and average noise levels for construction equipment. Maximum noise levels represent the noise levels from construction equipment occurring nearest to the noise sensitive use/receptor. Average noise levels represent the noise exposure to sensitive uses based on the distance to the center of the Project site. Noise levels from general Project-related construction activities would range from 79 to 96 dBA L_{eq} for the maximum noise levels and 67 to 78 dBA L_{eq} for the average noise levels. Pile driving noise can be especially high due to the high magnitude of noise associated with the impact of an elevated hammer onto the driven pile. The magnitude of noise will be dependent on the type of pile driver selected for the Project but will likely result in high levels of intermittent noise exposure.

As it relates to off-site uses, for informational purposes, construction-related noise impacts may exceed the 80 dBA L_{eq} and 85 dBA L_{eq} 8-hour construction noise level criteria as established by the FTA for commercial land uses.

The Project is estimated to generate 108 hauling truck trips over a 3-month demolition phase (average of 11 trips per day) and a total of 8,125 hauling truck trips over a 3-month grading phase (average of 125 trips per day) based on the CalEEMod outputs, shown in Appendix A of this Addendum. These transportation activities would incrementally raise noise levels on access roads leading to the site. It is expected that larger trucks used in equipment delivery would generate higher noise levels than trucks associated with worker commutes. The total number of daily vehicle trips would be minimal when compared to existing traffic volumes on the affected streets. There are no noise sensitive uses proximate to the Project site and consequently roadway noise impacts would be short term and would not result in a significant off-site noise impact.

Construction-related, short-term noise levels have the potential to be higher than existing ambient noise levels in the Project area under existing conditions. The proposed Project would be required to comply with the construction hours specified in the City's Noise Ordinance, which states that construction activities are allowed between 7:00 a.m. and 6:30 p.m., Monday through Friday, and from 8:00 a.m. to 6:00 p.m. on Saturday. No construction is permitted outside of these hours or on Sundays and federal holidays.

However, construction noise levels would exceed the FTA's significance thresholds for construction activities. In addition, the Project's construction phase would involve the use of impact pile driving which results in high levels of construction noise. Though the Project may adhere to the City's construction hours and implementation of construction noise elements, as discussed above, construction noise impacts would be considered significant due to the exceedance of the FTA's significance thresholds. However, it should be noted that the Project would not result in a new impact or an increase in severity of previously identified effects in the 2006 EIR.

Permanent Increases in Ambient Noise

Potential sources of noise during Project operation could include vehicle traffic, noise from the heating, ventilation, and air conditioning (HVAC) units, and noise from use of the on-site recreational areas by residents. Impacts from these noise sources are evaluated below.

In community noise assessments, a 3-dBA increase is considered "barely perceptible," and increases over 5 dBA are generally considered "readily perceptible" (Caltrans 2009). Operation of the proposed Project would displace traffic generated by existing office uses. The net difference between vehicle trips generated by existing and Project uses is an increase of 622 trips per day and 12 trips during the AM peak hour and 22 additional trips in the PM peak hour. The corresponding increase in off-site traffic noise would range from 0.0 to 2.5 dBA for the analyzed roadway segments proximate to the Project site. Table 3-16, Existing and Projected Traffic Noise Levels, depict the noise increase from the proposed Project. Thus, the traffic noise increases are below the 5 dBA noise increase threshold and would also not be perceptible or substantial. The impact on traffic noise levels would be less than significant and no mitigation is required.

TABLE 3-16
EXISTING AND PROJECTED TRAFFIC NOISE LEVELS

Roadways		**Existing Traffic**		**Future No Project**		**Future No Project**		**Cumulative Plus Project Noise Increase from Existing**	**Project Only Increase**
		ADT	*dBA CNEL*	*ADT*	*dBA CNEL*	*ADT*	*dBA CNEL*	*dBA CNEL*	*dBA CNEL*
Irvine Avenue	s/o Bristol Street South	24,500	76	28,700	77	28,700	77	0.7	0.0
	n/o Bristol Street North	21,300	75	25,200	76	25,200	76	0.7	0.0
Campus Drive	e/o Von Karman Avenue	21,000	74	27,600	76	27,600	76	1.2	0.0
	s/o Bristol Street South	8,900	71	12,300	72	12,300	72	1.4	0.0
MacArthur Boulevard	s/o Campus Drive	16,100	75	23,200	77	23,300	77	1.6	0.0
Jamboree Road	n/o Eastbluff/University Drive	50,700	80	62,500	81	62,500	81	0.9	0.0
University Drive	e/o Jamboree Road	13,700	74	14,800	74	14,800	74	0.3	0.0
Birch Street	s/o Orchard	6,500	69	6,900	70	6,900	70	0.3	0.0
MacArthur Boulevard	s/o Jamboree Road	20,600	76	30,400	78	30,500	78	1.7	0.0
Bristol Street N	e/o Birch Street	20,200	74	21,200	75	21,200	75	0.2	0.0

ADT: average daily traffic volume. CNEL: Community Noise Equivalent Level. s/o South of. n/o North of. e/o East of.

Note: Noise levels calculated from the FHWA's RD-77-108 Traffic Noise Prediction Model (Calculations can be found in Attachment B of this report). Noise levels calculated at 50 feet from the roadway centerline.

Source: Psomas 2023.

Noise Generated by On-Site Sources

The primary on-site noise sources generated by operation of the proposed Project would be heating, ventilation, and air conditioning (HVAC) equipment, interior courtyard activities, landscape maintenance, and trash collection. Noise generated by HVAC equipment is regulated by the NBMC, Section 10.26.045 which requires that noise exposure at offsite residential uses not exceed 55 dBA.

For maintenance and landscaping activities, Section 10.28 of the NBMC limits activities to between seven a.m. and six-thirty p.m., Monday through Friday, nor on any Saturday, except between the hours of eight a.m. and six p.m. Compliance with these NBMC limitations will result in less than significant impacts related to onsite noise sources associated with the proposed residential uses.

An interior courtyard may be developed with recreational activities which may be a source of noise. However, this use is surrounded by the project structure itself which will act as a six-story sound barrier to offsite uses. Noise associated with interior is not expected to be audible to offsite uses due to the barrier and would also be required to comply with the City's noise limits related to disturbance. Therefore, the proposed Project would not result in significant noise impacts nor lead to new or substantially more severe significant impacts beyond those identified in the 2006 EIR.

Land Use Compatibility Assessment

The land use compatibility of the Project site was assessed based on the Land Use Compatibility guidelines contained in the City of Newport Beach General Plan. Outdoor amenity areas and indoor sleeping areas associated with the proposed Project would be exposed to traffic noise along Newport Center Drive, adjacent commercial uses, and occasional aircraft operations.

Exterior Ambient Noise Impacts

Per the City's General Plan Noise Element, noise levels of up to 60 dBA CNEL are considered clearly compatible. Based on the Noise Element's noise contours of the Project area, the Project site is located outside of the existing and future 65 dBA CNEL noise contours for aircraft operations from JWA. The Project site is also located outside of the 60 dBA CNEL noise contours developed for roadway noise exposure within the Noise Element of the General Plan. As such, the existing noise environment would be compatible for the proposed land uses. However, there may be the potential for single-event aircraft flyovers to result in activity or sleep disturbance.

Interior Noise Levels

Interior noise levels that are a nuisance are primarily affected by noise intrusion from exterior noise sources such as aircraft and roadway traffic. According to the FAA, "Normal residential construction can be expected to provide a [noise level reduction] of 20 dB…" (FAA 2012). As such, exterior noise levels of less than 65 dBA CNEL would meet the City's interior noise limit of 45 dBA CNEL. Because the Project is located in an area which is below the 65 dBA CNEL noise contours for both roadways and aircraft, the interior noise level limits can be met with standard construction designs. To address the potential for activity or sleep disturbance from single-event aircraft flyovers the Project will comply with Standard Policies related to building design discussed under the Mitigation Program for Noise. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with land use compatibility beyond those identified in the 2006 EIR. The Project would not result in a new significant impact pertaining to noise that was not previously analyzed, and no new mitigation measures are required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Substantial Change from Previous Analysis.

Short-term Vibration Impacts

While there is currently limited information regarding vibration source levels, to provide a comparison of vibration levels expected for a Project of this size. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the Project boundary (assuming the construction equipment would be used at or near the Project boundary) because vibration impacts occur normally within the buildings. As discussed in the 2006 EIR, vibration levels above 94 VdB would result in potential damage to nonengineered timber as shown in Table 3-17. Other vibration exposure levels are shown for different types of structures. Levels above 72 VdB would have the potential to cause annoyance at sensitive residential receptors.

TABLE 3-17
CONSTRUCTION VIBRATION DAMAGE CRTIERIA

Building/ Structural Category	PPV, in/sec	Approximate Lv*
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

*RMS velocity in decibels, VdB re 1 micro-in/sec
Source: FTA 2018.

The closest off-site structures to the Project site are the existing commercial building to the east, approximately 5 feet from the potential construction activities. This building is assumed to be non-engineered timber and masonry. Pile driving and blasting are generally the sources of the most severe vibration during construction. Pile driving would be used to develop the footings of the proposed building. The amount of vibration is dependent on the type of pile driving that would be used and the proximity to offsite structures. Impact pile driving would have the potential to result in cosmetic damage to structures at distances of 100 feet or less.

Conventional construction equipment would be used for demolition, excavation and grading activities. Table 3-18 summarizes typical vibration levels measured during construction activities for various vibration-inducing pieces of equipment at a distance of 25 feet and calculated for other distances.

TABLE 3-18
VIBRATION LEVELS FOR CONSTRUCTION EQUIMENT

Equipment	Approximate VdB			
	25 Feet	**50 Feet**	**100 Feet**	**150 Feet**
Pile Driver (impact) Upper Range	112	103	94	89
Pile Driver (sonic) Upper Range	105	96	87	82
Vibratory Roller	94	85	76	71
Hoe Ram	87	78	69	64
Large Bulldozer	87	78	69	64
Caisson drilling	87	78	69	64
Loaded Trucks	86	77	68	63
Jackhammer	79	70	61	56
Small Bulldozer	58	49	40	35

VdB: vibration decibels

Source: FTA 2018.

As shown in Table 3-19, vibration levels for construction equipment have the potential to exceed the 72 VdB impact threshold related to vibration induced annoyance at the nearest structures to the construction site. This is a conservative analysis because it assumes each piece of equipment would be located at the closest point on the Project site to the nearest offsite building.

TABLE 3-19
VIBRATION ANNOYANCE LEVELS AT SENSITIVE USES

	Vibration Levels			
	North - Commercial Uses	**West - Office Uses**	**South - Parking Lot Uses**	**East - Commercial Uses**
Equipment	**(VdB @ 70 ft)**	**(VdB @ 100 ft)**	**(VdB @ 85 ft)**	**(VdB @ 5 ft)**
Pile Driver (impact)	99	94	96	133
Pile Driver (sonic)	92	87	89	126
Vibratory Roller	81	76	78	115
Hoe Ram	74	69	71	108
Large Bulldozer	74	69	71	108
Caisson drilling	74	69	71	108
Loaded Trucks	73	68	70	107
Jackhammer	66	61	63	100
Small Bulldozer	45	40	42	79
Annoyance Criteria	**72**	72	**72**	**72**
Exceeds Criteria?	**Yes**	**Yes**	**No – Nonsensitive**	**Yes**
Building Damage Criteria	**94**	**94**	**102**	**94**
Exceeds Criteria?	**Yes**	**Yes**	**No**	**Yes**

ppv: peak particle velocity; ft: feet.

Source: FTA 2018 (Calculations can be found in Appendix F).

As shown in Table 3-19, Project related construction activities would have the potential to result in vibration induced annoyance and cosmetic building damage. The 2006 EIR identified all construction vibration impacts to be significant and unavoidable; therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with construction vibration beyond those identified in the 2006 EIR.

Long-term Vibration Impacts

The 2006 EIR did not evaluate potential long-term vibration impacts. The streets surrounding the Project area are paved, smooth, and unlikely to cause significant ground-borne vibration. In addition, the rubber tires and suspension systems of buses and other on-road vehicles make it unusual for on-road vehicles to cause ground-borne noise or vibration issues. It is therefore assumed that no such vehicular vibration impacts would occur, and no vibration impact analysis of on-road vehicles is necessary. Additionally, once constructed, the proposed Project is a residential development and would not include uses that would generate ground-borne vibration. Therefore, the proposed Project would not lead to new or substantially more severe significant impacts associated with long-term vibration impacts, and no new mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or 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 Substantial Change from Previous Analysis. The 2006 EIR determined that there would be a less than significant impact pertaining to aircraft noise exposure if proposed residential uses were located outside of the noise contours detailed in the 2006 EIR. Based on Figures N2 Existing Noise Contours and N5 Future Noise Contours of the Noise Element of the General Plan, the Project site is located between the 60 dBA CNEL and 65 dBA CNEL contours for existing and future estimated aircraft noise exposure from JWA. These figures also show that the Project site is located within the 60 dBA CNEL noise contours for roadway generated noise. The proposed Project would not result in noise exposures in excess of the City's interior 45 dBA CNEL noise limit. Therefore, the proposed Project would not potentially create a new significant impact pertaining to aircraft noise exposure that was not previously analyzed prior to the incorporation of mitigation measures. However, Project residents would be exposed to single-event noise from aircraft flyovers which may result disturbance to activities and sleep. Compliance with the policies discussed in the City's Noise Element of the General Plan would reduce these single-event noise exposure to levels below significance.

Standard Conditions and Requirements

SC NOI-1 To ensure compliance with Newport Beach Municipal Code Section 10.28.040, grading and construction plans shall include a note indicating that loud noise generating project construction activities (as defined in Section 10.28.040 of the Newport Beach Municipal Code) shall take place between the hours of 7:00 AM and 6:30 PM on weekdays that are not federal holidays and from 8:00 AM to 6:00 PM on Saturdays in any area of the City that is not designated as a high-density area. Loud, noise generating construction activities are prohibited outside of these hours and on Sundays and federal holidays.

SC NOI-2 Heating, ventilation and air conditioning (HVAC) units shall be designed and installed in accordance with Section 10.26.045 of the Newport Beach Municipal Code, which specifies the maximum noise levels for new HVAC installations and associated conditions. All mechanical equipment shall be screened from view of adjacent properties and adjacent public streets, as authorized by a Site Development Review Permit.

SC NOI-3 Consistent with General Plan Policy N 1.4, all residential units shall be designed to ensure that interior noise levels in habitable rooms from exterior sources (including aircraft and vehicles on adjacent roadways) shall not exceed 45 dBA CNEL. This mitigation measure complies with the applicable sections of the California Building Code (Title 24 of the California Code of Regulations). Prior to granting of a building permit, the Applicant shall submit to the City of Newport Beach Community Development Department for review and approval architectural plans and an accompanying noise study that demonstrates that interior noise levels in the habitable rooms of residential units would be 45 dBA CNEL or less. Where closed windows are required to achieve the 45 dBA CNEL limit, Project plans and specifications shall include ventilation as required by the California Building Code.

Conclusion

The noise impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the noise analysis provided in the 2006 EIR are required.

3.14 POPULATION AND HOUSING

3.14.1 2006 EIR

The 2006 EIR assumed that General Plan buildout would increase the number of dwelling units in the City by 14,215 units (approximately 12,515 multi-family units and approximately 1,700 single-family units), for a total of 54,394 dwelling units. Using a population generation factor of 2.19 persons per household, the 2006 EIR indicated that the 14,215 residential units would result in a population increase of approximately 31,131 residents. This increase would result in a total population of 103,753 persons at General Plan buildout. The increase in residential units and the associated increase in population would exceed Southern California Association of Governments' (SCAG's) projections. The number of households in the City projected by SCAG by 2030 was 43,100 units, while the number of dwelling units under the General Plan would be 54,394 units. The SCAG projected population was 94,167 residents by 2030, while the population resulting from the General Plan buildout would be approximately 10 percent higher, or 103,753 residents. The General Plan EIR concluded that since residential growth would substantially increase population growth within the City (by approximately 43 percent over 2002 population [baseline conditions], and approximately 10 percent higher than then-existing SCAG projections), impacts pertaining to population growth would be considered significant. It was noted that the estimated population increase represented a conservative, worst-case scenario because it assumed that all allowed units would be built. Additionally, this estimate assumed that all residences in the City would be occupied. The City typically has a substantially higher vacancy rate than that of the County due to a higher percentage of vacation properties (seasonal housing).

It should also be noted that the 2006 EIR over analyzed the number of residential units in the JWA subarea. Although the adopted General Plan approved a maximum of 2,200 residential units in the Airport Area, at a maximum density of 50 dwelling units per net acre (du/net acre), the General Plan Program EIR evaluated 4,300 residential units in the Airport Area. As set forth in the General Plan Land Use Element, of the 2,200 residential units allocated to the Airport Area, 1,650 of the units must replace existing office, retail, and/or industrial uses so that there is no net gain in vehicular trips. The remaining 550 units of the 2,200 units allocated to the Airport Area (2,200 minus 1,650) are "additive" units that may be developed as infill on existing surface parking lots or areas not used as occupiable buildings on properties within the Conceptual Development Plan Area provided that parking is replaced onsite.

The 2006 EIR noted that development under the General Plan Update would occur primarily on sparse, developable land in the City, by intensifying current land uses and through conversion of land uses of economically underperforming and obsolete development. The 2006 EIR determined there would be no impact regarding the displacement of substantial numbers of existing housing or people necessitating the construction of replacement housing elsewhere.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **H 2.1 –** Support all reasonable efforts to preserve, maintain, and improve availability and quality of existing housing and residential neighborhoods, and ensure full utilization of existing City housing resources for as long into the future as physically and economically feasible.
- **H 2.2 -** Encourage the housing development industry to respond to existing and future housing needs of the community and to the demand for housing as perceived by the industry.
- **H 2.3 -** Approve, wherever feasible and appropriate, mixed residential and commercial use developments that improve the balance between housing and jobs.
- **H 3.1 -** Encourage preservation of existing and provision of new housing affordable to extremely low-, very low-, low-, and moderate-income households.
- **H 3.2** – Encourage housing developments to offer a wide spectrum of housing choices, designs, and configurations.

3.14.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
POPULATION AND HOUSING–Would the project:				
a) Induce substantial unplanned 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 number of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Would the Project:

a) Induce substantial unplanned 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)?

No Substantial Change from Previous Analysis. The proposed Project would allow for the development of 282 residential units. Assuming the same population generation factor of 2.19 persons per unit per the City's General Plan Update, the proposed Project would generate a residential population of approximately 618 persons. However, using the US

Census data generation factor of 2.27 persons per unit (used in the Air Quality/Greenhouse Gas Emission report), the Project would generate a total of 640 persons. To be more conservative, this number is assumed as the residential population of the proposed Project. The increase of 640 in residential population is 9 percent of SCAG's projected population growth for the City from 2016 to 2045 of 7,100 residents. The State has declared that the lack of housing is a critical problem that threatens the economic, environmental, and social quality of life in California. The consequences of the housing crisis include the lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commutes, and air quality deterioration.

An *Affordable Housing Implementation Plan and Density Bonus Application* was prepared for the Project by Springbrook Realty Advisors, Inc. in January 2023. As part of the Project, a General Plan Amendment would be required to designate additional density allocated to the Airport Area (Statistical Area L4). The Project would consist of 282 units including 188 base units and 94 density bonus units. The Development Standards provide that 30 percent of the base units within a residential development would be affordable to Lower Income households. Lower Income Households, as defined in California Health and Safety Code Section 50079.5, are defined as households earning 80 percent or less of area median income, adjusted for family size, including both very low- and low-income categories. The affordable housing requirement for this Project, as required by the Development Standards, is 56 units (30 percent of 188 base units).

To meet a portion of the Project's affordable housing requirements, the Applicant would provide 28 units (15 percent of base units) affordable to Very Low-Income Households ("Required Density Bonus Very Low-Income Units"). This would comply with the provisions of Government Code Section 65915 applicable to a 50 percent density bonus. Rents for the Required Density Bonus Very Low-Income Units would be computed in accordance with Health and Safety Code Section 50053, as required by Government Code Section 6591(c)(1). To meet the remainder of the affordable units required by the Development Standards, the Project would provide 28 units affordable to Low-Income households ("Development Standards Additional Low-Income Units"). Rents for those units would be computed based on income limits for Low Income households, as published annually by the Department of Housing and Community Development.

The Applicant intends to operate the Project as a rental community. The 28 Required Density Bonus Very Low-Income Units would remain rent restricted for a minimum of 55 years, per Government Code Section 6591(c)(1), more than the 30-year affordability term set forth in the Development Standards. Rents for the 28 Development Standards Additional Low-Income Units would be restricted for the required 30-year term.

While the exact location of each of the affordable homes within the Project site has not yet been determined, the affordable homes would be spread throughout the development to avoid concentration of affordable homes in any area. The affordable homes would be comparable in the quality of construction and exterior design to the market rate homes. As provided for in the Development Standards, all affordable homes would have access to the facilities and amenities offered by the development.

Project implementation would make progress on the City's housing goals and be consistent with projected growth in the City based on SCAG's growth forecasts. The City's 6th Cycle (2021–2029) RHNA is 4,845 housing units: 1,050 moderate-income units, 1,409 above moderate-income units, 1,456 very low-income units, and 930 low-income units. Additionally, the Project does not include the extension of roads or other infrastructure to underutilized areas, which could induce indirect growth. Therefore, the Project would not induce substantial unplanned population growth in the City. No significant impacts would occur, and no mitigation measures are required. The proposed Project would cause neither a new impact to occur nor an increase in the severity of an impact previously disclosed. As such, no further analysis is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Substantial Change from Previous Analysis. The proposed Project site is currently developed with an existing office building and surface parking lot. No existing residential uses are located on-site. As such, the Project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere, consistent with the conclusions for the 2006 EIR. Therefore, the Project would not create a new significant impact pertaining to displacement of people or housing that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Population and Housing have been identified for the proposed Project.

Conclusion

The population and housing impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the population and housing analysis provided in the 2006 EIR are required.

3.15 PUBLIC SERVICES

3.15.1 2006 EIR

The 2006 EIR found that impacts to fire services from implementation of the General Plan Update were less than significant. Any new development that would occur under the General Plan Update would be required to comply with all applicable federal, State, and local regulations governing the provision of fire protection services, including adequate fire access, fire flows, and number of hydrants. Additionally, the General Plan Update policies ensured impacts would be less than significant.

The 2006 EIR determined that the build-out of the General Plan would have a less than significant impact on police services. To maintain acceptable levels of service, the General Plan Update included policies to ensure adequate law enforcement is provided as the City experiences future development. To maintain the ratio of 1.7 officers per 1,000 residents (148 officers and 85,120 residents), the Newport Beach Police Department (NBPD) would have had to provide 53 additional officers by General Plan Update buildout. Maintaining the Police Department's ratio of 0.60 nonsworn personnel per sworn officer would result in the addition of 32 nonsworn personnel. The addition of 85 police personnel would require the Police Department to expand police facilities. However, since the Police Department did not have near-term plans for expansion of police facilities, staff members, or equipment inventory, it was deemed speculative to determine whether a new substation would be considered. The 2006 EIR stated that all new developments would be subject to the City's project-specific environmental review under CEQA. Therefore, the 2006 EIR found that impacts to police services would be less than significant.

As stated in the 2006 EIR, the Newport-Mesa Unified School District (NMUSD), with a service area of 58.83 square miles, provides educational services to the City of Newport Beach, City of Costa Mesa, and other unincorporated areas of Orange County. The Airport Area is served by the Santa Ana Unified School District (SAUSD). A small portion of the City located in the eastern part of the City is served by the Laguna Beach Unified School District. The 2006 EIR identifies that the NMUSD serves the majority of the City and has 32 public schools including 22 elementary schools, 2 junior high schools, 5 high schools, 2 alternative education centers, and 1 adult school. There are also several private schools in the City or local area that are available to the City's residents for educational services. The General Plan Update included goals and policies to address capacity issues for NMUSD and SAUSD. Buildout would likely require construction of new school facilities; however, the 2006 EIR concluded that with compliance with General Plan policies impacts would be less than significant.

The 2006 EIR stated that parks, although included as a public service in Appendix G of the CEQA Guidelines, are analyzed separately in Section 4.12 (Recreation) of the 2006 EIR. As such, further discussion of parks is discussed in Section 3.16, Recreation, of this Addendum.

Upon full buildout of the General Plan Update, the population in the Planning Area would increase by 31,131. This increase in residents would increase the demand for library services and facilities. Policy LU 2.8 of the proposed General Plan Update would help ensure that adequate library facilities are provided to the City's residents and that public services can adequately support new development. The Newport Beach Public Library (NBPL) stated that the growing need for electronic resources, as opposed to physical library resources, is changing. Therefore, the 2006 EIR stated that due to the growing need for electronic resources, former service standards (e.g., a certain number of volumes per thousand residents) are no longer appropriate when assessing the needs of the NBPL. Therefore, increased development in the City does not necessarily equate to an increase in total volumes or sf of library space. The 2006 EIR determined that compliance with policies contained in the General Plan Updated would ensure that any future identified library need would be adequately met. Impacts to libraries was determined to be less than significant.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

General Plan Policy LU 2.8 and LU 6.1.1, in Section 3.11 Land Use and Planning, are applicable to this topic.

3.15.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
PUBLIC SERVICES–Would the project:				
a) 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?	☐	☐	☐	☑
Police protection?	☐	☐	☐	☑
Schools?	☐	☐	☐	☑
Parks?	☐	☐	☐	☑
Other public facilities?	☐	☐	☐	☑

Would the Project:

a) 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:

i) Fire protection?

No Substantial Change from Previous Analysis. The Newport Beach Fire Department (NBFD) provides fire protection services for the entire City. The NBFD is responsible for reducing loss of life and property from fire, medical, and environmental emergencies. In addition to fire suppression, the NBFD also provides fire prevention and hazard reduction services. The Fire Prevention Division works in conjunction with the City's Planning, Public Works, and Building Departments to ensure that all new construction and remodels are built in compliance with local and State building and fire codes, including the provision of adequate emergency access and on-site fire protection measures. Based on the most recently available information from 2022, the NBFD's average response time is 4 minutes and 22 seconds (City of Newport Beach 2023). The nearest fire station to the Project site is NBFD Santa Ana Heights Station No. 7 at 20401 Acacia Street, approximately 1.0 mile southwest of the Project site. The Project is not expected to measurably impact average response times because the Project site's existing uses are already in the NBFD service area and are adequately served by the existing NBFD service facilities. However, the proposed Project has a higher density and hence more residents compared to what was analyzed in the General Plan EIR or the projection. Additionally, the proposed buildings on-site would be constructed in accordance with current applicable fire codes and would replace the older, on-site building constructed in 1975. Current fire codes are more stringent than the requirements of the past. Also, due to the Project site's proximity to the Santa Ana Heights Fire Station No. 7, the Project would be adequately served by existing fire services, and no new or expanded facilities would be necessary. Therefore, the proposed Project would not create a new significant impact pertaining to fire protection services that was not previously analyzed, and no mitigation measures are required. However, although the Project's demand for fire protection services would not result in construction of new or expansion of existing facility, it is noted that Fire Station 7 serving the Project site is in need of a rescue ambulance with patient transport and advanced life support (ALS) capabilities. Therefore, Standard Condition (SC) PS-1 is included to meet the need and further ensure the required level of services in the area.

ii) Police protection?

No Substantial Change from Previous Analysis. The NBPD provides local police services to the City, including the Project site. The Project site is within Area 2 of the NBPD's service area, which includes Newport Shores, Newport Terrace, Newport Crest, Versailles, Villa Balboa, Park Lido, Newport Heights, Cliffhaven, Bayshores, Castaways, Westcliff, Dover Shores, Harbor Highlands, Baycrest, and Santa Ana Heights. The NBPD is located at 870 Santa Barbara Drive, which is 3.0 miles southwest of the Project site. Under existing conditions, the

Project site's office use is served by the NBPD. The Project is not expected to measurably impact average response times because the Project site's existing uses are already in the NBPD service area and are adequately served by the existing NBPD service facilities. However, the proposed Project has a higher density and hence more residents compared to what was analyzed in the General Plan EIR or the projection. As such, there would be a less than significant impact, consistent with the finding of the 2006 EIR. The proposed Project would not create a new significant impact pertaining to police protection services that was not previously analyzed, and no mitigation measures are required.

iii) Schools?

No Substantial Change from Previous Analysis. Under existing conditions, the Project site is occupied by an office and surface parking lot, both of which do not generate any demand for school services. The Project's 282-unit residential development is anticipated to generate an approximate 565-person increase in the City's population. The Project has the potential to generate school-aged children who would require school services. This would increase demand on the NMUSD, which includes the Project site. Based on the student generation rates assumed in the 2006 EIR[5] the Project's 282 residential units would generate approximately 109 school aged students, with 55 elementary school students, 27 middle school students, and 27 high school students (City of Newport Beach 2006). As provided under Section 17620 of the California Education Code and Section 65970 of the California Government Code, the payment of statutory school development fees would fully mitigate a project's impacts on schools. Thus, impacts would be less than significant, and no mitigation is required. The proposed Project would not create a new significant impact on schools that was not previously analyzed, and no mitigation measures are required.

iv) Parks?

No Substantial Change from Previous Analysis. The proposed 282 residential units would result in a population of approximately 565 persons, which would generate a demand for parks and recreational facilities. The proposed Project would offer on-site amenities and open space, including podium level amenity space, roof-top common space, and 0.25-acre park. Additionally, Project residents would also be able to use nearby City parks and other public and regional parks. However, as part of the Project a General Plan Park Dedication Requirement is proposed. Pursuant to General Plan Policy LU 16-15.13, a public park equal to 8 percent of the gross land area of the total development, or a minimum 0.5-acre, whichever is greater, will be provided. This requirement would mandate a 0.5-acre park on the 2.49-acre Project site. The General Plan allows a waiver of its park dedication

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[5] The 2006 EIR estimated that implementation of the General Plan Update would result in the construction of approximately 14,215 dwelling units over existing conditions within the City. The increase in dwelling units would increase enrollment in the local schools serving Newport Beach. Using California Department of Finance population projections, and assuming that approximately 20 percent of the potential increase in population would represent children attending grades K through 12, implementation of the proposed General Plan Update would result in an enrollment increase of approximately 6,230 students (3,115 elementary school students, 1,557 students for middle schools, and 1,558 high school students) in the Planning Area. The number of elementary, middle, and high school students, respectively, was divided by the dwelling unit increase of 14,215 to obtain the following student generation ratios (rounded) for each grade level: 0.22 elementary students, 0.11 middle school students, and 0.11 high school students per household. These student generation ratios were used to estimate the number of students that the proposed Project would generate.

requirement where it can be demonstrated that the development parcels are too small to feasibly accommodate the park or inappropriately located to serve the needs of the residents. The 2.49-acre Project site is too small to accommodate a 0.5-acre park and physical construction of a 282-dwelling unit structure. Therefore, the Applicant will request a waiver of the General Plan Policy LU 16-15.13 public park dedication requirement and provide payment of in-lieu fees toward the parkland requirement. The in-lieu fees will be for the 0.5-acre equivalent (using a concession to waive a portion of the in-lieu fees). The proposed Project would not create a new significant impact on parks that was not previously analyzed, and no mitigation measures are required.

v) Other public facilities (libraries)?

No Substantial Change from Previous Analysis. The 2006 EIR determined there would be less than significant impact related to other public facilities (i.e., libraries). Under existing conditions, it is unlikely that the existing uses (i.e., office use) generated demand for library facilities. With implementation of the Project, the existing office building would be demolished and replaced with 282 residential units. Therefore, the demand for library services within the City would be incrementally increased because of the Project's resident population of 640 persons. The City's General Plan Arts and Cultural Element does not establish any quantitative standards for determining the amount of physical library space needed to serve the City's population. Additionally, given changes in technology (i.e., the use of electronic media in lieu of physical library resources), the demand for physical library space per population-based projections is speculative, as detailed in the 2006 EIR. The NBPL's Central library underwent an approximately 17,000-sf expansion in 2013 to service the City's population. The addition of approximately 565 persons to the City's population associated with the Project does not have the potential to directly or indirectly create the need to construct a new library or physically expand an existing library facility (NBPL 2023). Additionally, at the City, library services receive funding from property tax. As such, a portion of the Project's tax assessment would be dedicated to the City's Library Fund. Therefore, the proposed Project would not create a new significant impact on other public facilities, specifically libraries, that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

SC PS-1 Prior to the issuance of a building permit, the Applicant shall provide payment to the City of Newport Beach for the Project's pro-rata share of the cost for purchasing and equipping a new rescue ambulance with patient transport and advanced life support (ALS) capabilities to be located at Santa Ana Heights Fire Station No. 7.

Conclusion

The public services impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the public services analysis provided in the 2006 EIR are required.

3.16 RECREATION

3.16.1 2006 EIR

The 2006 EIR evaluated parks and recreational facilities on a Citywide basis and by service area. Twelve service areas were identified. At the time of adoption of the 2006 EIR, there was a deficit of approximately 38.8 acres of combined park and beach acreage citywide, with seven of the twelve service areas experiencing a deficit in this combined recreation acreage. However, the 2006 EIR stated that two of the twelve service areas within the City, Newport Center and Harbor View, had no identified park and recreation needs. Overall, the 2006 EIR found that impacts would be less than significant from increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. The construction and enhancement of park and recreational facilities and implementation of the goals and policies proposed in the General Plan Update would ensure that increased demand and use resulting from an increase in the Citywide population would not significantly accelerate the deterioration of existing recreational facilities.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

General Plan Policy LU 6.15.13 is applicable to the proposed Project. The Applicant is requesting a waiver of the General Plan Policy LU 16-15.13 public park dedication requirement and would provide payment of in-lieu fees toward the parkland requirement. The Applicant is requesting an incentive to waive a portion of the park in-lieu fee.

3.16.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
RECREATION–Would the project:				
(a) 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) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑

Would the Project:

a) 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) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Substantial Change from Previous Analysis. The Project site is located within the JWA subarea, as detailed in the 2006 EIR. Overall, the 2006 EIR found that impacts from increased use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated, would be less than significant.

The proposed 282 residential units would result in a population of approximately 640 persons, which would generate a demand for parks and recreational facilities. The proposed Project would offer on-site amenities and open space, including a podium level amenity space and roof-top common space for the residents. Additionally, Project residents would also be able to use nearby City parks and other public and regional parks. Furthermore, the Applicant will request a waiver of the General Plan Policy LU 16-15.13 public park dedication requirement and provide payment of in-lieu fees toward the parkland requirement. The in-lieu fees will be for the 0.5-acre equivalent (using a concession to waive a portion of the in-lieu fees). No new significant impact pertaining to existing parks would occur that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Recreation have been identified for the proposed Project.

Conclusion

The recreation impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the recreation analysis provided in the 2006 EIR are required.

3.17 TRANSPORTATION

The following analysis summarizes the "1600 Dove Street Residences Revised Traffic Impact Analysis" (TIA), prepared for the Project by Ganddini Group, Inc., dated August 14, 2023 (Ganddini 2023). This TIA is included in Appendix G of this Addendum.

3.17.1 2006 EIR

The 2006 EIR Transportation Study evaluated existing traffic conditions, future traffic conditions without implementation of the General Plan Update, and traffic conditions following implementation of the General Plan Update. The Transportation Study also analyzed the buildout scenarios, including Without Project (buildout of the then current General Plan); With Project (buildout of proposed General Plan Update); and General Plan Update without surrounding regional growth.

General Plan Circulation Element Policies CE 6.1.1., CE 6.1.2, CE 6.1.3, CE 6.2.1, CE 6.2.2, CE 6.2.3, CE 5.1.14, CE 5.1.15, CE 5.1.16, CE 5.2.1, and CE 5.2.2 encourage alternative modes of transportation, use of intelligent transportation systems, encourage enhancement and maintenance of public water transportation services and expanded public water transportation uses and land support facilities. In addition, improvements at some intersections have been limited to protect bicycle and pedestrian safety. The 2006 EIR concluded that impacts related to alternative transportation would be less than significant.

Additionally, the 2006 EIR concluded that impacts related to geometric design features would be less than significant. General Plan policies in the Circulation Element and the Land Use Element (CE 1.3.2, 2.2.1, 2.2.5) provide for maintaining and enhancing existing roadways, increasing safety of roadways, and balancing safety, quality of life and efficiency in the design of circulation and access. Compliance with General Plan policies would help reduce hazards due to design features. This impact would be less than significant.

Furthermore, the 2006 EIR found that impacts related to emergency access were less than significant. Projects would be required to meet all applicable local and State regulatory standards for adequate emergency access. General Plan policies related to disaster planning include measures for effective emergency response to natural or human-induced disasters that minimizes the loss of life and damage to property and reducing disruptions in the delivery of vital public and private services during and following a disaster. Therefore, the 2006 EIR concluded that with compliance with applicable regulatory standards and NBMC and Fire Code requirements regarding emergency access, impacts would be less than significant.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **CE 2.1.1 - Level of Service Standards:** Plan the arterial roadway system to accommodate projected traffic at the following level of service standards:
    - Level of Service (LOS) “D” throughout the City, unless otherwise noted
    - LOS “E” at any intersection in the Airport Area shared with Irvine, and in Corona del Mar (subject to findings of the most recent General Plan update traffic study)
- **CE 2.2.4 - Traffic Control:** Design traffic control measures to ensure City streets and roads function with safety and efficiency for vehicles, bicycles, and pedestrians.
- **CE 2.2.5 - Driveway and Access Limitations:** Limit driveway and local street access on arterial streets to maintain a desired quality of traffic flow and limit hazards to active transportation modes. Wherever possible, consolidate and/or reduce the number of driveways and implement access controls during redevelopment of adjacent parcels.
- **CE 2.2.7 - Emergency Access:** Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles. Provide all residential, commercial, and industrial areas with **efficient** and safe access for emergency vehicles. An emergency evacuation map shall be prepared as part of an updated Safety Element.
- **CE 5.2.4 – Trail System:** Promote construction of a comprehensive trail system as shown on Figure CE3 to connect bicycle trails with hiking trails and transit routes.
- **CE 5.2.6 - Pedestrian Improvements in New Development Projects:** Require new development projects to **include** safe and attractive sidewalks, walkways, and bike lanes in accordance with the Master Plan, and, if feasible, trails.
- **CE 7.1.5 - Support Facilities for Alternative Modes:** Require new development projects to provide facilities **commensurate** with development type and intensity to support alternative modes, such as preferential parking for carpools, bicycle lockers, showers, commuter information areas, rideshare vehicle loading areas, water transportation docks, and bus stop improvements.
- **CE 7.1.7 - Project Site Design Supporting Alternative Modes:** Encourage increased use of public transportation by requiring project site designs that facilitate the use of public transportation and walking.

3.17.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
TRANSPORTATION – Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☑
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☑
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d) Result in inadequate emergency access?	☐	☐	☐	☑

Would the project:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Substantial Change from Previous Analysis.

Project Trip Generation

The existing Project site land use is estimated per Table 3-20 to generate approximately 658 daily trips, including 92 trips during the AM peak hour and 88 trips during the PM peak hour. The proposed Project site land use is forecast to generate approximately 1,280 daily trips, including 104 trips during the AM peak hour and 110 trips during the PM peak hour. Therefore, the proposed Project is forecast to result in a net increase of approximately 622 net new daily trips, including 12 net new trips during the AM peak hour and 22 net new trips during the PM peak hour.

TABLE 3-20
PROJECT TRIP GENERATION

Trip Generation Rates									
Land Use	Source¹	Unit²	AM Peak Hour			PM Peak Hour			Daily
			% In	% Out	Rate	% In	% Out	Rate	
General Office Building	ITE 710	TSF	88%	12%	1.52	17%	83%	1.44	10.84
Multifamily Housing (Mid-Rise)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.4
Trips Generated									
Land Use	Quantity	Unit²	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
General Office Building	60.675	TSF	81	11	92	15	73	88	658
Multifamily Housing (Mid-Rise)	282	DU	25	79	104	68	42	110	1,280
Net Project Trips Generated			**-56**	**+68**	**+12**	**+53**	**-31**	**+22**	**+622**

Source: Ganddini 2023.

Notes:

(1) ITE = Institute of Transportation Engineers Trip Generation Manual (11th Edition, 2021); ### = Land Use Code

(2) TSF = Thousand Square Feet (Gross Floor Area); DU = Dwelling Units

TPO Impact Analysis

The addition of Project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed Project is forecast to result in no Level of Service impacts at the study intersections for the City’s Traffic Phasing Ordinance (TPO) Year 2029 With Project conditions and no improvements are required.

CEQA Year 2029 Impact Analysis

The addition of Project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed Project is forecast to result in no significant Level of Service impacts at the study intersections for CEQA Year 2029 With Project conditions, and no new mitigation measures are required.

CEQA General Plan Comparison Impact Analysis

The addition of Project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed Project is forecast to result in no significant Level of Service impacts at the study intersections for General Plan Comparison: Post 2030 General Plan Buildout With Project conditions, and no new mitigation measures are required.

Congestion Management Program

Since the proposed Project has indirect access to a Congestion Management Program (CMP) facility (e.g., MacArthur Boulevard or Jamboree Road) and is forecast to generate less than 2,400 daily trips, the proposed Project does not satisfy the criteria for preparation of a separate CMP impact analysis.

Pedestrian Facilities

Existing pedestrian facilities in the Project vicinity are shown on Exhibit 3.17-1.

Bicycle Routes

On-street bicycle facilities are not provided in the Project area along Dove Street or Dolphin Striker Way. Dove Street adjacent to the Project site does not have bikeway classification. Roadways that provide on-street bicycle facilities near the Project site include Bristol Street North, Bristol Street South, Birch Street, and intermittent areas of Jamboree Road and Campus Drive.

Transit Facilities

Exhibit 3.17-2 shows the existing transit routes available in the Project vicinity. As shown on Exhibit 3.17-2, no Orange County Transportation Authority Routes service Dove Street adjacent to the Project site.

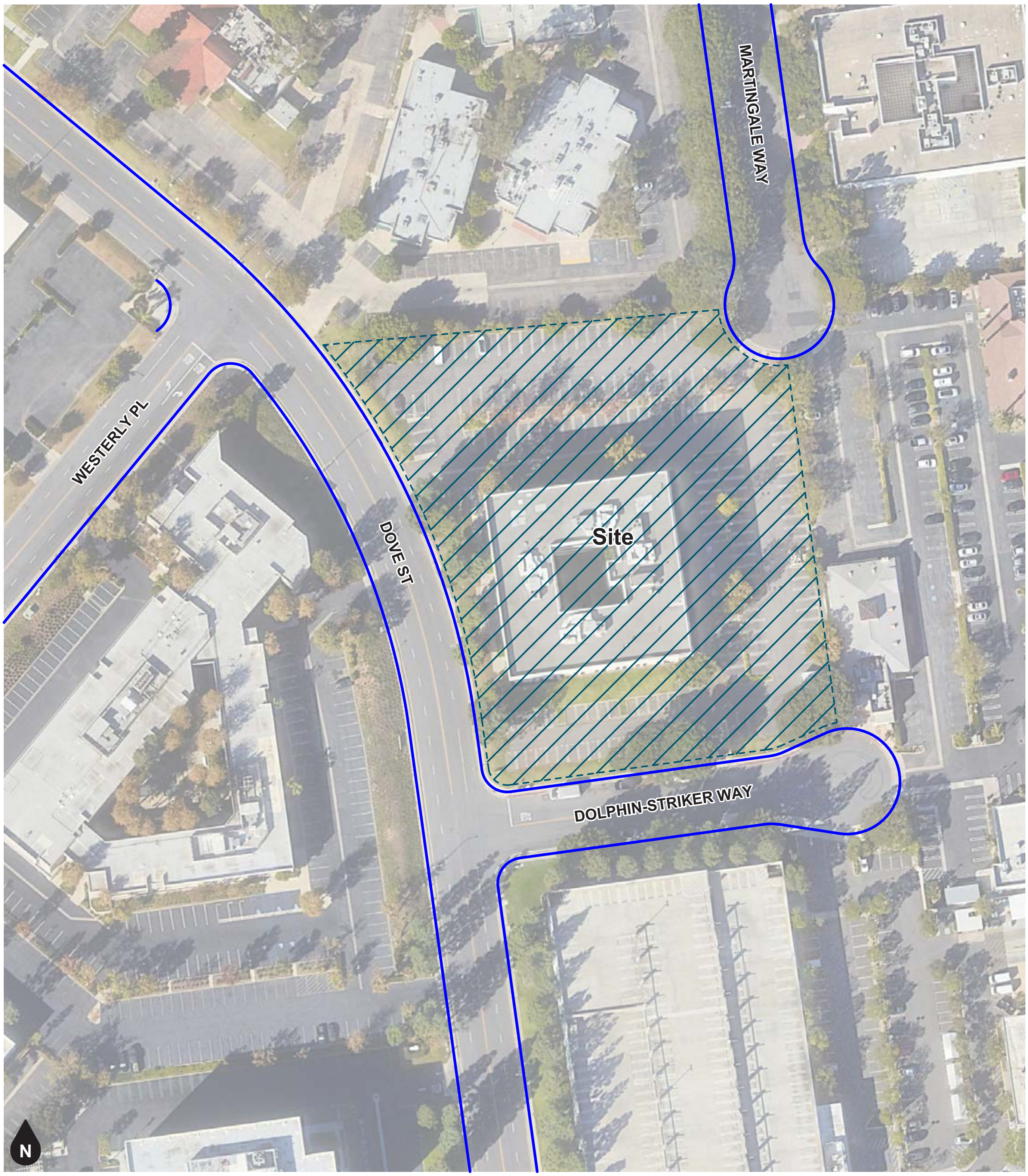
Therefore, the proposed Project would not create a new significant impact pertaining to conflict with a policy or program that was not previously analyzed, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Substantial Change from Previous Analysis.

Background

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the CEQA Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of VMT as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region.



Legend

D:\Projects\3NEW003400\GRAPHICS\Addendum\ex_Existing_Ped_Facilities_20230828.ai

Source: Ganddini Group, Inc. 2023

Existing Pedestrian Facilities

Exhibit 3.17-1

1600 Dove Street Residences

PSOMAS

(08/28/2023 SAK) R:\Projects\NEW\3NEW003400 - 1600 Dove Street Residences\Graphics\Addendum\ex_Existing_Ped_Facilities.pdf

Source: Ganddini Group, Inc. 2023

Orange County Transit Authority System Map

Exhibit 3.17-2

1600 Dove Street Residences

PSOMAS

(08/28/2023 SAK) R:\Projects\NEW\3NEW003400 - 1600 Dove Street Residences\Graphics\Addendum\ex_OCTA_System_Map.pdf

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All agencies and projects State-wide are required to utilize the updated CEQA guidelines recommending use of VMT for evaluating transportation impacts as of July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The OPR Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

When the 2006 EIR was approved, the applicable traffic metric was Level of Service (LOS), not VMT. Since LOS was the applicable threshold at that time, settled CEQA case law requires that LOS, not VMT, be the applicable CEQA metric for the proposed Project. The mandate requiring lead agencies to use VMT as a metric for evaluating traffic impacts was adopted in 2018 and became effective in 2020. The VMT does not constitute "new information" requiring additional environmental review nor does it affect the assessment of the Project's environmental impacts or mitigation measures compared to those analyzed in the General Plan Program EIR. The potential environmental impacts pertaining to the amount of travel associated with the General Plan was known at the time that General Plan Program EIR was certified. Therefore, in accordance with settled CEQA case law, LOS is used as the appropriate threshold to measure traffic impacts of the proposed Project. In light of this, the "VMT Assessment and Screening" section that follows is for information, non-CEQA purposes only.

VMT Assessment and Screening (For Information Purposes Only)

The Project VMT impact has been assessed in accordance with guidance provided by the City of Newport Beach *SB743 Implementation* (April 6, 2020) ["the City VMT Guidelines"] and City Council Policy K-3. The transportation guidelines provide a framework for "screening thresholds" for certain projects that are expected to cause a less than significant impact without conducting a detailed VMT study. The proposed Project is considered a residential land use.

The City VMT Guidelines contain a map of VMT per capita for all existing Newport Beach residential areas (see Appendix F of the TIA). VMT per capita in each area is compared to the regional average VMT per capita for Orange County. This map shows areas where residential development has a VMT per capita lower than the Orange County regional average and may therefore be presumed to result in a less than significant VMT impact based on guidance provided in the OPR Technical Advisory.

The proposed Project is in an area with low residential VMT per capita. Therefore, the proposed Project is presumed to have a less than significant impact on VMT since it satisfies the City-established screening criteria. No additional VMT modeling or mitigation measures are required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

No Substantial Change from Previous Analysis.

Site Access and Circulation

Consistent with the analysis in the 2006 EIR, the proposed Project site and immediate surrounding area do not contain any design features, which could produce significant traffic hazards. Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The Project driveways at Dove Street and Dolphin Striker Way would continue to provide full access. Based on review of the adjacent development and lane configurations along Dove Street and Dolphin Striker Way, the existing lane configurations are anticipated to provide adequate circulation (Ganddini 2023). Additionally, consistency with the General Plan policies would help reduce hazards due to design features. Therefore, the proposed Project would not create a new significant impact pertaining to site geometry that was not previously analyzed, and no mitigation measures are required.

d) Result in inadequate emergency access?

No Substantial Change from Previous Analysis. The 2006 EIR determined that the 2006 General Plan Update would result in no impacts regarding inadequate emergency access. A fire access road would be located southeast of the apartment building. Emergency vehicles would enter through Dolphin Striker Way, go past the resident garage entry, and turn left into the fire access road next to the loading area. Consistent with the analysis in the 2006 EIR, the Project would meet all applicable local and State regulatory standards for adequate emergency access. Therefore, the Project would not create a new significant impact pertaining to emergency access that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

SC TRAN-1 **Construction Management Plan.** Prior to issuance of any building permit, the Applicant shall submit for City of Newport Beach Community Development Director and Traffic Engineer review and approval a Construction Management Plan for the Project. The Plan shall identify construction phasing and address traffic control for any temporary street closures, detours, or other disruptions to traffic circulation and public transit routes. The Plan shall identify the routes that construction vehicles shall use to access the site, the hours of construction traffic, traffic controls and detours, construction materials and vehicle staging areas, and temporary parking arrangements for the construction workers.

SC TRAN-2 Sight distance at all intersections shall comply with City of Newport Beach standards.

Conclusion

The transportation impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the transportation analysis provided in the 2006 EIR are required.

3.18 TRIBAL CULTURAL RESOURCES

3.18.1 2006 EIR

The Tribal Cultural Resources Section was not included in the CEQA Appendix G Checklist at the time the 2006 EIR was adopted. This section was added to the checklist in September 2016 and reflects the requirements of Assembly Bill (AB) 52, requiring consultation with the Native American tribal governments on projects that were initiated on or after July 1, 2015. The 2006 General Plan Update was not subject to the requirements of AB 52, which is applicable only to a project that has a Notice of Preparation, a Negative Declaration (ND), or a Mitigated Negative Declaration (MND) filed on or after July 1, 2015. Thus, the 2006 EIR was not required to conduct AB 52 tribal consultation.

Although tribal cultural resources were not explicitly discussed in the 2006 EIR, cultural resources were addressed in Section 4.4 of the 2006 EIR and Section 3.5 of this Addendum.

Mitigation Program

Tribal Cultural Resources was not included in the 2006 EIR as a separate topic.

3.18.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
TRIBAL CULTURAL RESOURCES – Would the project:				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☐	☐	☑
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☑
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☑

Compliance with AB 52 pertaining to Native American Tribal Consultation is required for projects with publicly circulated CEQA documents, such as EIRs, MNDs, or NDs filed on or after July 1, 2015. The present Addendum does not require circulation for public review; thus, discussion of the tribal consultation process and analysis of impacts to tribal cultural resources is not required here. However, for informational purposes, an analysis is provided below.

Would the Project:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

  i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?

No Substantial Change from Previous Analysis. The Project site is currently developed with an office building and surface parking lot. The overall site has been disturbed, even prior to implementation of the 2006 General Plan Update. As discussed above in Section 3.5, Cultural Resources, of this Addendum, although the Project site has been previously disturbed, the area is potentially sensitive for archaeological and tribal cultural resources. The Project would be required to comply with City Council Policy K-5, which requires preservation of significant archeological and tribal cultural resources. Compliance with General Plan Policy HR 2.1 and Policy NR 18.1 would require that any new development protect and preserve archaeological and tribal resources from destruction, and that potential impacts to such resources be avoided and minimized through planning policies and permit conditions. As such, compliance with these regulations would ensure impacts to archaeological resources remain less than significant. Therefore, no new significant impacts that were not previously identified in the 2006 EIR would result that would require mitigation.

  ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Substantial Change from Previous Analysis. Consistent with the findings of the 2006 EIR, there is no indication that there are burials present at the Project site, and it is unlikely that human remains would be discovered during Project development. The proposed Project would redevelop the site to construct a multi-level podium apartment building with two and a half levels of subterranean parking. As discussed above in Section 3.5, Cultural Resources, although the potential for Project-related grading to have significant impacts on archaeological and paleontological resources is considered low, the proposed construction activities could potentially disturb native soils, and therefore, archaeological or tribal cultural resources may be uncovered at the site. In the event that archaeological and/or tribal cultural resources are discovered during grading and construction activities, the *California Health and Safety Code* Section 7050.5, *CEQA* Section 15064.5, and the *California Public Resources Code* Section 5097.98 describe procedures for monitoring and protocols to be followed. Therefore, the Project would not create a new significant impact pertaining to archaeological resources and disruption of human remains, that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Tribal Cultural Resources have been identified for the proposed Project.

Conclusion

The tribal cultural resources impacts of the proposed Project would be consistent with the cultural resources impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the tribal cultural resources analysis provided in the 2006 EIR are required.

3.19 UTILITIES AND SERVICE SYSTEMS

Information in this section is derived from the "Sewer Capacity Study for 1600 Dove Street, Newport Beach, CA" (Sewer Study) and "Water System Study for Proposed Residential Development" (Water Study), both prepared for the Project by Tait & Associates, Inc. (TAIT), dated December 13, 2023 (TAIT 2023a and 2023b). The Sewer Study and Water Study are included in Appendices H and I, respectively.

3.19.1 2006 EIR

Water

The City's surface water suppliers are the City, the Mesa Consolidated Water District, and the Irvine Ranch Water District, which source their imported water from the Municipal Water District of Orange County (MWDOC). The 2006 EIR concluded that the City's three water suppliers would have enough capacity to serve General Plan development and that no relocation or expansion of water facilities is required. Impacts would be less than significant. All of service providers used groundwater and recycled water to supplement their supply. MWDOC indicated that its 2030 projected availability of imported water supply would exceed the 2030 projected regionwide demand for imported water supply by at least 155,000 acre-feet. Therefore, MWDOC would be able to meet 100 percent of the City's imported water needs through 2030.

According to the City of Newport Beach's 2005 Urban Water Management Plan referenced in the 2006 EIR, water supplies would continue to meet the City's imported water needs until year 2030. Orange County Water District, which provides the groundwater supply to the City, projects that there would be sufficient groundwater supplies to meet any future demand requirements in Newport Beach. The water supply impact associated with the City's water service boundaries within the Newport Center/Fashion Island Area was determined to be less than significant.

Wastewater

The 2006 EIR concluded that implementation of the General Plan would produce an additional 4.12 million gallons per day (mgd) of wastewater. The additional wastewater would be treated at Orange County Sanitation District (OCSD) Reclamation Plants Nos. 1 and 2. Reclamation Plant No. 1 had a capacity of 174 mgd and treated an average flow of 90 mgd, approximately 52 percent of its design capacity. Reclamation Plant No. 2 had a capacity of 276 mgd and treated an average of 153 mgd, approximately 55 percent of its design capacity. The additional 4.12 mgd from buildout of the General Plan was determined to be nominal compared to the capacities of the two plants. In addition, policies within the General Plan require adequate wastewater facilities and conveyance systems to be available to the City residents through renovations, installations, and improvements when needed. Impacts were determined to be less than significant.

Storm Drainage

The 2006 EIR concluded that impacts to the City's storm drainage system would be less than significant. Since the City of Newport Beach is almost entirely built out, development would occur only in areas with existing storm drainage infrastructure. The Orange County Drainage Area Management Plan would require new developments to create and implement a WQMP, which would ensure pollutant discharges are reduced to the maximum extent practicable and do not exceed existing storm drainage capacities. Therefore, any additional stormwater runoff would not exceed storm drainage capacities, and impacts were determined to be less than significant.

Solid Waste

The 2006 EIR found that impacts on existing solid waste facilities from project-generated solid waste were less than significant. Development would result in additional solid waste to be disposed of at the Frank R. Bowerman Sanitary Landfill. Based on the landfill's 16-year lifespan and remaining capacity of approximately 44.6 million tons (at the time the previous EIR was prepared), the increase in solid waste was considered less than significant.

The 2006 EIR concluded that no impacts would occur related to compliance with federal, State, and local regulations. AB 939, the Integrated Waste Management Act of 1989 (PRC Section 40000 et seq.) required all local governments to develop source reduction, reuse, recycling, and composting programs to reduce tonnage of solid waste that would be diverted to landfills. Cities were required to divert at least 50 percent of all solid waste generated by January 1, 2000.

AB 1327, the California Solid Waste Reuse and Recycling Access Act of 1991 (PRC Section 42900 et seq.), required the California Integrated Waste Management Board to develop a model ordinance requiring adequate areas for the collection and loading of recyclable materials in development projects. Local agencies were then required to adopt and enforce either the model ordinance or an ordinance of their own by September 1, 1993. Chapter 6.06 of NBMC includes waste recycling requirements in conformance with AB 1327. The City consistently diverts 50 percent or more of solid waste; therefore, the City is in compliance with this legislation.

Mitigation Program

The 2006 EIR did not include mitigation measures but presented General Plan policies that would address the potential impacts. The relevant policies to the proposed Project will be implemented as conditions of approval.

- **LU 2.8 - Adequate Infrastructure:** Accommodate the types, densities, and mix of land uses that can be adequately supported by transportation and utility infrastructure (water, sewer, storm drainage, energy, and so on) and public services (schools, parks, libraries, seniors, youth, police, fire, and so on).
- **LU 3.2 - Growth and Change:** Enhance existing neighborhoods, districts, and corridors, allowing for re-use and infill with uses that are complementary in type,

form, scale, and character. Changes in use and/or density/intensity should be considered only in those areas that are economically underperforming, are necessary to accommodate Newport Beach's share of projected regional population growth, improve the relationship, and reduce commuting distance between home and jobs, or enhance the values that distinguish Newport Beach as a special place to live for its residents. The scale of growth and new development shall be coordinated with the provision of adequate infrastructure and public services, including standards for acceptable traffic level of service.

- **NR 3.4 - Storm Sewer System Permit:** Require all development to comply with the regulations under the City's municipal separate storm sewer system permit under the National Pollutant Discharge Elimination System. (Policy HB8.5)
- **NR 3.11 - Site Design and Source Control:** Include site design and source control BMPs in all developments. When the combination of site design and source control BMPs are not sufficient to protect water quality as required by the National Pollutant Discharge Elimination System (NPDES), structural treatment BMPs will be implemented along with site design and source control measures. (Policy HB8.12)
- **NR 3.15 - Street Drainage Systems:** Require all street drainage systems and other physical improvements created by the City, or developers of new subdivisions, to be designed, constructed, and maintained to minimize adverse impacts on water quality. Investigate the possibility of treating or diverting street drainage to minimize impacts to water bodies. (Policy HB8.16)

3.19.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☑
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☑
c) 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?	☐	☐	☐	☑
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☑
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☑

Would the Project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Substantial Change from Previous Analysis.

Water

The proposed Project would connect to existing water mains (i.e., 8-inch domestic water main in Dolphin Striker-Way, or the existing 12-inch water main in Dove Street for the proposed domestic, irrigation, and fire water flows) that are serviced by the City of Newport Beach. The City has indicated that there is adequate water capacity to serve the proposed Project. Therefore, the Project would not result in a new significant impact related to new or expanded water facilities, that was not previously identified, and no mitigation is required.

Existing Conditions

Services for the existing office facility is currently obtained from an 8-inch water main located in the Martingale Cul-De-Sac where a 4-inch Fire Water Double Detector Check, a 1-

to 2-inch Domestic Water Meter, and Irrigation Backflow Device are currently observed. Existing peak flows have been calculated based on section 4.4 “Land Use Demand Factors” of the City of Newport Beach Water Master Plan (WMP) based on the noted zoning allocation of mixed-use. Based on the WMP, average demand for the site is 5,478 gallons per day (GPD) or 3.8 gallons per minute (GPM).

Per City of Newport Beach WMP, the proposed Project is located in Pressure Zone #2 which requires a peaking factor of 2.6 to calculate peak hour demand; however, in order to provide a factor of safety, a peaking factor of 3.0 has been used for the purpose of calculating peak hour flow rates. The average flow of domestic water during peak hour demand is 11.4 GPM.

Proposed Conditions

The proposed Project would utilize the existing 8-inch water main on Dolphin-Striker Way as the primary source and the 12-inch water main on Dove Street as the secondary source for fire and domestic water service based on the results of water pressure studies (pending final pressures).

Expected daily proposed peak flows have been calculated based on section 4.4 “Land Use Demand Factors” of the City of Newport Beach WMP based on the noted zoning allocation of “Very High Residential.” Based on the City of Newport Beach’s WMP, the Project site has been categorized as a “Residential Very High”, which is identified for all parcels with development densities greater than 25 dwelling units per acre (DU/AC) and a generation rate of 3,800 gallons/acre/day (gpad). However, the proposed development includes up to 282 units within 2.49 acres equating to a development density of up to 100 DU/AC. Given the proposed density is much higher than the lower range provided in the City’s master plan, the generation rate has been quadrupled to assume a conservative rate of 15,200 gpad.

Based on the City of Newport Beach WMP and above noted modification, average demand for the site is 37,848 GPD or 26.3 GPM. The average flow of domestic water during peak hour demand is 78.9 GPM.

As a result, the expected peak hour demand flow rate for the proposed site would be 78.8 GPM which is 67.5 GPM higher than the existing peak hour demand flow rate.

Pressure Assessment and Conclusion

As noted above, pressure calculations have not been completed at this time, but would be incorporated upon receipt of fire flow tests and further coordination with the Mechanical, Electrical and Plumbing to define the building flows.

Water Conservation Features

The following measures would be incorporated into the Project to conserve water

1. Installation of “smart” irrigation controller with rain-sensor.
2. The use of low precipitation / low angle irrigation spray heads.

3. The use of low water consuming plants.
4. Soil amendment to achieve good soil moisture retention.
5. Mulching to reduce evapotranspiration from the root zone.
6. Installation of automatic irrigation system to provide deep-root watering to trees is required.

Water Conservation Statement

Purpose

To provide the maintenance staff members a mechanical device to distribute water and ensure plant survival in the most efficient manner and within a time frame that least interferes with the activities of the community.

The irrigation system for each hydrozone would be automatic and incorporate low volume drip emitters, bubblers, and high efficiency low angle spray heads at turf only. Drip irrigation systems may be employed where considered to be effective and feasible. Irrigation valves shall be separated to allow for the systems operation in response to orientation and exposure.

Planting would be designed to enhance the visual character of the site and the architectural elements. Plants shall be grouped with similar water, climatic, and soil requirements to conserve water and create a drought responsive landscape.

Each hydrozone consists of moderate to low water consuming plants. In areas of moderate water consuming plants, they shall be properly amended to retain moisture for healthy growth and to conserve water.

Plant material with each hydrozone shall be specified in consideration of north, south, east and west exposures.

Soil shall be prepared and amended to provide for maximum moisture retention and percolation. Planted beds shall be mulched to retain soil moisture and reduce evapotranspiration.

To avoid wasted water, the controls will be overseen by a flow monitor that would detect any broken sprinkler heads to stop that station's operation, advancing to the next workable station. In the event of pressure supply line breakage, it would completely stop the operation of the system. All material will be nonferrous, with the exception of the brass piping into and out of the backflow units. All work would be in the best acceptable manner in accordance with applicable codes and standards prevailing in the industry.

Wastewater

The following wastewater analysis is derived from the Sewer Study, prepared by TAIT for the Project.

Existing Sewer System

An existing 6-inch sewer lateral connects the Project site to the existing 8-inch public sewer main on Dolphin-Striker Way. The subject public sewer main originates on Dolphin-Striker Way at the existing sewer lateral connection and drains in the west direction to manhole MHM28_005 at the intersection of Dolphin-Striker Way and Dove Street. The sewer line increases to 10-inches at Dove Street and continues south to Manhole MHM28_003 at the intersection of Dove Street and Newport Place Drive. The sewer line increases to 15-inches at Newport Place Drive and continues east to MacArthur Boulevard and then north to MHM28_051. The sewer main increases to 18-inches and continues for a short run to MHM27 before discharging into the OCSD sewer main (Tait 2023a).

Proposed Sewer System

The existing 6-inch sewer lateral connecting the Project site to the existing 8-inch public sewer main on Dolphin-Striker way would be upgraded to an 8-inch line. No other change to the public sewer system is proposed as part of this Project. The land use of the Project site would change from commercial use to residential use. The Project site is currently a multi-story office complex with surface parking. The proposed Project would redevelop the site to construct a multi-level podium apartment building with two and a half levels of subterranean parking. The change in use for the site is anticipated to increase the rate of discharge to the system (Tait 2023a).

Results and Conclusion

Based on the data and calculations provided in the Sewer Capacity Study (Appendix H of this Addendum), and the City's Sewer Master Plan (SMP) design guidelines, the proposed redevelopment of the Project site from commercial to residential would not result in adverse impacts to the existing sewer system and adequate capacity exists within the system to handle the increase in projected daily sewer generation rates. Therefore, the Project would not result in a new significant impact related to wastewater treatment, that was not previously identified, and no mitigation is required.

Storm Water Drainage

Development of the proposed Project would alter the on-site drainage pattern with the development of the new apartment building, parking structure, and associated site improvements. However, the proposed Project, similar to other projects developed pursuant to the General Plan, would be required to implement a WQMP. The WQMP would reduce discharge of stormwater into urban runoff from the operational phase by managing site runoff volumes and flow rates through application of appropriate best management practices. BMPs would be designed in accordance with the NPDES requirements. Any drainage facilities would also be designed in accordance with Section 19.28.080 of NBMC. Therefore, stormwater runoff expected at buildout of the proposed Project would not exceed existing storm drainage capacities, and impacts would be less than significant.

As discussed under Section 3.10, Hydrology and Water Quality, the Project is expected to maintain the existing drainage pattern of the site. The site currently drains towards Dove Street, with approximately 60 percent of the drainage running toward the northwest and 40 percent to the southwest. The site is considered relatively flat at 1 percent to 2 percent to provide sheet flow within the existing parking lots. The parking lot drainage is collected by a series of concrete swales, which are collected by onsite private catch basins. The drainage is then conveyed to the public curb and gutter via various curb drains located along Dove Street. The drainage is then conveyed to the north and is collected by an existing public catch basin, which discharges the stormwater to an existing 54-inch reinforced storm drain owned and maintained by the City. The drainage is eventually discharged to the San Diego Creek and finally to the Newport Bay.

Under proposed conditions, approximately 0.52 acre of the 2.49-acre site would be landscaped or have a pervious surface. The impervious surface includes walkway areas in the podium area, roads that allow for vehicular traffic, which are anticipated to be paved with asphalt or decorative pavement. The roof drainage would be collected by a series of roof drains that would be routed to proposed bioretention basins via storm drain system. The bioretention basins would be sized for the DCV. The Project would propose two connections to the existing 54-inch storm drain in Dove Street. Once the DCV is achieved, the water quality flows and 25-year storm events would be discharged to the existing 54-inch storm drainpipe. The Project proposes individual parkway drains for each bioretention basin designed for the 100-year storm events.

Since the impervious percentage is decreased runoff volume is decreased and would not exceed the allowable 5 percent, and no HCOC are anticipated. Therefore, the Project would not result in a new significant impact related to storm water drainage, that was not previously identified, and no mitigation is required.

Electric Power

Southern California Edison (SCE) currently provides electricity to the City of Newport Beach, including the Project site (SCE 2023). The service would be provided in accordance with SCE's policies and extension rules on file with the California Public Utilities Commission (CPUC). Therefore, the Project would not result in a new significant impact related to electrical service, that was not previously identified, and no mitigation is required.

Natural Gas

The Southern California Gas Company (SCGC) currently provides natural gas service to the City of Newport Beach, including the Project site (SCGC 2023). The service would be provided in accordance with SCGC's policies and extension rules on file with the CPUC. Therefore, the Project would not result in a new significant impact related to natural gas service, that was not previously identified, and no mitigation is required.

Telecommunications

Telecommunications services are provided by Spectrum, Cox, and Google Fiber. Local telecommunications companies operate and maintain transmission and distribution infrastructure in the Project area. Therefore, the Project would not result in a new significant impact related to telecommunications facilities, that was not previously identified, and no mitigation is required.

b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple years?

No Substantial Change from Previous Analysis. According to the Water Study, water for domestic service and fire protection is provided to the property by the City of Newport Beach. Services for the existing office facility is currently obtained from an 8-inch water main located in the Martingale Cul-De-Sac where a 4-inch Fire Water Double Detector Check, a 1-inch to 2-inch Domestic Water Meter, and Irrigation Backflow Device are currently observed. Based on the City's GIS mapping system, there are no existing recycled water lines in the vicinity of the Project site. The existing water demand for the Project site is 26.3 GPM, and the proposed water demand would be 78.9 GPM, which means, the development of the proposed Project would result in the additional demand of 67.5 GPM. The 2020 Urban Water Management Plan (UWMP) found that the City's supply capabilities are expected to balance anticipated total water use and supply and accommodate normal years, single dry years, and multiple dry-year events. The UWMP indicated that there is adequate existing and planned water supply to accommodate future development accounted for in the General Plan, including the Project and its associated water demands. Therefore, the Project would not result in a new significant impact related to water supplies, that was not previously identified, and no mitigation is required.

c) 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?

No Substantial Change from Previous Analysis. As stated previously, the incremental increase in wastewater generated by the proposed Project could be accommodated by OCSD's treatment plants. The City requires NPDES permits, which set limits on allowable concentrations in any wastewater discharge. The NBMC also requires dwelling units and commercial uses to connect to the City's public sewer network and prohibits certain polluting substances from being discharged into a public sewer. The proposed Project, similar to developments in accordance with the General Plan, would be required to comply with all provisions of the NPDES program and the NBMC and would not exceed wastewater treatment requirements. Therefore, the Project would not create a new significant impact pertaining to wastewater treatment that was not previously analyzed, and no mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Substantial Change from Previous Analysis. The Frank R. Bowerman Landfill has a maximum permitted disposal of 11,500 tons per day. The landfill has a remaining capacity of 205,000,000 cubic yards with a closure date of December 31, 2053 (CalRecycle 2023). As identified in Table 3-21, Estimated Solid Waste Generation, the proposed Project would generate approximately 1,808 pounds of solid waste per day (0.9 ton per day or 330 tons/year). The estimated refuse generation for the Project is less than 0.01 percent of the landfill's annual tons per day average. The proposed Project's development intensity is consistent with the City's development assumptions, which are used by the County of Orange in their long-term planning for landfill capacity. The County's landfill system has capacity in excess of the required 15-year threshold established by the California Department of Resources Recycling and Recovery. Based on the remaining capacity of the Bowerman Landfill and the County's long-term planning programs required to meet CalRecycle requirements, there would be adequate waste disposal capacity within the permitted County's landfill system to meet the needs of the proposed Project. Therefore, the Project would not create a new significant impact pertaining to solid waste disposal that was not previously analyzed, and no mitigation measures are required.

TABLE 3-21
ESTIMATED SOLID WASTE GENERATION

Units/Square Feet (sf)	Solid Waste Generation Rate	Solid Waste Generation
282 units: multi-family residential	6.41 lbs/unit/day	1,807.62 lbs/day
Total		1,807.62 lbs/day (330 tons/yr)

Source: Newport Beach 2006.

The proposed Project, similar to other projects developed pursuant to the General Plan, would comply with the California Green Building Standards and AB 341. The 2019 California Green Building Standards Code requires that at least 65 percent of the nonhazardous construction and demolition waste from residential construction be recycled and/or salvaged for reuse. AB 341 mandates a statewide solid waste diversion rate of 75 percent by 2020. Therefore, the Project would not create a new significant impact pertaining to solid waste reduction goals that was not previously analyzed, and no mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Substantial Change from Previous Analysis. Compliance with AB 939 is measured for each jurisdiction, in part, as actual disposal amounts compared to target disposal amounts. Target disposal rate for the City is 9.6 pounds per day (ppd) per resident. Actual disposal rate in 2018 was 6.9 ppd per resident. Therefore, solid waste diversion in Newport Beach is consistent with AB 939, thus the Project's solid waste generation would be consistent with

AB 939 and AB 1327. The proposed Project, similar to all projects, is required to recycle construction waste in compliance with the 2019 California Green Building Code and store and collect recyclable materials in compliance with AB 341 and handle green waste in accordance with AB 1826. Therefore, the proposed Project would not create a new significant impact pertaining to solid waste regulations that was not previously analyzed, and no mitigation measures are required.

Standard Conditions and Requirements

SC UTIL-1 The project shall be required to comply with the City of Newport Beach Municipal Code Chapter 14.16 related to water conservation and supply level regulations in effect during the construction and operation of the project, and Municipal Code Chapter 14.17 with respect to water-efficient landscaping.

SC UTIL-2 The project shall be required to comply with Section 19.28.080 (Storm Drains) of the City's Municipal Code which requires developers to design and construct all drainage facilities necessary for the removal of surface water from the site (e.g., open/closed channels, catch basins, manholes, junction structures), and to protect off-site properties from a project's water runoff. The storm drain system must be designed in accordance with the standards of the Orange County Flood Division. A drainage fee is also charged to fund improvements to the City's drainage facilities.

SC UTIL-3 The Applicant shall prepare and obtain approval of a Construction and Demolition Waste Management Plan (CDWMD) for the project. The CWMP shall list the types and weights or volumes of solid waste materials expected to be generated from construction. The CDWMP shall include options to divert from landfill disposal nonhazardous materials for reuse or recycling by a minimum of 65 percent of total weight or volume.

Conclusion

The utilities and service systems impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the utilities and service systems analysis provided in the 2006 EIR are required.

3.20 WILDFIRE

3.20.1 2006 EIR

Effective December 28, 2018, the State adopted amendments to the State CEQA Guidelines requiring the analysis and mitigation of wildfire as a separate topic in CEQA documents. The 2006 EIR was adopted prior to the 2018 State CEQA Guidelines amendments, and as such, responses to wildfire as a separate topic was not addressed.

However, the 2006 EIR addressed exposure of structures to a significant risk of loss, injury, or death involving wildland fires, in Section 4.6, Hazards and Hazardous Materials. According to the 2006 EIR, the City defines a wildland fire hazard area as any geographic area that contains the type and condition of vegetation, topography, weather, and structure density that potentially increases the possibility of wildland fires. The eastern portion of the City and surrounding areas to the north, east, and southeast include grass- and brush-covered hillsides with significant topographic relief that facilitate the rapid spread of fire, especially if fanned by coastal breezes or Santa Ana winds. The 2006 EIR noted that while implementation of the proposed General Plan Update could result in development in urbanized areas adjacent to or intermixed with wildlands, thereby exposing people or structures to risks involving wildland fires, this impact would be less than significant.

Mitigation Program

Wildfire was not included in the 2006 EIR as a separate topic.

3.20.2 PROPOSED PROJECT IMPACT ANALYSIS

Environmental Issues	New Significant Impact	More Severe Impacts	New Ability to Substantially Reduce Significant Impact	No Substantial Change From Previous Analysis
WILDFIRE– If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☑
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☑

Environmental Issues	**New Significant Impact**	**More Severe Impacts**	**New Ability to Substantially Reduce Significant Impact**	**No Substantial Change From Previous Analysis**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☑

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Substantial Change from Previous Analysis. The proposed Project is not within a State responsibility area or designated as VHFHSZ, as defined by CAL FIRE. The nearest VHFHSZ designated by CAL FIRE is located 5.51 miles southeast of the Project site, within the hillside and open space areas within the City (CAL FIRE 2022).

Temporary lane closures on adjacent streets may be required during the short-term construction period. However, Project construction would not involve full closure of any public roadway during construction. Additionally, because Checklist Response thresholds 3.20a through 3.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", no impacts related to these thresholds would occur, and no mitigation is required. Therefore, the Project would not create a new significant impact to emergency response plans or emergency evacuation plans, and no mitigation measures are required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Substantial Change from Previous Analysis. The Project site is in a highly urbanized area of the City, and there are no large, undeveloped areas and/or steep slopes on or near the site that would exacerbate fire risks such that would expose the Project and its occupants to wildfire related hazards. The site and the surrounding areas are not located in a designated VHFHSZ, as identified by CAL FIRE. Rather, the site is within a Non-VHFHSZ area. Therefore, the Project is not expected to exacerbate wildfire risks and create pollutants associated with wildfire or uncontrolled spread of wildfire. Additionally, because Checklist Response thresholds 3.20a through 3.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", the Project would not create a new significant impact pertaining to exacerbation of fire risks, and no mitigation measures are required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Substantial Change from Previous Analysis. As previously described, the proposed Project is not within a designated VHFHSZ as defined by CAL FIRE. The site is located in a highly urbanized area and surrounded by developed land on all sides. All proposed structures would be constructed to meet current building and fire codes. Implementation of the proposed Project and maintenance of associated infrastructure would not exacerbate fire risk such that would result in a significant temporary or ongoing impact. Additionally, because Checklist Response thresholds 3.20a through 3.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones", the Project would not create a new significant impact pertaining to installation or maintenance of associated infrastructure that may exacerbate fire risk, and no mitigation measures are required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Substantial Change from Previous Analysis. As previously described, the proposed Project is not within a designated VHFHSZ as defined by CAL FIRE. The Project is in a highly urbanized area that is in a generally flat topographical area away from downslope or landslide areas. Specifically, implementation of the Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Additionally, Checklist Response thresholds 3.20a through 3.20d apply only to those projects that are "located in or near state responsibility areas or lands classified as very high fire hazard severity zones". Therefore, the Project would not create a new significant impact pertaining to exposure or people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, and no mitigation measures are required.

Standard Conditions and Requirements

No standard conditions and requirements pertaining to Wildfire have been identified for the proposed Project.

Conclusion

The wildfire impacts of the proposed Project would be consistent with the impacts identified for the 2006 General Plan Update, analyzed in the 2006 EIR. The proposed Project would not create a new significant impact or a substantial increase in the severity of previously identified effects. In regard to Section 15162 of the State CEQA Guidelines, (1) no substantial changes are proposed as part of the proposed Project that would result in new significant effects or an increase in severity of previous effects; (2) no substantial changes in circumstances have occurred that would result in new significant effects; and (3) no new information has become known that was not previously known that would (a) create new significant impacts, (b) increase the severity of previously examined effects, or (c) determine that mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible; or (4) introduce mitigation measures that are considerably different from those analyzed in the 2006 EIR. For these reasons, no major revisions to the wildfire analysis provided in the 2006 EIR are required.

4.0 CONCLUSIONS

Based on the analysis provided in this Addendum, there is substantial evidence to determine that (1) the proposed Project does not represent a substantial change from the previously approved project evaluated in the 2006 EIR; (2) no substantial changes have occurred with respect to the circumstances under which the proposed Project is undertaken; and (3) the proposed Project has not introduced new information of substantial importance that was not previously known. The proposed Project would not have any new or substantially more severe impacts than what was evaluated in the 2006 EIR. 2006 EIR, when considered in conjunction with this Addendum, provides adequate documentation, pursuant to the CEQA for the Project.

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5.0 REFERENCES

Airport Land Use Commission (OCALUC). 2008 (April 17, Amended). Airport Environs Land Use Plan for John Wayne Airport.

AES Due Diligence, Inc. 2021 (April 22). Phase I Environmental Site Assessment. San Diego, CA: AES.

California Air Resources Board (CARB). 2021. Emission Factor Model (EMFAC 2021). Web database: https://arb.ca.gov/emfac/.

———. 2010 (October 21). Appendix C to Final Localized Significance Threshold Methodology. Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

California Department of Forestry and Fire Prevention (CAL FIRE). 2022. Fire Hazard Severity Zones in State Responsibility Area. Sacramento, CA: CAL FIRE.

California Department of Transportation (Caltrans). 2023 (February 21, last accessed). California State Scenic Highway System Map - ArcGIS Online. Sacramento, CA: Caltrans. https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.

California Department of Conservation, Division of Mines and Geology (CDMG). 2023 (March 6, access date). The California Seismic Hazards Program. Sacramento: CA: https://www.conservation.ca.gov/cgs/sh/program.

CalRecycle. 2023 (February 21, last accessed). SWIS Facility/Site Activity Details: Frank R. Bowerman Sanitary LF (30-AB-0360). https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2767?siteID=2103.

Ganddini Group, Inc. 2023 (August 14). 1600 Dove Street Residences, Revised Traffic Impact Analysis, City of Newport Beach. Santa Ana, CA: Ganddini.

Kling Consulting Group, Inc (KCG). 2023. Preliminary Geotechnical Investigation for Feasibility Purposes, 1600 Dove Street, Newport Beach, California, 92660. Irvine, CA: KCG.

Newport Beach, City of. 2023 (February 21, last accessed). Emergency Medical Services. Newport Beach, CA: the City. https://www.newportbeachca.gov/government/departments/fire-department/emergency-medical-services-division.

———. 2006. City of Newport Beach General Plan. Newport Beach, CA: City of Newport Beach. https://www.newportbeachca.gov/government/departments/community-development/planning-division/general-plan-codes-and-regulations/general-plan.

Newport Beach Public Library (NBPL). 2023 (February 21, last accessed). Central Library. Newport Beach, CA: the City. https://www.newportbeachlibrary.org/about/hours-and-locations/central-library.

South Coast Air Quality Management District. 2022. 2022 Air Quality Management Plan (December 2, 2022). Diamond Bar, CA: SCAQMD. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan.

———. 2008 (October). Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. Diamond Bar, CA.

Southern California Association of Governments (SCAG). 2020 (December). 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy. Los Angeles, CA: SCAG. http://scagrtpscs.net/Documents/2016/draft/d2016RTPSCS.pdf.

Southern California Edison (SCE). 2023 (February 21, last accessed). Our Service Territory. SCE Territory Map | Leadership | Who We Are | About Us | Home - SCE. Rosemead, CA: SCE.

Southern California Gas Company (SCGC). 2023 (February 21, last accessed). Company Profile. http://www.socalgas.com/about-us/company-info.shtml. San Diego, CA: SCGC.

Springbrook Realty Advisors, Inc. 2023 (January 20). 1600 Dove Street Affordable Housing Implementation Plan and Density Bonus Application. Laguna Niguel, CA.

Tait & Associates, Inc. 2024 (April 24). County of Orange/Santa Ana Region Priority Project Preliminary Water Quality Management Plan, 1600 Dove Stret, Newport Beach, CA 92660. Santa Ana, CA: TAIT.

———. 2023a (December 13). Water System Study for Proposed Residential Development. Santa Ana, CA: TAIT

———. 2023b (December 13). Sewer Capacity Study for 1600 Dove Street, Newport Beach, CA 92660. Santa Ana, CA: TAIT.

U.S. Environmental Protection Agency.2014 (December 9). Clean Data Determination for 1997 PM2.5 Standards; California—South Coast; Applicability of Clean Air Act Requirements. Federal Register 79(236): 72999–73007. Washington, D.C.: USEPA. http://www.gpo.gov/fdsys/pkg/FR-2014-12-09/pdf/2014-28709.pdf#page=1.

U.S. Geological Survey (USGS). 2023 (February 21, last accessed). Areas of Land Subsidence in California. Washington, DC: USGS. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html.

U.S. Department of Transportation, Federal Aviation Administration (FAA). 2012 (November 7, revised). Program Guidance Letter 12-09 Eligibility and Justification Requirements for Noise Insulation Projects Memorandum. Washington, DC.

Appendix A

Air Quality and Greenhouse Gas Emissions
CalEEMod Outputs

1600 Dove Street Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	1600 Dove Street
Construction Start Date	1/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	1600 Dove St, Newport Beach, CA 92660, USA
County	Orange
City	Newport Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5995
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Apartments Mid Rise	282	Dwelling Unit	7.42	270,720	22,000	—	640	—
Enclosed Parking Structure	530	Space	4.77	212,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.7	37.5	33.1	0.12	1.23	5.14	6.16	1.14	1.65	2.79	15,889
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.65	59.5	53.4	0.13	2.18	11.6	13.8	2.02	5.14	7.16	17,250
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.37	21.9	25.3	0.06	0.74	4.46	5.20	0.69	1.57	2.25	8,823
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.16	4.00	4.61	0.01	0.14	0.81	0.95	0.13	0.29	0.41	1,461

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

2026	3.24	37.5	33.1	0.12	1.23	4.93	6.16	1.14	1.65	2.79	15,889
2027	18.7	13.3	32.4	0.04	0.37	5.14	5.51	0.34	1.23	1.57	9,178
2028	1.84	11.6	27.5	0.04	0.31	4.37	4.69	0.29	1.05	1.34	8,135
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
2026	5.65	59.5	53.4	0.13	2.18	11.6	13.8	2.02	5.14	7.16	17,250
2027	1.90	12.4	26.4	0.04	0.35	4.37	4.72	0.32	1.05	1.37	8,089
2028	2.86	18.5	36.1	0.05	0.57	4.57	5.14	0.53	1.09	1.62	9,678
Average Daily	—	—	—	—	—	—	—	—	—	—	—
2026	2.32	21.9	25.3	0.06	0.74	4.46	5.20	0.69	1.57	2.25	8,823
2027	6.37	9.23	20.3	0.03	0.26	3.31	3.57	0.24	0.79	1.03	6,076
2028	0.55	3.56	7.40	0.01	0.10	1.04	1.15	0.10	0.25	0.35	2,098
Annual	—	—	—	—	—	—	—	—	—	—	—
2026	0.42	4.00	4.61	0.01	0.14	0.81	0.95	0.13	0.29	0.41	1,461
2027	1.16	1.68	3.71	0.01	0.05	0.60	0.65	0.04	0.14	0.19	1,006
2028	0.10	0.65	1.35	< 0.005	0.02	0.19	0.21	0.02	0.05	0.06	347

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.2	4.18	63.4	0.11	0.15	10.5	10.6	0.14	2.66	2.80	14,296
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.3	4.21	35.1	0.11	0.13	10.5	10.6	0.12	2.66	2.78	13,774
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.1	4.31	51.6	0.10	0.14	9.82	9.97	0.14	2.49	2.63	13,370

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.20	0.79	9.42	0.02	0.03	1.79	1.82	0.02	0.46	0.48	2,214

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.94	3.09	37.8	0.11	0.06	10.5	10.5	0.05	2.66	2.71	10,971
Area	9.22	0.30	25.3	< 0.005	0.03	—	0.03	0.02	—	0.02	165
Energy	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	2,701
Water	—	—	—	—	—	—	—	—	—	—	157
Waste	—	—	—	—	—	—	—	—	—	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	1.94
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.2	4.18	63.4	0.11	0.15	10.5	10.6	0.14	2.66	2.80	14,296
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.91	3.36	34.7	0.10	0.06	10.5	10.5	0.06	2.66	2.71	10,530
Area	6.31	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	84.3
Energy	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	2,701
Water	—	—	—	—	—	—	—	—	—	—	157
Waste	—	—	—	—	—	—	—	—	—	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	1.94
Stationary	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	10.3	4.21	35.1	0.11	0.13	10.5	10.6	0.12	2.66	2.78	13,774
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.69	3.23	33.9	0.10	0.06	9.82	9.88	0.05	2.49	2.55	10,126

Area	8.30	0.16	17.3	< 0.005	0.02	—	0.02	0.01	—	0.01	61.2
Energy	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	2,701
Water	—	—	—	—	—	—	—	—	—	—	157
Waste	—	—	—	—	—	—	—	—	—	—	299
Refrig.	—	—	—	—	—	—	—	—	—	—	1.94
Stationary	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	23.3
Total	12.1	4.31	51.6	0.10	0.14	9.82	9.97	0.14	2.49	2.63	13,370
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.67	0.59	6.19	0.02	0.01	1.79	1.80	0.01	0.46	0.46	1,676
Area	1.51	0.03	3.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.1
Energy	0.01	0.14	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	447
Water	—	—	—	—	—	—	—	—	—	—	26.0
Waste	—	—	—	—	—	—	—	—	—	—	49.6
Refrig.	—	—	—	—	—	—	—	—	—	—	0.32
Stationary	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.85
Total	2.20	0.79	9.42	0.02	0.03	1.79	1.82	0.02	0.46	0.48	2,214

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.29	20.7	19.0	0.03	0.84	—	0.84	0.78	—	0.78	3,438
Dust From Material Movement	—	—	—	—	—	3.42	3.42	—	1.75	1.75	—
Demolition	—	—	—	—	—	0.60	0.60	—	0.09	0.09	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.62	3.33	0.01	0.15	—	0.15	0.14	—	0.14	603
Dust From Material Movement	—	—	—	—	—	0.60	0.60	—	0.31	0.31	—
Demolition	—	—	—	—	—	0.11	0.11	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.66	0.61	< 0.005	0.03	—	0.03	0.02	—	0.02	99.8
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.06	0.06	—
Demolition	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.68	0.00	0.00	0.20	0.20	0.00	0.05	0.05	188
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.11	9.20	3.96	0.05	0.10	1.96	2.06	0.10	0.55	0.65	7,807
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	33.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.63	0.69	0.01	0.02	0.34	0.36	0.02	0.10	0.11	1,370
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.30	0.13	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	227

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	5,316
Dust From Material Movement	—	—	—	—	—	5.11	5.11	—	2.63	2.63	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.55	5.11	5.05	0.01	0.22	—	0.22	0.20	—	0.20	932
Dust From Material Movement	—	—	—	—	—	0.90	0.90	—	0.46	0.46	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.10	0.93	0.92	< 0.005	0.04	—	0.04	0.04	—	0.04	154
Dust From Material Movement	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.80	0.00	0.00	0.23	0.23	0.00	0.05	0.05	219
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.33	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	281
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	39.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	8.16

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	6,621
Dust From Material Movement	—	—	—	—	—	2.41	2.41	—	0.95	0.95	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	4.85	4.91	0.01	0.20	—	0.20	0.18	—	0.18	1,179
Dust From Material Movement	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.88	0.90	< 0.005	0.04	—	0.04	0.03	—	0.03	195
Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	1.05	0.00	0.00	0.26	0.26	0.00	0.06	0.06	264
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	10.2	4.52	0.06	0.11	2.26	2.37	0.11	0.63	0.74	9,004
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	45.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	1.91	0.81	0.01	0.02	0.40	0.42	0.02	0.11	0.13	1,602
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.35	0.15	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	265

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	3.55	4.67	0.01	0.14	—	0.14	0.13	—	0.13	866
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.65	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	143
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.99	0.89	15.4	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,859
Vendor	0.04	2.07	1.04	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,129
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.99	1.02	13.3	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,663
Vendor	0.04	2.16	1.06	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.37	4.97	0.00	0.00	1.36	1.36	0.00	0.32	0.32	1,339
Vendor	0.02	0.78	0.38	0.01	0.01	0.20	0.20	0.01	0.05	0.06	766
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	222
Vendor	< 0.005	0.14	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.88	14.4	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,793
Vendor	0.04	1.99	0.99	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,086
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.90	12.4	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,601
Vendor	0.04	2.08	1.01	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,083
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.72	9.25	0.00	0.00	2.69	2.69	0.00	0.63	0.63	2,611
Vendor	0.03	1.49	0.71	0.01	0.01	0.39	0.40	0.01	0.11	0.12	1,489
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.13	1.69	0.00	0.00	0.49	0.49	0.00	0.12	0.12	432

Vendor	0.01	0.27	0.13	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	246
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	2.11	3.06	0.01	0.07	—	0.07	0.07	—	0.07	570
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.39	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	94.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.75	13.6	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,690
Vendor	0.04	1.91	0.96	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,039

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.88	11.7	0.00	0.00	3.82	3.82	0.00	0.89	0.89	3,538
Vendor	0.04	1.99	0.98	0.01	0.01	0.56	0.57	0.01	0.15	0.17	2,036
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.21	2.90	0.00	0.00	0.89	0.89	0.00	0.21	0.21	850
Vendor	0.01	0.47	0.23	< 0.005	< 0.005	0.13	0.13	< 0.005	0.04	0.04	482
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.04	0.53	0.00	0.00	0.16	0.16	0.00	0.04	0.04	141
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	79.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	1,516
Paving	0.30	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.76	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	174
Paving	0.03	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.14	0.21	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	28.9
Paving	0.01	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.05	0.60	0.00	0.00	0.20	0.20	0.00	0.05	0.05	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	21.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	16.5	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.25	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	40.0
Architectural Coatings	4.93	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	6.62
Architectural Coatings	0.90	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.18	2.89	0.00	0.00	0.76	0.76	0.00	0.18	0.18	759
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.06	0.77	0.00	0.00	0.23	0.23	0.00	0.05	0.05	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	36.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.94	3.09	37.8	0.11	0.06	10.5	10.5	0.05	2.66	2.71	10,971
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.94	3.09	37.8	0.11	0.06	10.5	10.5	0.05	2.66	2.71	10,971
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.91	3.36	34.7	0.10	0.06	10.5	10.5	0.06	2.66	2.71	10,530
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total	3.91	3.36	34.7	0.10	0.06	10.5	10.5	0.06	2.66	2.71	10,530
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.67	0.59	6.19	0.02	0.01	1.79	1.80	0.01	0.46	0.46	1,676
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.67	0.59	6.19	0.02	0.01	1.79	1.80	0.01	0.46	0.46	1,676

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	986
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	708
Total	—	—	—	—	—	—	—	—	—	—	1,694
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	986
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	708
Total	—	—	—	—	—	—	—	—	—	—	1,694
Annual	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	163
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	117
Total	—	—	—	—	—	—	—	—	—	—	281

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	1,007
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	1,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	1,007
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.05	0.79	0.34	0.01	0.06	—	0.06	0.06	—	0.06	1,007
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.14	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	167
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.01	0.14	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	167

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	84.3
Consumer Products	5.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.49	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.91	0.23	25.2	< 0.005	0.02	—	0.02	0.02	—	0.02	81.0
Total	9.22	0.30	25.3	< 0.005	0.03	—	0.03	0.02	—	0.02	165
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	84.3
Consumer Products	5.81	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.49	—	—	—	—	—	—	—	—	—	—
Total	6.31	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	84.3
Annual	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.96
Consumer Products	1.06	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	0.36	0.03	3.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.18
Total	1.51	0.03	3.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	10.1

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	157
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	157
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	157
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	157
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	26.0
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	26.0

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	299
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	299
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	299
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	299
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	49.6
Enclosed Parking Structure	—	—	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	49.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	1.94
Total	—	—	—	—	—	—	—	—	—	—	1.94
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	1.94
Total	—	—	—	—	—	—	—	—	—	—	1.94
Annual	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	0.32
Total	—	—	—	—	—	—	—	—	—	—	0.32

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.85
Total	0.01	0.02	0.02	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	3.85

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	3/31/2026	5.00	64.0	—
Site Preparation	Site Preparation	1/1/2026	3/31/2026	5.00	64.0	—
Grading	Grading	4/1/2026	6/30/2026	5.00	65.0	—
Building Construction	Building Construction	7/1/2026	4/30/2028	5.00	478	—
Paving	Paving	1/1/2028	2/29/2028	5.00	42.0	—
Architectural Coating	Architectural Coating	4/1/2027	8/31/2027	5.00	109	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	109	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	3.91	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	125	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	292	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	64.9	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	58.4	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	548,208	182,736	9,350	1,039	12,467

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	—	50,000	64.0	60,675	—
Site Preparation	2,000	—	96.0	0.00	—
Grading	—	65,000	195	0.00	—
Paving	0.00	0.00	0.00	0.00	4.77

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Apartments Mid Rise	—	0%
Enclosed Parking Structure	4.77	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,280	1,153	962	444,069	14,792	13,326	11,110	5,130,728
Enclosed Parking Structure	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	4
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	282

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
548208	182,736	9,350	1,039	12,467

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,033,765	346	0.0330	0.0040	3,132,130
Enclosed Parking Structure	742,303	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	10,582,233	273,750
Enclosed Parking Structure	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	159	—
Enclosed Parking Structure	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	0.00	48.0	210	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.54	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	55.4
AQ-PM	57.5
AQ-DPM	86.4

Drinking Water	52.8
Lead Risk Housing	0.28
Pesticides	1.59
Toxic Releases	85.1
Traffic	90.0
Effect Indicators	—
CleanUp Sites	93.2
Groundwater	91.3
Haz Waste Facilities/Generators	90.0
Impaired Water Bodies	98.1
Solid Waste	72.4
Sensitive Population	—
Asthma	10.1
Cardio-vascular	6.75
Low Birth Weights	19.0
Socioeconomic Factor Indicators	—
Education	7.82
Housing	63.3
Linguistic	37.7
Poverty	51.7
Unemployment	41.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	72.51379443

Employed	66.62389324
Median HI	71.23059156
Education	—
Bachelor's or higher	91.36404466
High school enrollment	100
Preschool enrollment	85.56396766
Transportation	—
Auto Access	54.54895419
Active commuting	23.40562043
Social	—
2-parent households	15.20595406
Voting	31.2074939
Neighborhood	—
Alcohol availability	28.78224047
Park access	6.544334659
Retail density	98.42166046
Supermarket access	67.2783267
Tree canopy	33.37610676
Housing	—
Homeownership	7.391248556
Housing habitability	59.04016425
Low-inc homeowner severe housing cost burden	71.07660721
Low-inc renter severe housing cost burden	81.45771847
Uncrowded housing	70.98678301
Health Outcomes	—
Insured adults	83.98562813
Arthritis	0.0

Asthma ER Admissions	87.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	97.8
Cognitively Disabled	88.7
Physically Disabled	85.5
Heart Attack ER Admissions	76.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	70.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	95.4
Children	86.0
Elderly	76.6
English Speaking	43.7

Foreign-born	77.6
Outdoor Workers	94.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.3
Traffic Density	90.4
Traffic Access	46.4
Other Indices	—
Hardship	5.6
Other Decision Support	—
2016 Voting	54.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Data Provided by applicant
Construction: Construction Phases	Data Provided by applicant
Construction: Dust From Material Movement	Data provided by applicant
Operations: Vehicle Data	Data provided by traffic study
Operations: Hearths	data provided by applicant
Operations: Water and Waste Water	Outdoor water use data provided by applicant
Operations: Emergency Generators and Fire Pumps	Data provided by applicant

Existing Land Use 1600 Dove Street Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Existing Land Use 1600 Dove Street
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	1600 Dove St, Newport Beach, CA 92660, USA
County	Orange
City	Newport Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5995
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	60.7	1000sqft	1.39	60,675	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.96	1.91	19.9	0.05	0.06	1.61	1.67	0.06	0.28	0.35	6,295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.51	2.01	16.1	0.04	0.06	1.61	1.66	0.06	0.28	0.34	6,102
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.30	1.65	14.3	0.03	0.05	1.22	1.27	0.05	0.22	0.27	5,101
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.30	2.62	0.01	0.01	0.22	0.23	0.01	0.04	0.05	845

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Area	1.89	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159

Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.96	1.91	19.9	0.05	0.06	1.61	1.67	0.06	0.28	0.35	6,295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Area	1.45	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159
Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.51	2.01	16.1	0.04	0.06	1.61	1.66	0.06	0.28	0.34	6,102
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	1.22	12.2	0.03	0.02	1.22	1.24	0.02	0.22	0.23	3,303
Area	1.75	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.65
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159
Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.30	1.65	14.3	0.03	0.05	1.22	1.27	0.05	0.22	0.27	5,101
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547
Area	0.32	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27
Energy	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	253
Water	—	—	—	—	—	—	—	—	—	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	17.6
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	0.60	0.30	2.62	0.01	0.01	0.22	0.23	0.01	0.04	0.05	845

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Total	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Total	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547
Total	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	1,032
Total	—	—	—	—	—	—	—	—	—	—	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	1,032
Total	—	—	—	—	—	—	—	—	—	—	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	171
Total	—	—	—	—	—	—	—	—	—	—	171

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Total	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Total	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	81.8
Total	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	81.8

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.30	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Total	1.89	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.30	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—
Total	1.45	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.24	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27
Total	0.32	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	159
Total	—	—	—	—	—	—	—	—	—	—	159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	159
Total	—	—	—	—	—	—	—	—	—	—	159
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	26.3

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	106
Total	—	—	—	—	—	—	—	—	—	—	106

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	106
Total	—	—	—	—	—	—	—	—	—	—	106
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	17.6
Total	—	—	—	—	—	—	—	—	—	—	17.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.15
Total	—	—	—	—	—	—	—	—	—	—	0.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.15
Total	—	—	—	—	—	—	—	—	—	—	0.15
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	658	149	47.5	181,795	5,797	1,315	418	1,601,796

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	91,013	30,338	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	1,081,246	346	0.0330	0.0040	1,537,897

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	10,783,995	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

General Office Building	56.4	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.54	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	55.4
AQ-PM	57.5
AQ-DPM	86.4
Drinking Water	52.8
Lead Risk Housing	0.28
Pesticides	1.59
Toxic Releases	85.1
Traffic	90.0
Effect Indicators	—

CleanUp Sites	93.2
Groundwater	91.3
Haz Waste Facilities/Generators	90.0
Impaired Water Bodies	98.1
Solid Waste	72.4
Sensitive Population	—
Asthma	10.1
Cardio-vascular	6.75
Low Birth Weights	19.0
Socioeconomic Factor Indicators	—
Education	7.82
Housing	63.3
Linguistic	37.7
Poverty	51.7
Unemployment	41.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	72.51379443
Employed	66.62389324
Median HI	71.23059156
Education	—
Bachelor's or higher	91.36404466
High school enrollment	100
Preschool enrollment	85.56396766

Transportation	—
Auto Access	54.54895419
Active commuting	23.40562043
Social	—
2-parent households	15.20595406
Voting	31.2074939
Neighborhood	—
Alcohol availability	28.78224047
Park access	6.544334659
Retail density	98.42166046
Supermarket access	67.2783267
Tree canopy	33.37610676
Housing	—
Homeownership	7.391248556
Housing habitability	59.04016425
Low-inc homeowner severe housing cost burden	71.07660721
Low-inc renter severe housing cost burden	81.45771847
Uncrowded housing	70.98678301
Health Outcomes	—
Insured adults	83.98562813
Arthritis	0.0
Asthma ER Admissions	87.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	97.8
Cognitively Disabled	88.7
Physically Disabled	85.5
Heart Attack ER Admissions	76.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	70.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	95.4
Children	86.0
Elderly	76.6
English Speaking	43.7
Foreign-born	77.6
Outdoor Workers	94.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.3
Traffic Density	90.4
Traffic Access	46.4

Other Indices	—
Hardship	5.6
Other Decision Support	—
2016 Voting	54.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Data provided by applicant.

Existing Land Use 1600 Dove Street Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Existing Land Use 1600 Dove Street
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	19.6
Location	1600 Dove St, Newport Beach, CA 92660, USA
County	Orange
City	Newport Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5995
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	60.7	1000sqft	1.39	60,675	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.96	1.91	19.9	0.05	0.06	1.61	1.67	0.06	0.28	0.35	6,295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.51	2.01	16.1	0.04	0.06	1.61	1.66	0.06	0.28	0.34	6,102
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.30	1.65	14.3	0.03	0.05	1.22	1.27	0.05	0.22	0.27	5,101
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.60	0.30	2.62	0.01	0.01	0.22	0.23	0.01	0.04	0.05	845

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Area	1.89	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159

Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.96	1.91	19.9	0.05	0.06	1.61	1.67	0.06	0.28	0.35	6,295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Area	1.45	—	—	—	—	—	—	—	—	—	—
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159
Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.51	2.01	16.1	0.04	0.06	1.61	1.66	0.06	0.28	0.34	6,102
Average Daily	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.53	1.22	12.2	0.03	0.02	1.22	1.24	0.02	0.22	0.23	3,303
Area	1.75	0.02	1.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.65
Energy	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	1,526
Water	—	—	—	—	—	—	—	—	—	—	159
Waste	—	—	—	—	—	—	—	—	—	—	106
Refrig.	—	—	—	—	—	—	—	—	—	—	0.15
Total	3.30	1.65	14.3	0.03	0.05	1.22	1.27	0.05	0.22	0.27	5,101
Annual	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547
Area	0.32	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27
Energy	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	253
Water	—	—	—	—	—	—	—	—	—	—	26.3
Waste	—	—	—	—	—	—	—	—	—	—	17.6
Refrig.	—	—	—	—	—	—	—	—	—	—	0.02
Total	0.60	0.30	2.62	0.01	0.01	0.22	0.23	0.01	0.04	0.05	845

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Total	2.05	1.47	16.9	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,493
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Total	2.03	1.60	15.7	0.04	0.03	1.61	1.63	0.02	0.28	0.31	4,311
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547
Total	0.28	0.22	2.22	0.01	< 0.005	0.22	0.23	< 0.005	0.04	0.04	547

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	1,032
Total	—	—	—	—	—	—	—	—	—	—	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	1,032
Total	—	—	—	—	—	—	—	—	—	—	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	171
Total	—	—	—	—	—	—	—	—	—	—	171

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Total	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Total	0.02	0.41	0.35	< 0.005	0.03	—	0.03	0.03	—	0.03	494
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	81.8
Total	< 0.005	0.08	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	81.8

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.30	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.43	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Total	1.89	0.02	2.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	11.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.30	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.15	—	—	—	—	—	—	—	—	—	—
Total	1.45	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.24	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27
Total	0.32	< 0.005	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.27

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	159
Total	—	—	—	—	—	—	—	—	—	—	159
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	159
Total	—	—	—	—	—	—	—	—	—	—	159
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	26.3
Total	—	—	—	—	—	—	—	—	—	—	26.3

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	106
Total	—	—	—	—	—	—	—	—	—	—	106

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	106
Total	—	—	—	—	—	—	—	—	—	—	106
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	17.6
Total	—	—	—	—	—	—	—	—	—	—	17.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.15
Total	—	—	—	—	—	—	—	—	—	—	0.15
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.15
Total	—	—	—	—	—	—	—	—	—	—	0.15
Annual	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	0.02
Total	—	—	—	—	—	—	—	—	—	—	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	658	149	47.5	181,795	5,797	1,315	418	1,601,796

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	91,013	30,338	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	1,081,246	346	0.0330	0.0040	1,537,897

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	10,783,995	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

General Office Building	56.4	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	9.54	annual days of extreme heat
Extreme Precipitation	3.60	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	55.4
AQ-PM	57.5
AQ-DPM	86.4
Drinking Water	52.8
Lead Risk Housing	0.28
Pesticides	1.59
Toxic Releases	85.1
Traffic	90.0
Effect Indicators	—

CleanUp Sites	93.2
Groundwater	91.3
Haz Waste Facilities/Generators	90.0
Impaired Water Bodies	98.1
Solid Waste	72.4
Sensitive Population	—
Asthma	10.1
Cardio-vascular	6.75
Low Birth Weights	19.0
Socioeconomic Factor Indicators	—
Education	7.82
Housing	63.3
Linguistic	37.7
Poverty	51.7
Unemployment	41.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	72.51379443
Employed	66.62389324
Median HI	71.23059156
Education	—
Bachelor's or higher	91.36404466
High school enrollment	100
Preschool enrollment	85.56396766

Transportation	—
Auto Access	54.54895419
Active commuting	23.40562043
Social	—
2-parent households	15.20595406
Voting	31.2074939
Neighborhood	—
Alcohol availability	28.78224047
Park access	6.544334659
Retail density	98.42166046
Supermarket access	67.2783267
Tree canopy	33.37610676
Housing	—
Homeownership	7.391248556
Housing habitability	59.04016425
Low-inc homeowner severe housing cost burden	71.07660721
Low-inc renter severe housing cost burden	81.45771847
Uncrowded housing	70.98678301
Health Outcomes	—
Insured adults	83.98562813
Arthritis	0.0
Asthma ER Admissions	87.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	97.8
Cognitively Disabled	88.7
Physically Disabled	85.5
Heart Attack ER Admissions	76.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	70.0
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	95.4
Children	86.0
Elderly	76.6
English Speaking	43.7
Foreign-born	77.6
Outdoor Workers	94.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	13.3
Traffic Density	90.4
Traffic Access	46.4

Other Indices	—
Hardship	5.6
Other Decision Support	—
2016 Voting	54.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Data provided by applicant.

Appendix B

Energy Data

Energy Use Summary

Construction Phase (gallons/construction perioc	**Gasoline**	**Diesel**
Construction Vehicles	20,587	29,179
Worker Trips	107,486	281
Vendor Trips	14,880	155
Haul Trucks	29	44,156
Total	**142,982**	**73,770**

Operations Phase (gallons/year)	**Gasoline**	**Diesel**	**Natural Gas (kBTU/yr)**	**Electricity (kWh/yr)**
Apartments Mid Rise	172,300	16,524	3,132,130	1,033,765
Parking	0	0	0	742,303
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
All Project Land Uses	**172,300**	**16,524**	**3,132,130**	**1,776,069**

Operations Onroad Energy Use

Year 2028

Vehicle Types	MPG by Fuel Type					Population by Fuel Type					
1	2	3	4	5	6	7	8	9	10	11	12
	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid	Total
LDA	31.7	43.6	0.4	0.000	28.2	5,249,824	10,048	411,172	0	189,539	5,860,584
LDT1	26.3	25.3	0.4	0.000	28.0	477,661	46	2,840	0	2,228	482,775
LDT2	26.2	34.4	0.4	0.000	27.9	2,760,690	9,759	39,610	0	38,275	2,848,334
LHDT1	14.8	20.9	0.6	0.000	0.0	203,281	119,636	11,085	0	0	334,003
LHDT2	12.8	17.7	0.6	0.000	0.0	30,989	54,805	2,875	0	0	88,669
MCY	42.0	0.0	0.0	0.000	0.0	264,896	0	0	0	0	264,896
MDV	21.3	25.5	0.4	0.000	27.6	1,677,351	20,717	41,439	0	23,899	1,763,407
MH	4.9	10.1	0.0	0.000	0.0	26,488	12,768	0	0	0	39,256
MHDT	5.4	9.1	1.0	8.4	0.0	23,185	124,534	5,284	1,875	0	154,879
HHDT	4.4	6.4	1.8	6.3	0.0	38	111,567	2,990	11,981	0	126,575
OBUS	5.3	7.3	1.1	9.2	0.0	4,805	3,335	124	572	0	8,837
SBUS	9.1	7.4	1.2	4.3	0.0	3,031	2,946	213	3,708	0	9,899
UBUS	7.3	10.2	2.1	3.2	0.0	877	5	550	4,693	0	6,125
						10723115.8	470166.1	518183.2	22829.8	253942.5	11988237.4

Trips/Day Land Use	Trips/day Weekday	Trips/day Saturday	Trips/day Sunday	Total Weekly	VMT/day Weekday	VMT/day Saturday	VMT/day Sunday	Trip Length
Apartments Mid Rise	1280.28	1153.38	961.62	8516.4	14,833	13,363	11,141	11.59
Parking				0	0	0	0	-
				0	0	0	0	-
				0	0	0	0	-
				0	0	0	0	-
				0	0	0	0	-
Total	**1,280**	**1,153**	**962**					

Fleet Mix

Land Use		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**
Apartments Mid Rise		1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%
Parking		1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%
	0	1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%
	0	1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%
	0	1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%
	0	1%	49%	4%	24%	3%	1%	2%	15%	0%	2%	0%	0%	0%	100.0%

Vehicle Trips

Weekday Trips		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**
Apartments Mid Rise		8	630	50	305	36	10	29	186	4	20	1	1	0	1,280
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		**8**	**630**	**50**	**305**	**36**	**10**	**29**	**186**	**4**	**20**	**1**	**1**	**0**	**1,280**

Saturday Trips		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**
Apartments Mid Rise		7	568	45	274	32	9	26	168	4	18	1	1	0	1,153
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		**7**	**568**	**45**	**274**	**32**	**9**	**26**	**168**	**4**	**18**	**1**	**1**	**0**	**1,153**

Sunday Trips		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**
Apartments Mid Rise		6	473	38	229	27	7	21	140	3	15	1	1	0	962
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		**6**	**473**	**38**	**229**	**27**	**7**	**21**	**140**	**3**	**15**	**1**	**1**	**0**	**962**

Gallons of Fuel

Gasoline		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**	
Apartments Mid Rise		2	71,315	7,597	45,120	5,934	1,039	2,731	33,301	2,503	2,239	316	167	36	172,300	
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		2	**71,315**	**7,597**	**45,120**	**5,934**	**1,039**	**2,731**	**33,301**	**2,503**	**2,239**	**316**	**167**	**36**	**172,300**	**Total Gallons Gasoline**

Diesel		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**	
Apartments Mid Rise		4,131	99	1	122	2,467	1,330	0	344	581	7,092	159	198	0	16,524	
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		4,131	**99**	**1**	**122**	**2,467**	**1,330**	**0**	**344**	**581**	**7,092**	**159**	**198**	**0**	**16,524**	**Total Gallons Diesel**

Electricity		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**	
Apartments Mid Rise		396	459,079	3,075	43,981	8,525	2,205	0	45,445	0	2,606	41	92	79	565,524	
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		396	**459,079**	**3,075**	**43,981**	**8,525**	**2,205**	**0**	**45,445**	**0**	**2,606**	**41**	**92**	**79**	**565,524**	**Total Electricity (kWh)**

Natural Gas		**HHDT**	**LDA**	**LDT1**	**LDT2**	**LHDT1**	**LHDT2**	**MCY**	**MDV**	**MH**	**MHDT**	**OBUS**	**SBUS**	**UBUS**	**Total**	
Apartments Mid Rise		456	0	0	0	0	0	0	0	0	116	22	431	430	1,455	
Parking		0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		456	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**116**	**22**	**431**	**430**	**1,455**	**Total Natural Gas**

Utilities

	NaturalGas Use	**Electricity Use**
Land Use	kBTU/yr	kWh/yr
Apartments Mid Rise	3132129.698	1033765.216
Parking	0	742303.4924
Total	**3,132,130**	**1,776,069**

Offroad Construction Equipment Energy Use

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per	Hours Per Da	Horsepower	Load Factor	**Horsepower Category**	**Num Days**	**Year**	**Fuel Consumption Rate (gal/hour)**	**Fuel Type**	**Total Fuel Consumption (gal/construction period)**
Demolition	Rubber Tired Dozers	Diesel	Average	2	8	367	0.4	300	64	2026	4.6	Diesel	1,875
Demolition	Excavators	Diesel	Average	3	8	36	0.38	175	64	2026	2.9	Diesel	1,685
Demolition	Concrete/Industrial Saws	Diesel	Average	1	8	33	0.73	100	64	2026	4.7	Gasoline	1,762
Site Preparation	Rubber Tired Dozers	Diesel	Average	3	8	367	0.4	300	64	2026	4.6	Diesel	2,813
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4	8	84	0.37	100	64	2026	1.6	Diesel	1,210
Grading	Graders	Diesel	Average	1	8	148	0.41	175	65	2026	3.1	Diesel	671
Grading	Excavators	Diesel	Average	2	8	36	0.38	175	65	2026	2.9	Diesel	1,141
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37	100	65	2026	1.6	Diesel	614
Grading	Scrapers	Diesel	Average	2	8	423	0.48	300	65	2026	5.6	Diesel	2,787
Grading	Rubber Tired Dozers	Diesel	Average	1	8	367	0.4	300	65	2026	4.6	Diesel	952
Building Construction	Forklifts	Diesel	Average	3	8	82	0.2	100	478	2026	2.0	Diesel	4,600
Building Construction	Generator Sets	Diesel	Average	1	8	14	0.74	100	478	2026	5.2	Gasoline	14,669
Building Construction	Cranes	Diesel	Average	1	7	367	0.29	300	478	2026	3.3	Diesel	3,167
Building Construction	Welders	Diesel	Average	1	8	46	0.45	50	478	2026	2.4	Gasoline	4,156
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3	7	84	0.37	100	478	2026	1.6	Diesel	5,929
Paving	Pavers	Diesel	Average	2	8	81	0.42	100	42	2026	1.7	Diesel	489
Paving	Paving Equipment	Diesel	Average	2	8	89	0.36	100	42	2026	1.6	Diesel	396
Paving	Rollers	Diesel	Average	2	8	36	0.38	100	42	2026	1.7	Diesel	433
Architectural Coating	Air Compressors	Diesel	Average	1	6	37	0.48	100	109	2026	1.3	Diesel	416
											Total	**Gasoline**	**20,587**
											Total	**Diesel**	**29,179**
													49,766

Onroad Construction Energy Use

Year 2026

Vehicle Types	MPG by Fuel Type					Population by Fuel Type					
	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid	Gasoline	Diesel	Electricity	Natural Gas	Plug-in Hybrid	Total
LDA	30.6	42.2	0.4	0.000	28.2	5,339,380	12,657	353,155	0	173,605	5,878,797
LDT1	25.4	23.5	0.4	0.000	28.0	490,238	139	1,892	0	1,403	493,672
LDT2	25.2	33.2	0.4	0.000	27.9	2,657,372	9,157	27,553	0	29,932	2,724,013
LHDT1	14.3	20.8	0.6	0.000	0.0	204,849	114,398	4,167	0	0	323,413
LHDT2	12.4	17.5	0.6	0.000	0.0	31,705	51,572	1,076	0	0	84,352
MCY	41.8	0.0	0.0	0.000	0.0	256,960	0	0	0	0	256,960
MDV	20.4	24.6	0.4	0.000	27.6	1,648,729	20,681	29,732	0	18,614	1,717,756
MH	4.9	10.1	0.0	0.000	0.0	28,184	12,563	0	0	0	40,747
MHDT	5.3	9.0	1.0	8.4	0.0	24,387	121,698	1,944	1,716	0	149,745
HHDT	4.2	6.2	1.8	6.1	0.0	47	107,567	1,220	11,300	0	120,135
OBUS	5.2	7.1	1.1	9.0	0.0	5,109	3,207	50	535	0	8,901
SBUS	9.0	7.4	1.2	4.3	0.0	2,959	3,215	83	3,488	0	9,745
UBUS	7.0	6.8	2.1	3.2	0.0	894	11	211	4,984	0	6,100

Daily Trips							Gasoline Consumption			Diesel Consumption		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker	Vendor	Haul	Worker	Vendor	Haul
Demolition	15	0	109	18.5	10.2	20						
Site Preparation	18	0	4	18.5	10.2	20						
Grading	20	0	125	18.5	10.2	20						
Building Construction	292	65	0	18.5	10.2	20						
Paving	15	0	0	18.5	10.2	20						
Architectural Coating	58	0	0	18.5	10.2	20						
Total Trips												
Demolition	960	0	6976	18.5	10.2	20	688	0	13	2	0	20,058
Site Preparation	1152	0	256	18.5	10.2	20	826	0	0	2	0	736
Grading	1300	0	8125	18.5	10.2	20	932	0	15	2	0	23,362
Building Construction	139576	31070	0	18.5	10.2	20	100,057	14,880	0	261	155	0
Paving	630	0	0	18.5	10.2	20	452	0	0	1	0	0
Architectural Coating	6322	0	0	18.5	10.2	20	4,532	0	0	12	0	0
Total	**149,940**	**31,070**	**15,357**				**107,486**	**14,880**	**29**	**281**	**155**	**44,156**

Appendix C

Preliminary Geotechnical Investigation

Preliminary Geotechnical Investigation for Feasibility Purposes, 1600 Dove Street, Newport Beach, California, 92660.

PN 22036-00
January 13, 2023

KLING Consulting Group, Inc.

KCG KLING
Consulting
Group, Inc.

January 13, 2023 **PN 22036-00**

Mr. Satish Lion
The Picerne Group
5000 Birch Street,
Newport Beach, CA 92660

Subject: **Preliminary Geotechnical Investigation for Feasibility Purposes, 1600 Dove Street, Newport Beach, California, 92660**

Dear Mr. Lion:

At your request and authorization, Kling Consulting Group, Inc. (KCG) has performed a preliminary feasibility level geotechnical investigation for a proposed multi-level apartment complex with one or two subterranean levels located in Newport Beach, California (**see Figure 1 - Site Location Map**). The purpose of our evaluation has been to review site geologic/geotechnical conditions and assess potential constraints affecting development of the site. Subsurface field exploration consisting of three Cone Penetrometer (CPT) soundings, was completed to characterize the subsurface soils and determine selected engineering properties to develop preliminary geotechnical conclusions and recommendations. We expect our findings and opinions will assist in your decision-making process to develop the property and aid in development of preliminary costs and budgets for the project.

We appreciate this opportunity to be of continued service and to work with you on this project. Should you have any questions regarding this report, please do not hesitate to call.

Respectfully,

KLING CONSULTING GROUP

John Holder

John C. Holder
Staff Engineer

HENRY F. KLING
No. 2205

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Principal Geotechnical Engineer
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1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of our limited geotechnical investigation was to evaluate near-surface soil conditions to provide preliminary feasibility level geotechnical design recommendations for a proposed multi-level apartment building complex. The scope of work undertaken included the following tasks:

- Compilation and interpretation of available, previously documented geologic and geotechnical data for the property;
- Coordination with Underground Service Alert to mark and identify buried utilities;
- Subsurface exploration, including three (3) Cone-Penetrometer Soundings (CPTs) to maximum depths of approximately 50 feet. Continuous logs of the subsurface conditions, as encountered in the soundings, were recorded and are presented in Appendix B. The locations of the soundings are shown in **Figure 2 - Exploration Location Map**;
- Geotechnical engineering analysis and preliminary estimate of liquefaction settlement; and
- Preparation of this report along with accompanying maps and illustrations. This report presents our findings, conclusions, and feasibility level recommendations.

1.2 SITE AND PROJECT DESCRIPTION

The subject site is located along the east side of Dove Street, north of Dolphin-Striker Way and west of MacArthur Blvd., in Newport Beach, California. The subject site is identified as APN 427-181-03, with street address 1600 Dove Street. The square-shaped subject site encompasses approximately 2.3-acres, and is currently occupied by one existing commercial office building along with paved drive and parking areas. The approximate location of the site is illustrated in **Figure 1 - Site Location Map**.

Through discussions with the client, it is understood the proposed development preliminarily consists of a multi-level style building entailing multiple levels of studio, one-bedroom and two-bedroom apartments with both ground floor parking and one or two levels of subterranean parking.

Specific grading plans are not available; however, grading is anticipated to include cut excavations of at least 12 or 24-feet below existing grades to achieve the proposed grades for subterranean parking.

Notes:

Scale: 1": 1850'

0 925 ft 1850 ft

KCG KLING Consulting Group, Inc.

Client:
The Picerne Group

Address:
1600 Dove Street,
Newport Beach, CA 92660

Site Location Map

Drawn: J.H.	**Date:** 1/13/2023
P/N: 22036-00	**Figure:** 1

Notes:

◭ - Cone Penetration Testing Location

Scale: 1'': 80'

0 40 ft 80 ft

KCG KLING Consulting Group, Inc.

Client:

The Picerne Group

Address:

1600 Dove Street,
Newport Beach, CA 92660

Exploration Location Map

Drawn:	J.H.	**Date:**	1/13/2023
P/N:	22036-00	**Figure:**	2

2.0 GEOLOGIC CONDITIONS

2.1 Subsurface Investigation and Sampling

On January 9th, 2022, three CPT soundings were advanced using a Cone Penetration Testing drill rig. The CPT soundings were completed to depths of 50 feet below the existing ground surface in the vicinity of the proposed development area. Records of the CPT soundings are included in Appendix B. The approximate location of the soundings is illustrated in **Figure 2 - Exploration Location Map**.

For this preliminary field exploration, ring and bulk soil samples were NOT obtained for laboratory testing.

2.2 Regional and Site Specific Geologic Setting

The subject site is located in the Peninsular Ranges Geomorphic Province, at the south-eastern edge of the Los Angeles Basin and within the nearly flat-lying area of the Tustin Plain. The site is primarily underlain by elevated Pleistocene and late Pliocene marine terrace deposits established by progressive and (or) episodic tectonic uplift of coastal southern California.

The National Geologic Map Database maps the site as being underlain by late to middle Pleistocene Old Paralic Deposits. The Old Paralic Deposits comprise a poorly sorted, moderately permeable, reddish-brown, interfingered strandline, beach, estuarine, and colluvial deposits composed of silt, sand, and cobbles. These deposits rest on now emergent wave-cut abrasion platforms preserved by regional uplift.

2.3 Subsurface Conditions

2.3.1 Asphalt

The site is mantled by a relatively thin veneer of asphalt pavement to a depth of approximately 3.5-inches from the existing ground in the vicinity of the soundings.

2.3.2 Old Paralic Deposits ($Qopf_a$)

The site is underlain by sands, clay, and sandy-silt associated with the Old Paralic Deposits of Late to Middle Pleistocene age to an observed depth of up to 50.0 feet below the current ground level in the vicinity of the borings. The Old Paralic Deposits typically consist of light brown to dark gray, sandy clays and sandy to clayey silts, that are medium stiff to hard and moist to wet, with silty sands that are medium dense to very dense. Records of the CPT soundings are presented in Appendix B.

2.4 Groundwater

Groundwater was encountered within two of the three CPT soundings based on pore water dissipation readings at depths of approximately 18 feet below the existing ground surface. Based on experience with nearby sites, we believe the water at 18 feet is likely perched.

The regional groundwater levels are more likely at depths of 26 feet to 30 feet. As such, groundwater at a depth of 26 feet could impact construction of two levels of subterranean parking 24 feet below exsiting grades. Temporary de-watering could be required during construction to stabilize the basement subgrade. In order to confirm the actual regional groundwater level and to be prepared for possible ground water impacts during construction, installation of at least two piezometers is recommended.

It should be noted that groundwater variation may result from fluctuations in the ground surface topography, subsurface stratification, rainfall, irrigation and other factors that may not be evident at the time of our subsurface exploration. The depth to groundwater within the site should be confirmed as part of a design-level exploration of the site that includes hollow stem auger borings. Until the site specific ground water levels can be clearly established, the potential groundwater levels discussed above should be considered in construction planning and design.

The nearest groundwater observation well, monitored by the California Department of Water Resources, is located southwest of the intersection of Campus Drive and Carlson Avenue at a ground surface elevation of 17 feet above sea level. The highest recorded groundwater level was recorded at approximately 18 feet below the ground surface in May 1998 (Reference 6). The subject site is approximately 0.8 miles west from this observation well. According to the California Geologic Survey (CGS), Seismic Hazard Zone Maps and Report for the Tustin 7.5-Minute Quadrangle (References 8 and 9), the reported and mapped historical high groundwater level is approximately 10 feet below the current ground level in the vicinity of the site.

3.0 GEOTECHNICAL ENGINEERING CONSIDERATIONS

3.1 Expansive Soil Characteristics

We anticipate that subsurface soils will consist of interbedded sand, silt, and clay. While sandy soils are generally not susceptible to expansion, the potential exists that layers of expansive clay could be present at the foundation elevation. These layers should not be left in place or used as fill if any clay beds are encountered. Laboratory testing to evaluate expansion potential would be recommended as part of a design-level exploration of the site. Until future testing is performed, the soil should be considered as having moderate potential for expansion.

3.2 Sulfate Content

Sulfate testing was not performed as part of this investigation. Laboratory testing to evaluate sulfate content would be recommended as part of a design-level exploration of the site. Preliminarily, the soils can be considered "S0" sulfate per ACI-318 (Reference 4).

3.3 Faulting and Seismicity

The subject site is not located within a State of California Earthquake Fault Zone (formerly known as Alquist-Priolo Zones, Jennings and Bryant, 2010; Hart and Bryant, 1997). The property is not located where a site-specific investigation to determine the locations of any active faults would be required. However, the Southern California region is seismically active. Active and potentially active faults within Southern California are capable of producing seismic shaking at the site. It is anticipated that the site will periodically experience ground acceleration due to exposure to moderate to large magnitude earthquakes occurring on distant faults.

However, no active faults are known to exist at the site, and the risk of surface fault rupture is considered low. The closest active fault zones to the subject site is the San Joaquin Hills fault located approximately 1.8 miles from the site and the Newport-Inglewood Fault Zone, located approximately 5.2 miles from the subject site.

3.4 Seismic Design Parameters

Presented below are the site seismic parameters utilizing generic geologic, seismic, and geotechnical data gathered for the site using the ASCE 7 Hazard Tool web based tool (Reference 1). All structures should be designed for earthquake-induced strong ground motions in accordance with the 2022 CBC procedures utilizing the following parameters:

Seismic Design Parameters

Site Class (Soil Profile)	**D**
Latitude	**33.664697**
Longitude	**-117.865670**
Short Period Spectral Acceleration, Ss:	**1.47**
1-Second Period Spectral Acceleration, S1:	**0.48**
Maximum Considered Earthquake Spectral Response Acceleration, SMS:	**1.71**
Maximum Considered Earthquake Spectral Response Acceleration, SM1:	**1.16**
Design Spectral Response Acceleration, SDS:	**1.14**
Design Spectral Response Acceleration, SD1:	**0.77**
Site modified peak ground acceleration PGA_M	**0.64**
Seismic Design Category	**D**

3.5 Seismic Hazards

3.5.1 Liquefaction Potential

Liquefaction occurs when ground water pressure in loose sandy soil becomes greater than overburden pressure due to seismic-induced cyclic shear stresses from earth quakes. The result is a near complete loss of soil shear strength and ground settlement. The California Geological Survey (CGS), Seismic Hazard Zone Map for the Tustin Quadrangle (Reference 8) indicates the site is not situated in a liquefaction zone. Our review of the Seismic Hazard Zone Report for the Tustin Quadrangle (Reference 9), indicates the historic groundwater is reported to be approximately 10 feet from existing grades in the vicinity of the property. Our liquefaction analysis conservatively incorporates the historic high groundwater depth of 10 feet. Our geotechnical evaluation indicated that localized and isolated sandy layers within the Old Paralic Deposits that underlie the site are susceptible to relatively minor amounts of liquefaction due to a design-level earthquake along a nearby fault. Overall seismic induced liquefaction settlement would be reduced with the removal of materials for the subterranean excavations. The portions of the site that appear to be susceptible to liquefaction and the magnitudes of seismic-induced settlement described above appear to be somewhat localized. The state of California has not established a seismic hazard zone for the area.

3.5.2 Liquefaction Settlement Analysis

The total earthquake-induced liquefaction settlement potential was calculated using the software program “CLiq v.1.7” by GeoLogismiki (Reference 11). Our evaluation was based on the site class and adjusted peak ground acceleration of 0.64g, as presented in the Seismic Design Parameters Table above, and a probabilistic 2,475-year modal magnitude of 7.69. Our analysis indicated the estimated settlement due to earthquake-induced liquefaction settlement ranges between approximately 0.366 to 2.566 inches. These settlement values are considered preliminary, and further geotechnical investigation would be required to provide refinement of the estimated differential settlement of the site. The results of our analysis are included herein in **Appendix C - Seismic Settlement Analysis.**

The liquefaction analysis was performed utilizing a groundwater level case presented below:

- 10-foot groundwater table based on the historic highest groundwater table as presented in *The Seismic Hazard Zone Report for the Tustin 7.5-Minute Quadrangle, Orange County, California* (Appendix A).

In addition, the analysis included the following parameters and assumptions:

- Factor of Safety = 1.0
- “Dry” seismic settlements calculated
- Soil Behavior Type Index (Ic) = 2.60[18].
- Weighting factor for volumetric strain applied[11].

- Cn limit value applied.

3.5.3 Sesimically-Induced Settlement

The liquefaction analyses results for seismically induced vertical ground settlement is presented below:

CPT	Vertical Settlements (Inches)	Liquefaction Potential Index (LPI)
1	0.366	7.183 (high risk)
2	0.709	4.231 (low risk)
3	2.566	2.257 (low risk)

The overall vertical settlement calculations include seismically induced "dry" settlements.

Based on our analysis, the seismic induced settlements range from approximately 0.366 inches to 2.566 inches. It should be noted the majority of the vertical ground settlement occurs in the upper 10 to 12 feet of the soil column. Vertical ground settlements between 12 and 50 feet are less than 0.5 inches, which could be applied to one subterranean level. Additionally, seismically induced differential settlement is variable across the site, with a worst case differential of 2.2-inches over a horizontal distance of 300 feet. The amount of differential at one level of subterranean would be much less.

3.5.4 Lateral Spreading

Lateral spreading, a phenomenon associated with seismically induced soil liquefaction, is the lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. Lateral spreading generally occurs on gently sloping ground or level ground with nearby free surface faces such as a drainage or stream channel. No open channels or free face surfaces are known to be located in close proximity to the site. According to studies undertaken by Zhang et al. (2004), Cubrinovski (2012), lateral displacements occur between 300 and 1000 feet from a "free face". As such, the potential for lateral spreading would be unlikely to occur within the project site.

4.0 CONCLUSIONS

The following conclusions are preliminary and based upon our analysis and data review obtained during our limited subsurface field investigation. It is our opinion that the proposed development concept is considered geotechnically feasible provided the recommendations presented herein are implemented during design and construction. Recommendations presented herein are subject to revision and refinement upon completion of the full geotechnical investigation.

- Based upon our review of the site and the proposed development plans, the underlying soils on-site are considered to have sufficient bearing capacity to support the proposed development, provided the recommendations herein are implemented.

- Our geotechnical evaluation indicates that the Old Paralic Deposits that underlie the site are not susceptible to siginificant liquefaction settlement due to a design-level earthquake incorporating a historical high groundwater level of 10 feet below existing grades

(CGS/CDMG, 1998). The estimated settlements are in the range of 0.366 inches to 2.566 inches at the site during seismic events. Overall seismic induced liquefaction settlement would be reduced with the removal of the upper materials for the subterranean excavation, as summarized in Section 3.5. The liquefaction assessment is considered preliminary, and further study is required to refine the estimates and determine likely differential settlement. Lateral spreading is considered unlikely due to the lack of "free face" in the vicinity of the subject site.

- No active fault is known to exist at the site, and the risk of surface fault rupture is considered to be low. However, the project site lies within a region of historical seismicity and will likely be subject to seismic shaking in the future.

- KCG's professional opinion is that liquefaction-induced ground displacements are essentially negligible following removal of the upper materials for subterranean excavation. As part of the supplemental investigation differential liquefaction settlement can be quantified and if needed, incorporated into the structural analysis. Should the final analysis determine differential settlement substantial enough to require mitigation, added stiffness from a mat foundation system or grade beams for spread footings, or similar could be considered.

- Soils underlying the subject site are not considered to be susceptible to hydrocollapse;

- Groundwater condition was encountered in our CPT soundings at depths of approximately 18 feet below the existing ground surface based on pore water dissipation. Although groundwater levels would not be expected to impact proposed site construction of one subterranean level at or near a depth of 12 feet below exsiting grades, groundwater could potentially be an issue for two subterranean levels at or near a depth of 24 feet. Further subsurface investigation performed with hollow stem auger borings that includes installation of piezometers could better determine if water near a depth of 18 feet is perched, or is connected to regional groundwater system. For preliminary planning, temporary dewatering or other measures should be considered and groundwater levels taken into account for ultimate design;

- Preliminarily, the soils underlying the site should be considered to have moderate expansion potential.

- The proposed development should not adversely affect neighboring properties, provided standard of practice excavation shoring methods are employed.

5.0 PRELIMINARY RECOMMENDATIONS

Preliminary recommendations presented below are based on discussions with the client and the limited geotechnical information gathered and analyzed to date. Based on our limited subsurface investigation, subsoils at one and two subterranean levels are typically stiff clay/silty clay. These soils should provide suitable soil support for the proposed structures. Foundations can be expected to bear directly on native soil, provided it has not been disturbed, found to be locally soft or expansive. Each foundation excavation should be evaluated and if loose disturbed or softened soil is found, it should be removed and replaced as engineered fill or processed in place and recompacted. The extent and depth of processing or recompaction should be as approved by the geotechnical consultant.

5.1 Supplemental Subsurface Exploration

During this limited feasibility level investigation, the subsurface exploration was limited to three CPT sounding locations in readily accessible areas. We recommend that a supplemental geotechnical investigation be performed that includes additional borings (including installation of piezometers). The supplemental investigation should also include laboratory testing, foundation and settlement analysis; ground water measurements and to verify subsurface conditions. Recommendations would be updated as warranted.

5.2 Earthwork Specifications

All grading should be performed per the General Earthwork and Grading Specifications presented in Appendix D unless specifically revised or amended below. Grading should also conform to all applicable governing agency requirements. Prior to the commencement of grading operations, all vegetation, organic topsoil and human-made structure should be cleared and disposed of off-site. Any undocumented fill or back-fill encountered should be removed and re-compacted. All areas receiving fill should be scarified to 6 inches and/or over-excavated, moisture conditioned to between optimum moisture and two to four percent above optimum moisture content, and re-compacted to a minimum of 90 percent relative compaction as determined by ASTM D1557. Soil material excavated from the site should be adequate for re-use as compacted fill provided it is free of trash, vegetation and other deleterious material. All earthwork and grading operation should be performed under the observation and testing of the geotechnical consultant of record.

5.3 Remedial Earthwork

5.3.1 Conventional Foundations –One or Two Level Subterranean

For convential speard footings, the foundation excavations should be evaluated for suitability and any disturbed soil or localized softened soil be mitigated with removal and replacement, or processed in place and recompacted, as needed to create adequate support. The geotechnical consultant should perform the evaluation and approve mitigation measures, if needed.

5.3.2 Mat Slab Foundations –One or Two Level Subterranean

For Mat slab foundation systems, the exposed subgrade soil should be evaluated as recommended for spread footings. Any disturbed, locally soft or expansive soil encountered should be either removed and replaced with compacted fill, or processing (i.e. 12-inch scarification and recompaction) and proof rolling of the subgrade soils exposed at the subterranean level. Acceptance of exposed soil should be performed by the geotechnical consultant and should also approve any mitigation measures, if needed.

5.3.3 Proposed Pavement and Flatwork Areas

In areas outside of proposed structural areas that would support pavement and flatwork, the exposed sub-grade soils should be processed and re-compacted to a depth of 12-inches. If soils are disturbed during the removal of existing improvements, the disturbed soil should be removed and replaced with compacted fill. After removals are made, exposed soils should be scarified to a depth of 6-inches, brought to near optimum moisture content, and re-compacted.

5.4 Processing of Natural Soils and Fill Placement

Processing of in-place soils exposed after clearing, grubbing, and removal of unsuitable material and before placing fill should include the following items of work:

Scarification of the materials exposed after remedial removals should be accomplished to a depth of at least 6 inches or as dictated by actual soil conditions encountered;

The scarified soils should be brought to 2 to 4 percent above optimum moisture content by watering or drying, as required;

Compaction of the processed soils to at least 90 percent of the laboratory maximum dry density before placing fill.

Fill should be placed in relatively thin (6 to 8-inch) uniform lifts; moisture conditioned to 2 to 4 percent above optimum moisture content and compacted to at least 90 percent relative compaction based on ASTM D 1557. Actual lift thickness would depend on soil type and compaction equipment being used.

5.5 Preliminary Recommendations - Proposed Building Foundations

All foundation criteria are considered minimum requirements that may be superseded by more stringent requirements from the architect, structural engineer, or governing agencies; recommended preliminary geotechnical design parameters are being provided for conventional spread footing and reinforced mat slab foundation systems for the residential building; and mat slab for the proposed parking structure with one subterranean level.

5.5.1 Subterranean-Conventional Shallow Foundations

The following preliminary geotechnical design parameters are provided for proposed conventional foundations with one or two levels of subterranean parking. The proposed foundations for the proposed building may be supported by square pad footings utilizing a maximum allowable bearing pressure of 4,000 pounds per square foot with maximum width of 10-feet, and minimum depth of 3-feet below the lowest adjacent grade (including the top of the slab on grade). A coefficient of friction of 0.35 may be used, along with a passive lateral resistance of 200 pounds per square foot per foot of embedment. This bearing value could potentially be increased based on further subsurface exploration and laboratory analysis generated from supplemental investigation.

If normal code requirements are used for seismic design, the allowable bearing value and coefficient of friction may be increased by 1/3 for short duration loads, such as the effect of wind or seismic forces.

If any utility lines are within a 1:1 (horizontal: vertical) projection from the bottom of a footing, they may be within the influence zone of the proposed footing load; if this condition exists, the proposed footing should be deepened so that the utility is outside the zone of influence; the utility line could also be relocated or encased with concrete with concrete slurry. These conditions should be evaluated on a case by case basis.

5.5.2 Subterranean- Mat Slab

A rigid mat foundation may be used to support the structure, provided the recommendations above are implemented. The exposed soil in the excavation should be evaluated and if determined necessary, proof rolled or locally recompacted as needed, in accordance with the recommendations herein. When properly designed and constructed, a structural mat foundation system can be expected to support high structural loads and provide relatively uniform settlement and bridge over local areas of slightly less stiffness or density. Mat foundations should be properly reinforced to form a relatively rigid structural unit in accordance with the structural engineer's design. For designing a mat foundation, we preliminarily recommend a modulus of subgrade reaction of 100 pounds per square inch per inch (pci). This value can be further refined as part of the supplemental investigation.

5.6 Settlement

Static settlement of proposed foundations is not expected to exceed one inch for total and one half inch differential over 50 horizontal feet, provided the minimum remedial earthwork recommendations provided in Section 5.3 is performed for the specific foundation system type. For preliminary design purposes, seismic induced liquefaction settlement for the apartment site ranges froms 0.366 to 2.566 inches. This is considered an acceptable amount of settlement for structural mitigation, however it should be refined and verified during the recommended supplemental investigation. The amount of seismic induced liquefaction would decrease to approximately 0.5 inches or less at one level of subterranean basement grade.

5.7 Slab-On-Grade

These recommendations are provided for planning purposes as the anticipated podium construction would not entail interior slab on grade floors. Additionally, the recommendations are considered minimum requirements that may be superseded by more stringent requirements from the architect, structural engineer, or governing agencies.

Concrete slabs should be at least 5-inches in thickness. Actual slab thickness and reinforcement should be determined by the structural engineer based on structural loads and soil interaction. Our recommendations should be superseded by the recommendations of the structural engineer or architect.

Subgrade soils should be placed wet of the optimum moisture content, and moisture should be maintained until placement of the concrete slab. Additional testing should be performed after precise grading to verify our recommendations.

The slab should be underlain by a minimum two-inch layer of sand, with a sand equivalent of 30 or greater. The sand layer should be underlain by a 15-mil Stego Wrap vapor retarder or equivalent product with a permeance rate of 0.012 perms and a puncture resistance of Class "A" or "B" per ASTM E 1745-97. As per the manufacturer's recommendations, all seams should overlap a minimum of 6 inches and should be sealed in accordance with the specifications provided by the vapor retarder manufacturer. All penetrations should be sealed using a combination of Stego Wrap, Stego Tape and/or Stego Mastic or approved equivalent product. The vapor retarder should be lapped downward a minimum of 12 inches where the vapor retarder encounters an interior footing or exterior thickened edge or footing. The vapor retarder should be placed on top of the sand layer if the sand is expected to become wet before pouring concrete. If the sand can be kept dry before pouring concrete, the vapor retarder should be placed under the sand layer. The water-cement ratio should be a minimum of 0.45 for all concrete within the structure that will contact the on-site soil.

If moisture sensitive floor coverings are utilized, interior concrete slabs should be designed and constructed in accordance with the applicable floor covering manufacturer's specifications.

Slab subgrade soil should be pre-saturated to at least optimum moisture content to a depth of at least 12 inches below the sand layer.

5.7.1 Basement Slab on Grade Floors

Parking garage basement slab in grade floors, other than a mat slab, should be a minimum of 5-inches in thickness and reinforced to resist shrinkage and temperature warping cracking. Actual slab thickness and steel reinforcement should be determined by the structural engineer based on environmental factors and concrete shrinkage considerations. An aggregate base layer may be required depending on the subgrade soils exposed during construction or determined from the supplemental investigation.

5.8 Permanent Subterranean Walls

We anticipate that where temporary shoring is installed, the permanent restrained retaining walls for the subterranean level will predominantly be placed directly against the temporary shoring. The design parameters provided below assume that granular non-expansive soils (Expansion Index <20 and SE≥30) are used to back-fill any retaining walls. Permanent subterranean walls should be designed to resist the pressure exerted by retained soils plus any additional lateral forces due to loads placed adjacent to or near the wall. Retaining walls that are free-draining, are situated above groundwater and are to be restrained from movement at the top, such as basement walls, should be designed for an equivalent fluid weight of 70 pcf for at-rest conditions (for a level surface of retained earth). If traffic loads are planned adjacent to the walls, the walls should be designed for an additional uniform horizontal pressure of 75 and 150 psf for passenger car and truck traffic, respectively. For other surcharge loads, we recommend the walls be designed to resist a uniform horizontal pressure equal to 30 percent of the uniform surcharge load.

If back-fill conditions (including the slope of the retained ground surface) differ from those assumed herein, Kling Consulting Group should be consulted to provide additional evaluation and/or recommendations as warranted. All retaining structures should be fully free draining. Building walls below grade should be waterproofed or damp-proofed, depending on the degree of moisture protection desired. The foundation system for the retaining walls should be designed in accordance with the recommendations presented in the preceding sections of this report, as appropriate. Footings should be embedded at a minimum of 18-inches below adjacent grade (excluding the 6-inch landscape layer).

For resistance to lateral loads, an allowable coefficient of friction of 0.35 between the base of the foundation elements and underlying material is recommended. In addition, an allowable passive resistance equal to an equivalent fluid weighing 200 pcf acting against the foundation may be used to resist lateral forces. Passive pressure in the upper 1.0-foot should be neglected unless confined by concrete slabs-on-grade or asphaltic pavement. These values may be increased by one-third for transient wind or seismic loads. A seismic surcharge of 19 H should be applied as an equivalent fluid pressure with the resultant acting at 1/3-height above the base of the wall, where H= the retained height of the wall greater than 6 feet.

The permanent subterranean wall should be provided with an adequate back drain system to reduce the potential for build-up of hydrostatic pressures.

Adequate drainage should be provided behind all retaining walls. The drainage system should consist of a minimum of four-inch diameter perforated PVC pipe (schedule 40 or approved equivalent) placed at the base of the retaining wall and surrounded by ¾-inch clean crushed rock wrapped in a Mirafi 140N filter fabric, or equivalent approved by the Geotechnical Engineer. The drain rock wrapped in fabric should be at least 12-inches wide and extend from the base of the wall to within two feet of the ground surface. The upper two feet of back-fill should consist of compacted native soil. The retaining wall drainage system should be sloped to outfall to the storm drain system or other appropriate facility.

For those portions of the wall not placed against shoring, the above values assume granular back-fill and free-draining conditions to prevent buildup of hydrostatic pressure in the back-fill. Back-fill materials should meet the recommendations described in the following section of this report. Import fill materials should be approved by the soils engineer prior to placement. Wall back-fill should be compacted by mechanical methods to at least 90 percent of the maximum dry density as determined by ASTM D 1557.

5.9 Temporary Excavations

We anticipate the on-site soils can be excavated using conventional heavy duty earthmoving equipment in good condition. Shoring systems, if used, may yield during excavation causing adjacent facilities and improvements to settle slightly. The magnitude of shoring movements and the resulting settlements are difficult to estimate because they depend on many factors, including the method of installation and the contractor's skill with installing the shoring system. Lateral deflections for a properly designed and constructed shoring system would likely be within ordinarily accepted limits of approximately 1-inch. A monitoring program should be established to evaluate the effects of shoring construction on other facilities.

Provided the excavations are above groundwater, temporary excavations and trench walls to a depth of four feet may be made vertically without shoring, subject to verification of safety by the contractor. Deeper excavations should be no steeper than 1.5:1 (horizontal to vertical) or braced or shored in accordance with CAL OSHA standards and guidelines. The contractor is assumed responsible for maintaining safety at the jobsite. All excavation work should be in compliance with current CAL OSHA standards. Under no circumstances should excavations be made deeper than four feet or below groundwater without shoring, bracing or laying-back, in accordance with CAL OSHA standards and guidelines. No surcharge loads should be allowed within five feet from the top of the cuts.

Existing utility lines, roadways and other easements/right-of-ways may be impacted by the temporary excavations may require shoring to obtain the full depth of the excavation.

5.10 Shoring

It is understood that a temporary or permanent shoring system may be warranted for areas of proposed subterranean basement excavation where space is not available for properly sloped backcuts. The shoring contractor should coordinate with the earthmoving contractor regarding sequence and requirements of installing the shoring system. The shoring contractor should also consider the potential for localized perched groundwater in the design and installation procedures of the shoring system.

We anticipate that the shoring system will be designed as a cantilever system and may consist of closely spaced steel H-Pile soldier piles and wooden lagging. Preliminary design considerations are presented in the following section for this anticipated shoring method. Please note that the method of temporary support can impact the design earth pressures. As such, Kling Consulting Group should perform a review of the shoring design and provide additional recommendations, as warranted.

Shoring systems, during excavation, may yield causing adjacent facilities and improvements to settle slightly. The magnitude of shoring movements and the resulting settlements are difficult to estimate because they depend on many factors, including the method of installation and the contractor's skill with installing the shoring system. Lateral deflections for a properly designed and constructed shoring system would likely be within ordinarily accepted limits of approximately 1-inch. A monitoring program should be established to evaluate the effects of shoring construction on other facilities.

Horizontal and vertical movements of the shoring system should be monitored by a licensed surveyor. The construction monitoring and performance of the shoring system are ultimately the contractor's responsibility. At a minimum, we recommend that the tops of the soldier beams should be surveyed prior to excavation and that the top and bottom of the soldier beams be surveyed on a weekly basis until the foundation is completed. The surveyed soldier beam data points should be located at approximately 50 feet on-center. Surveying should consist of measuring movements in vertical and two perpendicular horizontal directions.

The shoring system should be designed to resist the pressure exerted by the retained soils plus any additional lateral forces due to loads applied near the top of the excavations. Cantilever shoring walls with a level back-fill surface should be designed for an equivalent fluid pressure of 45 pcf (active pressure). For surcharge loads due to traffic, the shoring should be designed for an additional uniform horizontal pressure of 75 psf for passenger car traffic and 150 psf for heavy truck traffic. For other surcharge loads, the wall should be designed for a uniform horizontal pressure equal to one-third the anticipated surcharge pressure. These parameters all assume a level ground surface and that temporary shoring will not be subject to hydrostatic pressures. The shoring system should be properly embedded beneath the toe of the excavation to provide adequate structural stability.

It is recommended that the design of the shoring system incorporate a passive equivalent fluid weight of 200 pcf for the shoring embedded within relatively competent old paralic deposits material. The soldier piles should be spaced no closer than 3 diameters on center. The soldier piles should be drilled and back-filled with concrete to the full depth of the passive resistance zone. The area providing the passive resistance can be assumed to have a width equal to twice the concrete pile diameter.

The recommended passive pressure for the shoring assumes a horizontal surface for the soil mass extending at least 10 feet in front of the face of the shoring, or three times the height of the surface generating passive pressure, whichever is greater. The shoring system should be embedded a sufficient depth beneath the toe of the excavation so as to provide structural stability. We recommend that a factor of safety of at least 1.2 be applied to the calculated embedment depth and that the passive pressure be limited to 2,500 psf. The assumed geotechnical conditions should be verified as necessary during shoring construction by a representative of the geotechnical consultant.

Timber lagging may be used between the soldier piles to help support the exposed soils. If lagging is to remain after construction, treated lumber should be used. Lagging should be designed for the full lateral pressure recommended above. If possible, structural walls should be cast directly against the shoring, thus eliminating the need for placing back-fill within a narrow space. Voids between the soil and lagging should be properly grouted or slurried to reduce the potential for the voids to propagate to the surface.

Special provisions for wall drainage (such as the use of prefabricated composite drain) may be necessary above the groundwater table where this type of construction is used.

The performance of the proposed shoring system is highly dependent on the means and methods utilized by the contractors involved in the work and the judgment of the shoring design engineer. The shoring engineer and contractor shall be solely responsible for locating the existing improvements surrounding the site, controlling settlements of the surrounding structures and improvements within the structural and aesthetic limits. Load path and loading determination for underpinning design is the purview of the structural underpinning designer.

If the anticipated depth of excavation requires shoring that extends to depths where a cantilever shoring system is not feasible, we would be pleased to provide geotechnical recommendations for an anchored (tie-back) shoring system upon request. With deep excavations required to allow for the construction of subterranean levels that would normally require tie-back anchors, due to the proximity to the adjacent properties or structures tie-back systems may not be allowed and other options such as H-beam and lagging or rakers may be required.

5.11 Preliminary Pavement Design

Pavement section design is provided below based on near surface soil conditions encountered during our investigation and assumed traffic loading.

5.11.1 Asphalt Concrete Pavement

The upper on-site subgrade soils were classified as silty clays and clayey silts and sandy silts. To allow for soil variability, we are assuming an R-Value of 10 for preliminary design purposes.

Based on an R-value of 10, the parameters below are provided for preliminary design purposes. Pavement sections were calculated for traffic indices of 4.0 and 5.5, which are commonly used for parking stalls and drive aisles subject to passenger vehicles, respectively. However, the selection of actual traffic index should be the purview of the project civil or traffic engineer.

Pavement Section Design

Location	R-Value	Traffic Index	Multiple Layered	
			Asphalt Concrete (inches)	Aggregate Base* (inches)
Parking Stall	10	4.0	3.0	6.0
Drive Aisles	10	5.5	4.0	9.0

*Aggregate base material should consist of Class 2 aggregate base materials or Crushed Miscellaneous Base (CMB).

The upper 12 inches of the subgrade soils should be compacted to at least 90 percent of the laboratory maximum dry density (ASTM D1557). All base materials should be compacted to at least 95 percent of the laboratory maximum dry density (ASTM D1557).

5.11.2 Portland Cement Concrete Pavement

For preliminary design of concrete pavement, it is recommended that a concrete pavement section consisting of 6-inches of concrete underlain by at least 6-inches of either Class 2 or crushed miscellaneous base be used for preliminary design. Concrete Compressive strength should be 4000 psi or greater. Aggregate base material should be compacted to a minimum of 95 percent relative compaction as per ASTM D1557. Subgrade soil should be compacted to at least 90 percent of the laboratory maximum dry density in accordance with ASTM D1557. If concrete crack control is desired, the slabs should be minimally reinforced with No. 4 rebar, placed every 24 inches on center, both ways. A 10-foot square or less grid system should be used in the construction of continuous sections of concrete pavement or as recommended by the structural engineer.

For trash enclosures, concrete pavement should consist of a minimum 8-inch thick concrete slab placed over a minimum of 6-inches of either Class 2 or crushed miscellaneous base material, compacted to 95 percent relative compaction. Concrete should have a minimum strength of 4000 psi and be reinforced with a minimum of No. 4 bars placed at 24 inches on center, in each direction, positively supported (with concrete chairs or other devices) at mid-height in the slab. Crack control joints should be placed at a 10-foot maximum spacing in each direction in the slab or as recommended by the structural engineer. Concrete mix design should incorporate the recommendations presented in the slab on grade section of this report for improved geotechnical performance.

5.12 Exterior Flatwork

Laboratory testing of soils nearby the subject site and our experience with similar soils in the site vicinity indicate that the upper on-site soil materials present possess a very low to high expansion potential. **Appendix E** contains a table listing our hardscape recommendations for varying degrees of expansive soils. This table should be preliminarily followed for a low to high expansion potential for Expansion Index (E.I.) = 21 to 130. Additional testing should be performed during future supplemental investigation and subsequently during earthwork construction to confirm the as graded conditions.

The following general recommendations may be considered for concrete hardscape including expansive soils mitigation and may be superseded by the requirements of the City of Newport Beach. These recommendations are based on “medium” expansion potential and are preliminary.

5.12.1 Sidewalk, Pedestrian Walkways

Expansion Potential	Minimum Concrete Thickness (in)	Subgrade Pre-Soaking Depth	Reinforcement	Joint * Spacing
Medium (EI >51 & <90)	4 (Full)	120% of Optimum to 18" (or 5% over optimum,	#3 @ 16" OC, EW	4-5 Feet

* Joints at curves and angle points are recommended.

The above recommendations may be superseded by the project architect, structural engineer or the governing agency's requirements. These recommendations are not intended to mitigate cracking caused by shrinkage and temperature warping.

5.13 Drainage

Positive drainage should be maintained away from any building or graded slope face and directed to suitable areas via non-erosive devices, as designed by the project civil engineer. For drainage over soil and paved areas immediately adjacent to structures, please refer to Section 1804.4 of the 2022 CBC.

5.14 Geotechnical Observation and Testing

Geotechnical observation and testing should be conducted during the following stages of grading:

- During all phases of precise grading, footing excavations, etc.
- During slab subgrade pre-saturation and moisture conditioning.
- During utility trench excavation and compaction.
- During placement of retaining wall sub-drainage, back-fill, and compaction.
- For any unusual conditions encountered during grading.

6.0 PROFESSIONAL LIMITATIONS

Geotechnical services are provided by KCG in accordance with generally accepted professional engineering and geologic practice in the area where these services are to be rendered. Client acknowledges that the present standard in the engineering and geologic and environmental profession does not include a guarantee of perfection and, except as expressly set forth in the conditions above, no warranty, expressed or implied, is extended by KCG.

Geotechnical reports are based on the project description and proposed scope of work as described in the proposal. Our conclusions and recommendations are based on the results of the field, laboratory, and office studies, combined with an interpolation and extrapolation of soil conditions as described in the report. The results reflect our geotechnical interpretation of the limited direct evidence obtained. Our conclusions and recommendations are made contingent upon the opportunity for KCG to continue to provide geotechnical services beyond the scope in the proposal to include all geotechnical services. If parties other than KCG are engaged to provide such services, they must be notified that they will be required to assume complete responsibility for the geotechnical work of the project by concurring with the recommendations in our report or providing alternate recommendations.

It is the reader's responsibility to verify the correct interpretation and intention of the recommendations presented herein. KCG assumes no responsibility for misunderstandings or improper interpretations that result in unsatisfactory or unsafe work products. It is the reader's further responsibility to acquire copies of any supplemental reports, addenda, or responses to public agency reviews that may supersede recommendations in this report.

APPENDIX A

REFERENCES

APPENDIX A

REFERENCES

1. American Society of Civil Engineers (ASCE), 2022, ASCE 7 Hazard Tool: https://asce7hazardtool.online/, accessed January, 2023.

2. American Society of Civil Engineers (ASCE), 2022, *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*.

3. American Society for Testing and Materials (ASTM), 2018, Annual Book of ASTM Standards, Volume 04.08, Construction: Soil and Rock (I), Standards D 420 - D 5876

4. American Concrete Institute, 2014, Manual of Concrete Practice, Volume 1 through 6.

5. California Building Standards Commission, 2022, California Building Code, Volume 2.

6. California Department of Water Resources, 2020, Groundwater Level Data, accessed January 2023 URL: http://www.water.ca.gov/waterdatalibrary/.

7. California Geologic Survey (CGS), Compilation of Quaternary Surficial Deposits: https://maps.conservation.ca.gov/cgs/qsd/app/, Accessed January 2023.

8. California Geological Survey, 2001, Seismic Hazard Zones, Tustin Quadrangle, dated revised January 17, 2001.

9. California Geological Survey, Department of Conservation, Division of Mines of Geology, 1998, "Seismic Hazard Zone Report for the Tustin 7.5-Minute Quadrangle", Seismic Hazard Zone Report 012, Tustin, CA.

10. Cubrinovski, M. Robinson, K. Taylor, M. Hughes, M. Orense, R. (2012) Lateral spreading and its impacts in urban areas in the 2010–2011 Christchurch earthquakes, New Zealand Journal of Geology and Geophysics, 55:3, 255-269, DOI: 10.1080/00288306.2012.699895

11. Geologismiki, 2007, CLiq, Liquefaction Software, Version 1.7.

12. Google® Maps®, Accessed January 2023.

13. USGS, National Geologic Map Data Base (NGMDB), https://ngmdb.usgs.gov/mapview/, accessed January, 2023

14. USGS, topoView, https://ngmdb.usgs.gov/topoview/, accessed January, 2023.

APPENDIX A

REFERENCES
(continued)

15. USGS, Unified Hazard Tool, https://earthquake.usgs.gov/hazards/interactive/, accessed January, 2023

16. Youd, T. L., Hansen, C. M., and Bartlett, S. F. ~2002!. *Revised multilinear regression equations for prediction of lateral spread displacement.* J. Geotech. Geoenviron. Eng., 1007–1017

17. Zhang, G. Robertson, P.K. 2004. *Estimating Liquefaction-Induced Lateral Displacements Using the Standard Penetration Test or Cone Penetration Test.* Journal of Geotechnical and Geoenvironmental Engineering.

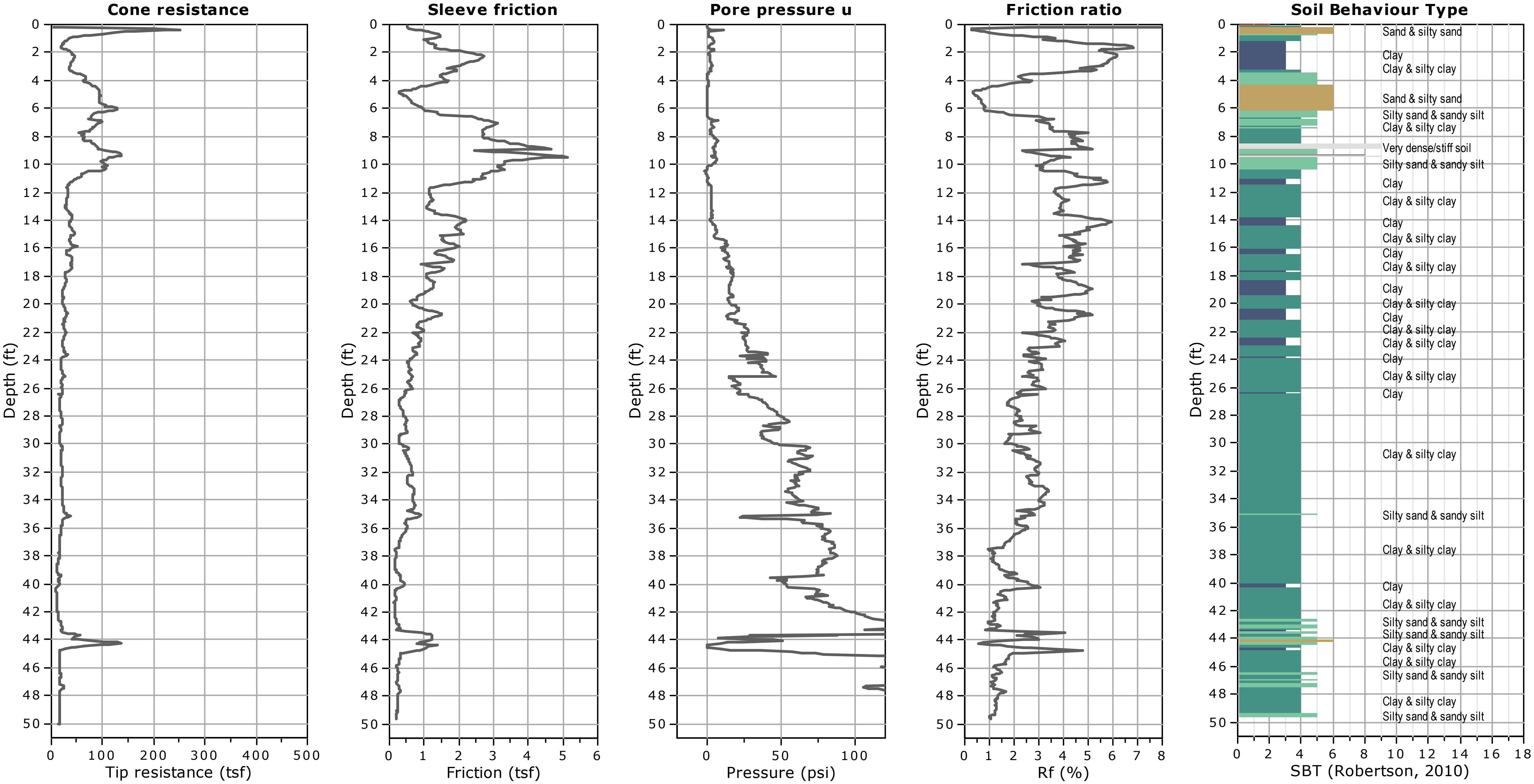
APPENDIX B

CPT SOUNDINGS

Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Kling Consulting Group / Picerne Group**
Location: **1600 Dove St, Newport Beach, CA**

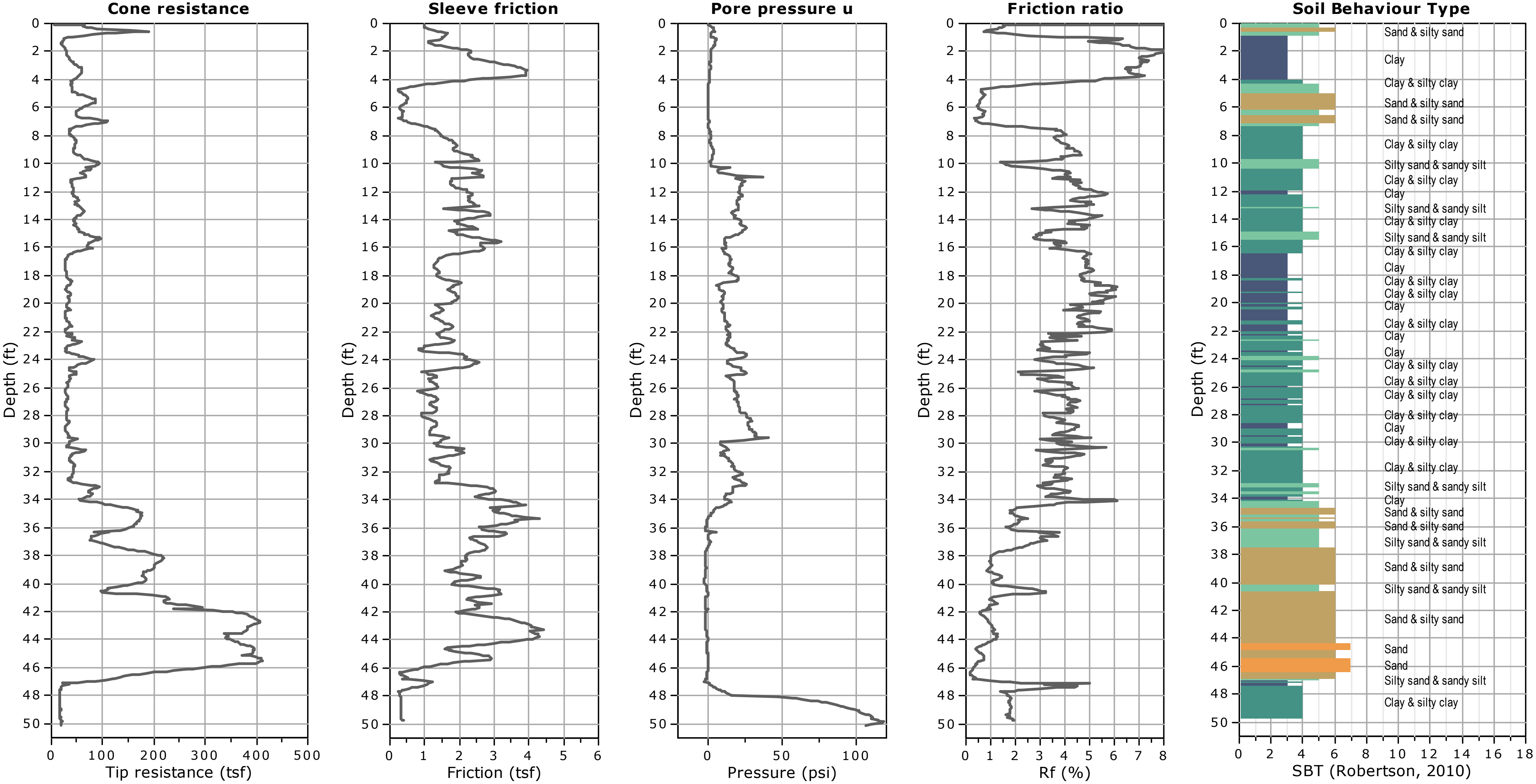
CPT-1
Total depth: 50.07 ft, Date: 1/9/2023



Kehoe Testing and Engineering
714-901-7270
steve@kehoetesting.com
www.kehoetesting.com

Project: **Kling Consulting Group / Picerne Group**
Location: **1600 Dove St, Newport Beach, CA**

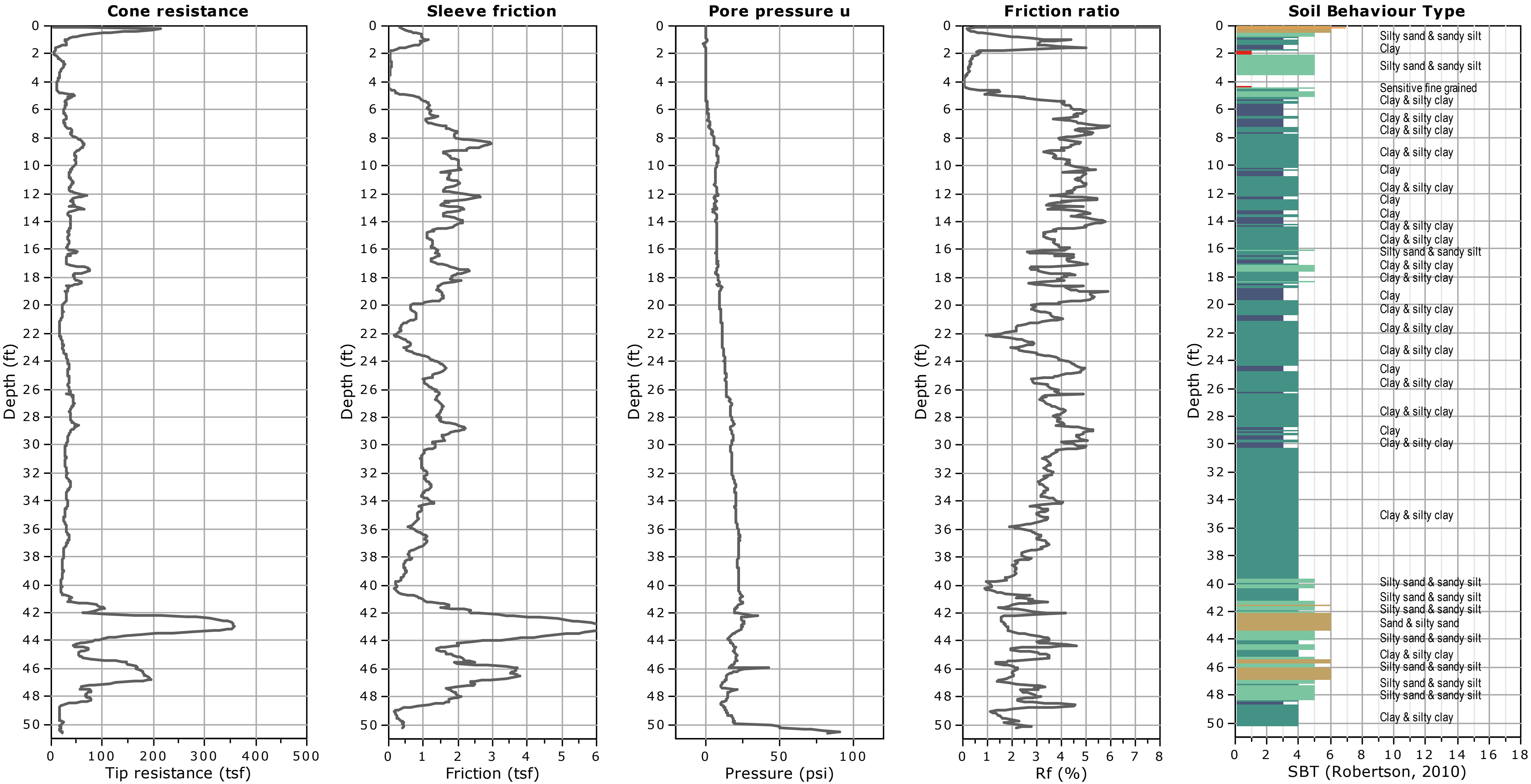
CPT-2
Total depth: 50.11 ft, Date: 1/9/2023



Project: **Kling Consulting Group / Picerne Group**
Location: **1600 Dove St, Newport Beach, CA**

CPT-3

Total depth: 50.60 ft, Date: 1/9/2023



APPENDIX C

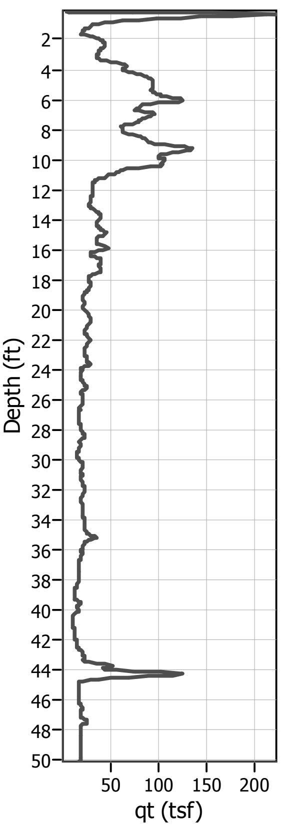
LIQUEFACTION AND SEISMIC SETTLEMENT ASSESSMENT

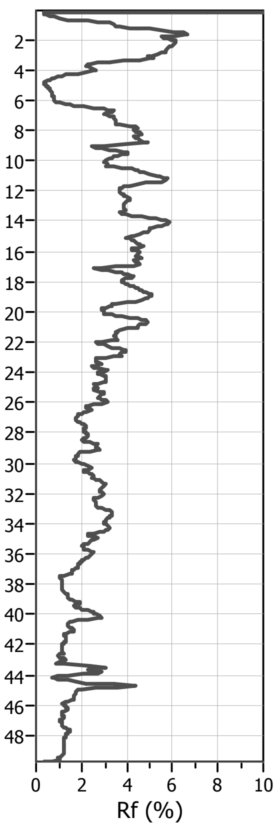
Project title : **Location :**

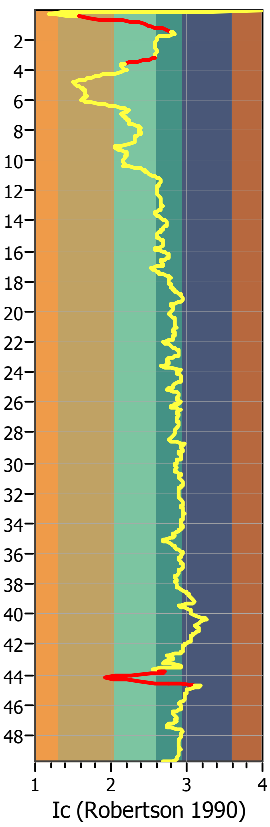
CPT file : CPT-1

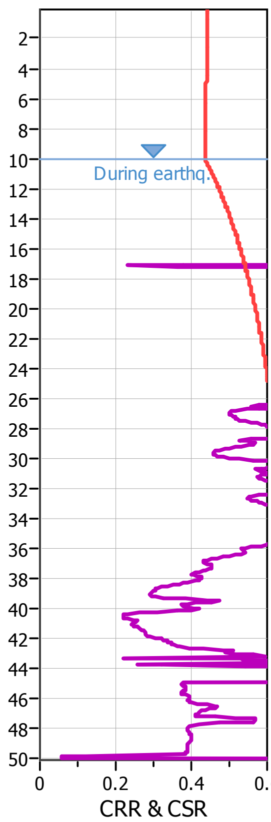
Input parameters and analysis data

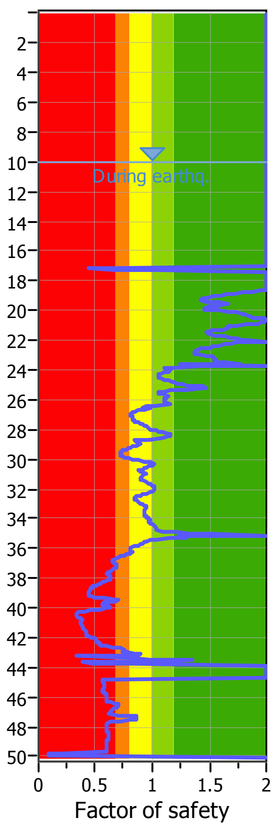
Analysis method:	Robertson (2009)	G.W.T. (in-situ):	18.00 ft	Use fill:	No	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	7.69	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.64	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

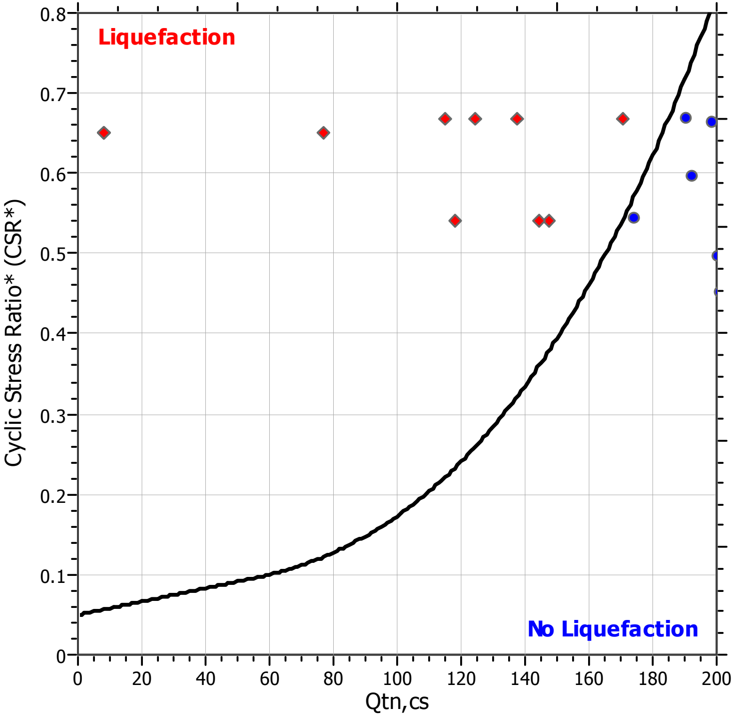

Cone resistance

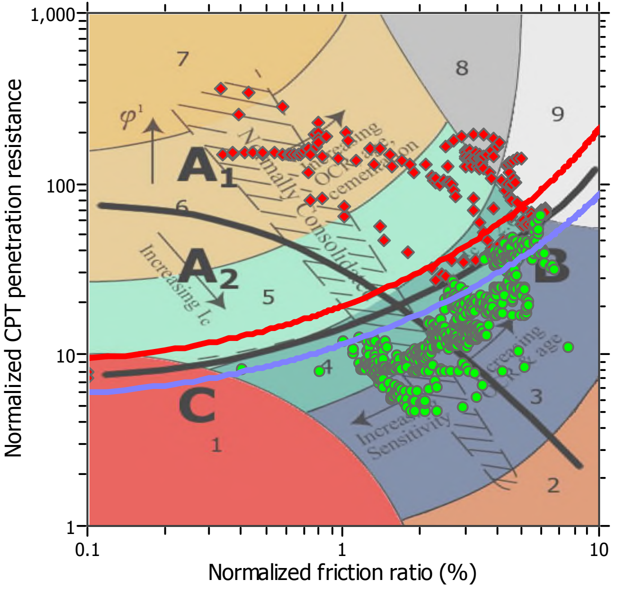

Friction Ratio


SBTn Plot


CRR plot

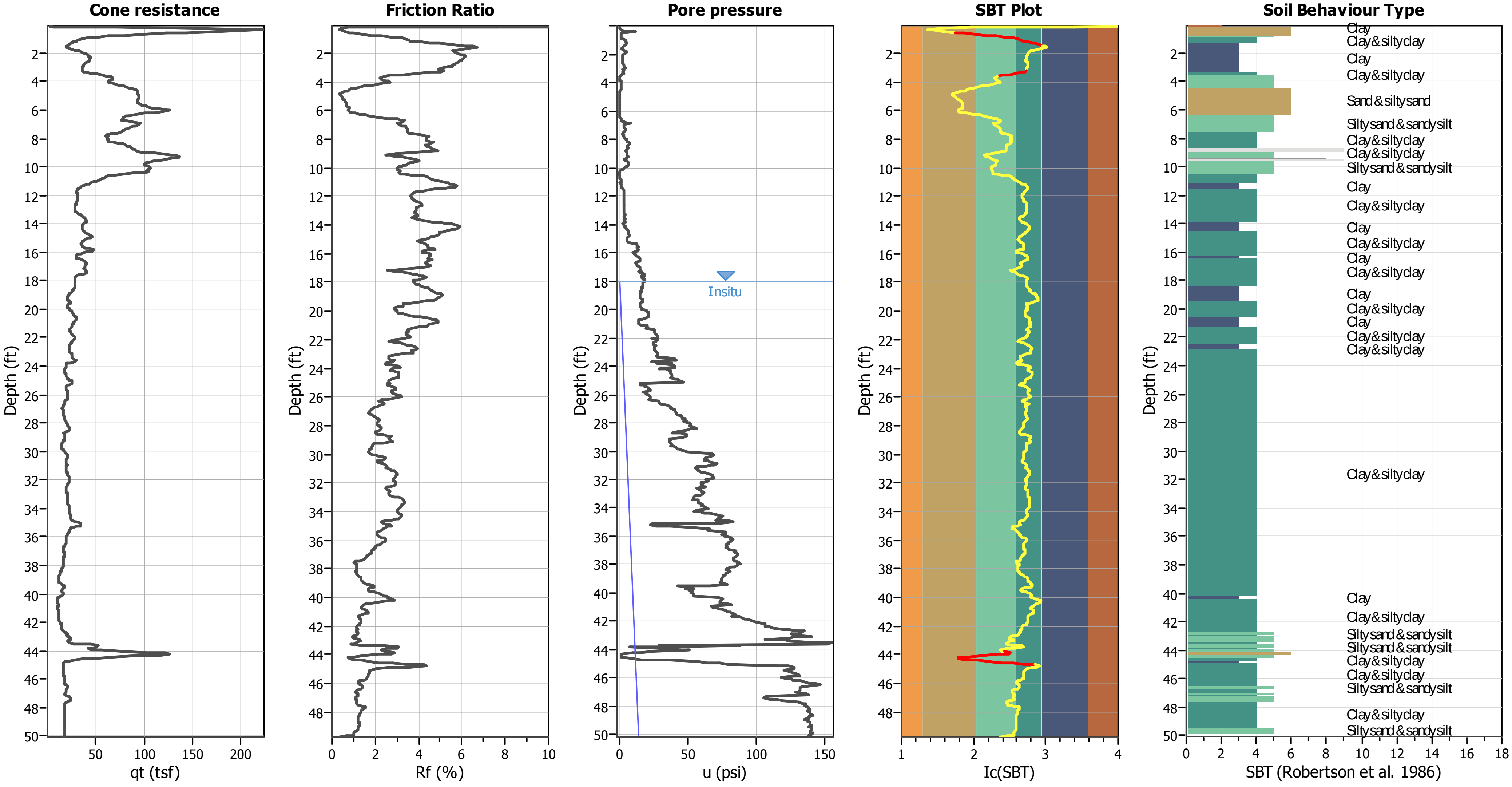

FS Plot


$M_w=7^{1/2}$, sigma'=1 atm base curve


Summary of liquefaction potential

Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



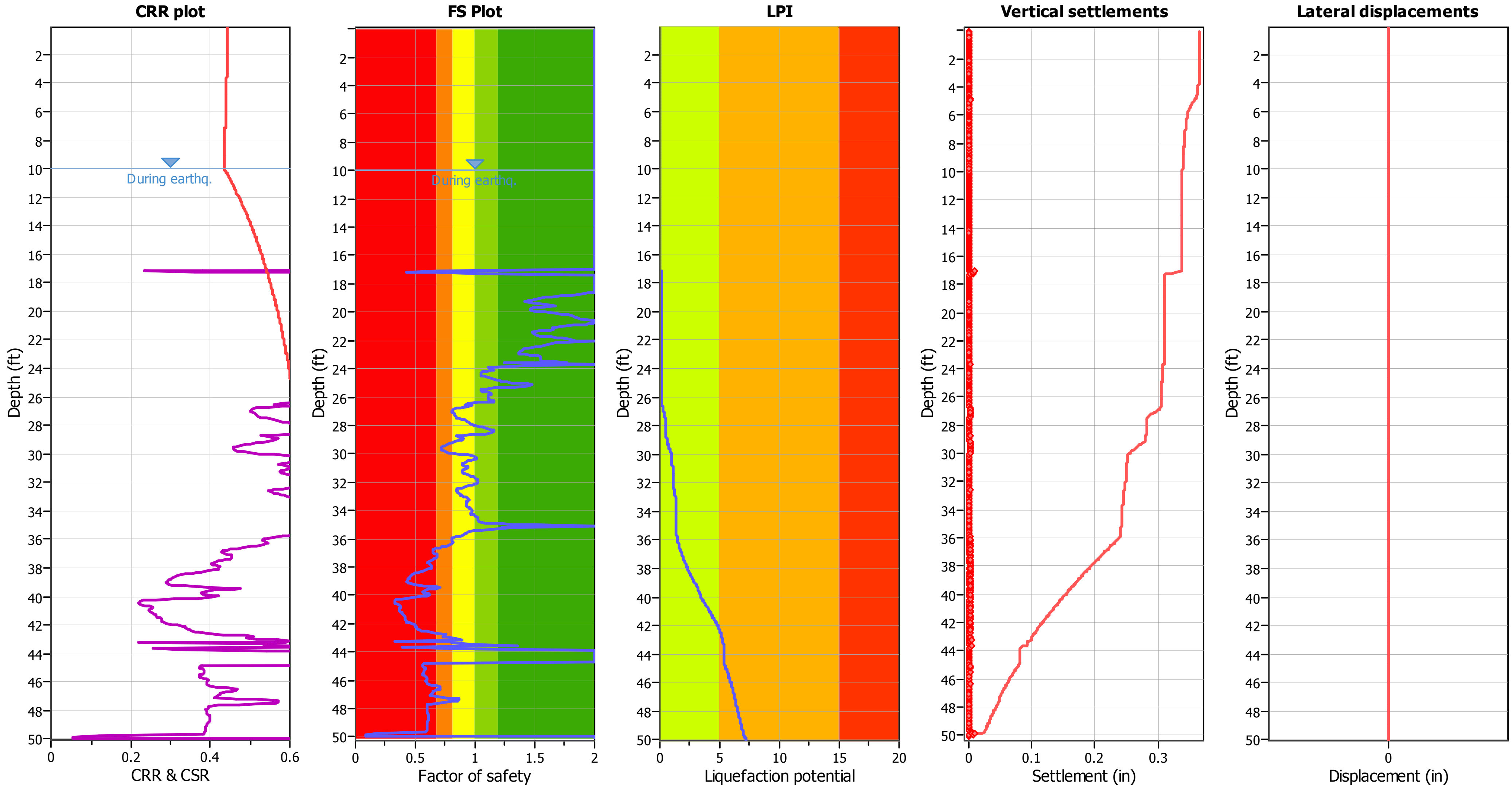
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.69	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.64	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	18.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

☐ 1. Sensitive fine grained
☐ 2. Organic material
☐ 3. Clay to silty clay
☐ 4. Clayey silt to silty
☐ 5. Silty sand to sandy silt
☐ 6. Clean sand to silty sand
☐ 7. Gravely sand to sand
☐ 8. Very stiff sand to
☐ 9. Very stiff fine grained

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.69	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.64	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	18.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

F.S. color scheme

- ☐ Almost certain it will liquefy
- ☐ Very likely to liquefy
- ☐ Liquefaction and no liq. are equally likely
- ☐ Unlike to liquefy
- ☐ Almost certain it will not liquefy

LPI color scheme

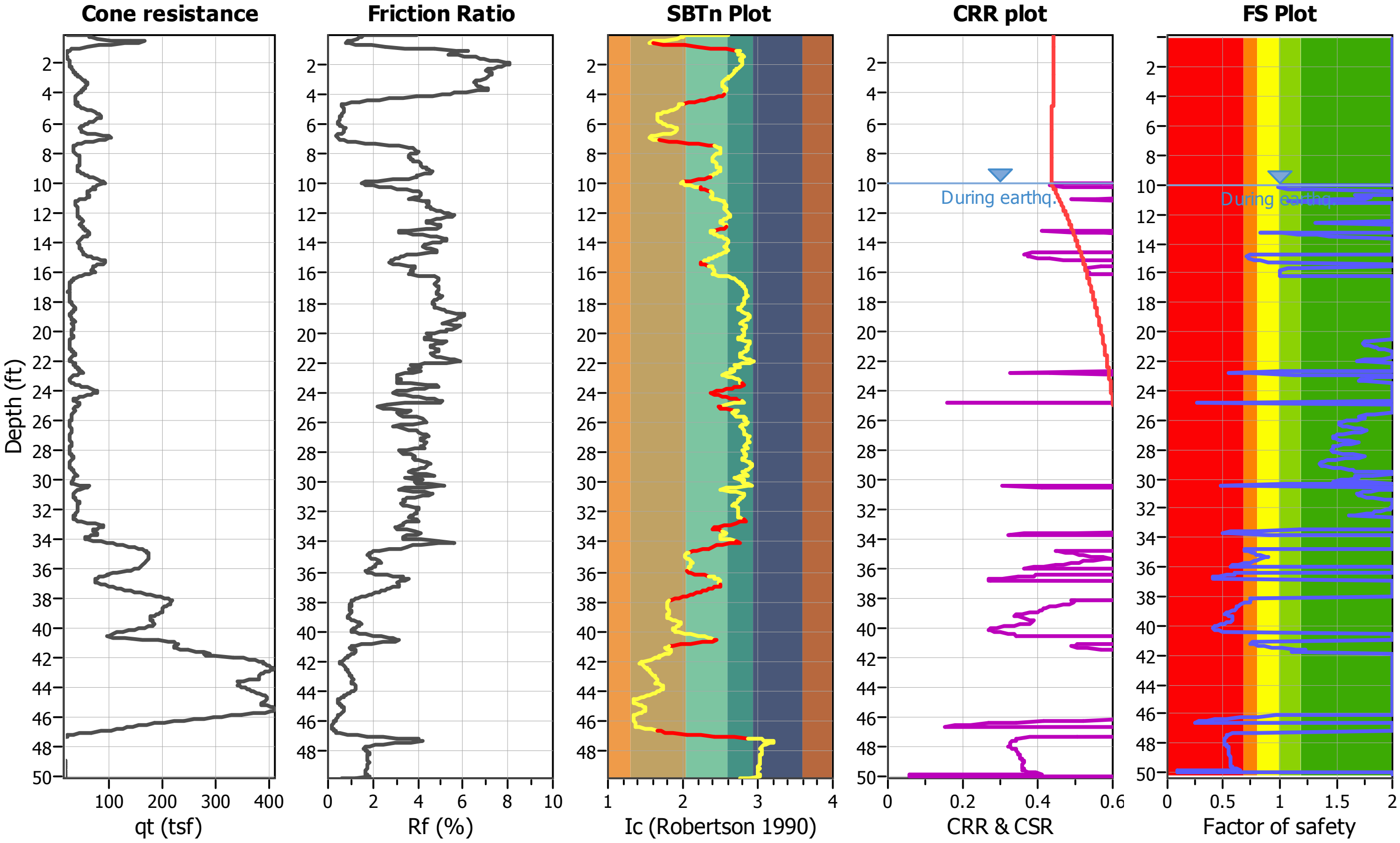
- ☐ Very high risk
- ☐ High risk
- ☐ Low risk

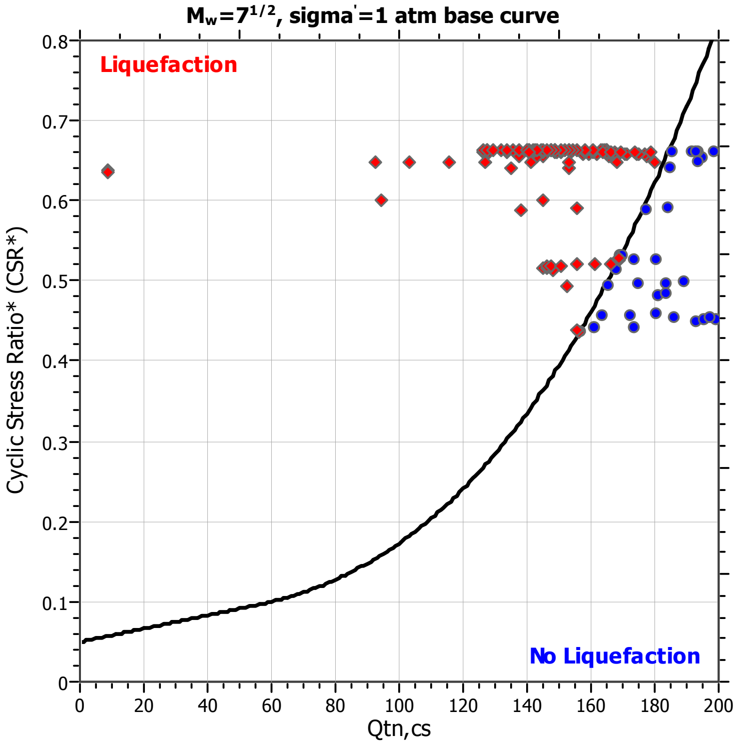
Project title : **Location :**

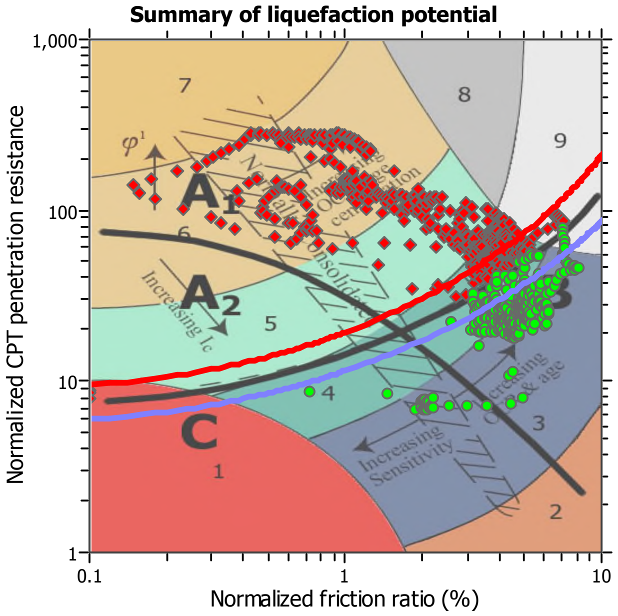
CPT file : CPT-2

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	18.00 ft	Use fill:	No	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	7.69	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.64	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

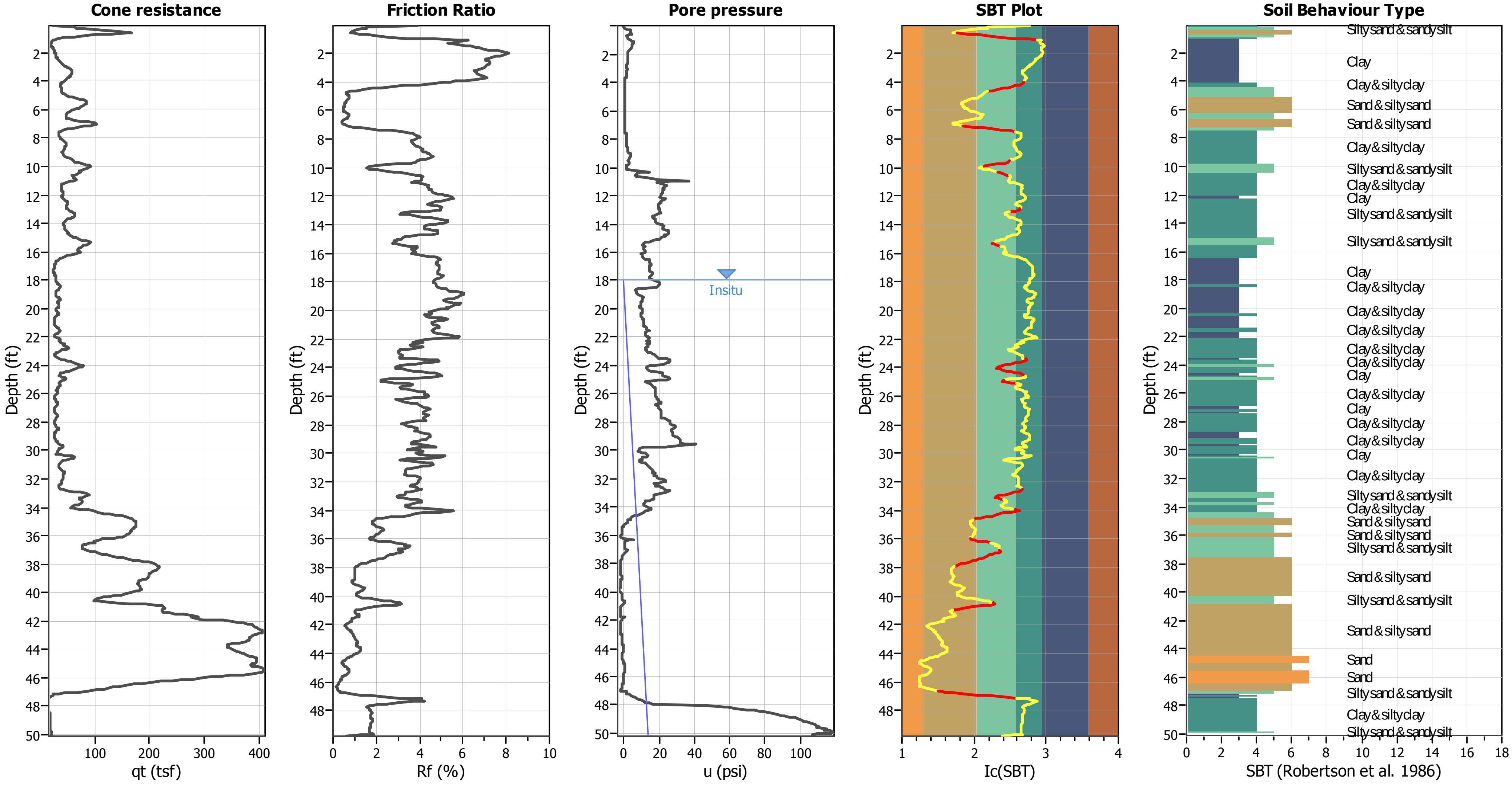






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



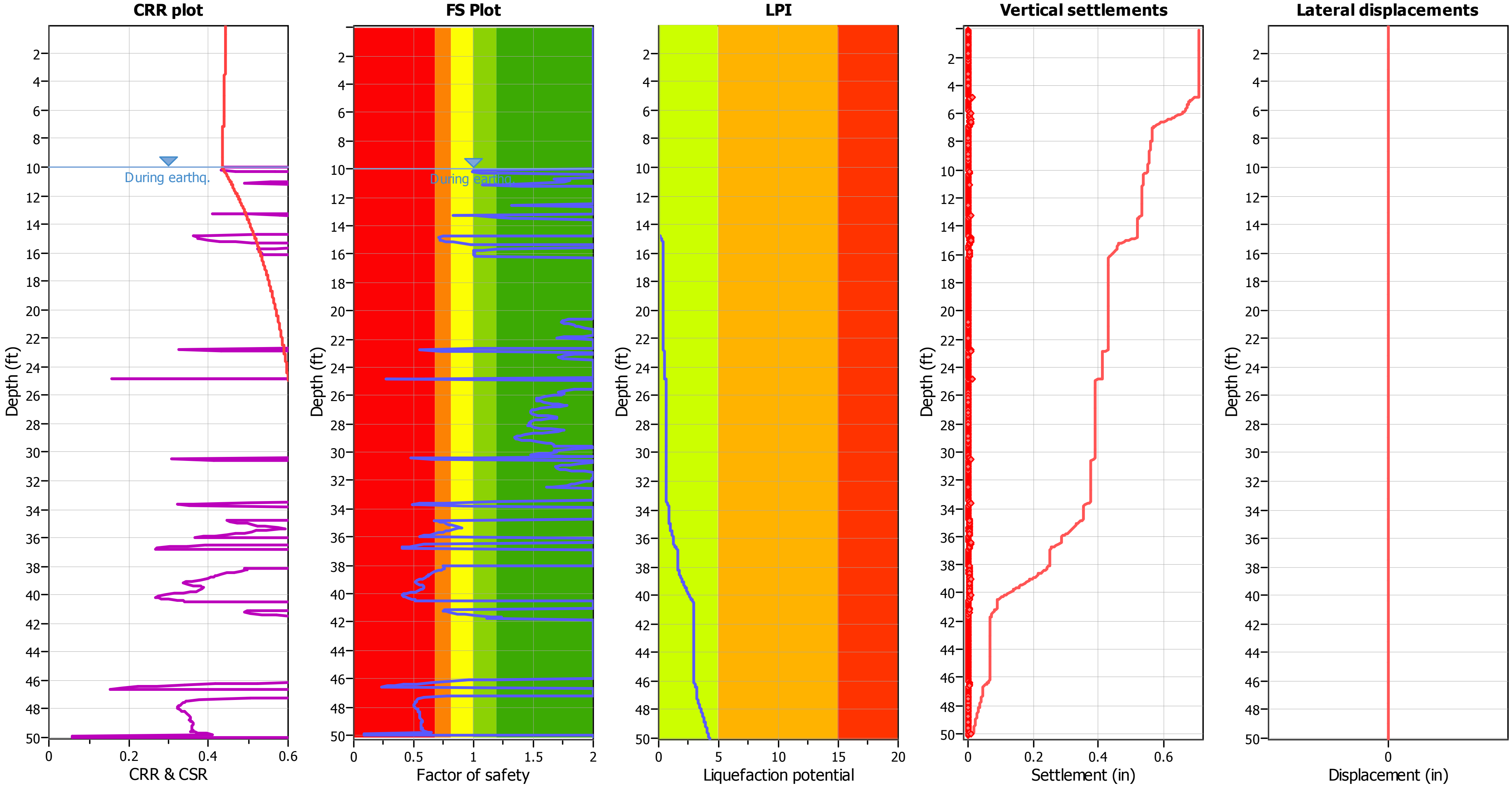
Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.69	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.64	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	18.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

SBT legend

☐ 1. Sensitive fine grained
☐ 2. Organic material
☐ 3. Clay to silty clay
☐ 4. Clayey silt to silty
☐ 5. Silty sand to sandy silt
☐ 6. Clean sand to silty sand
☐ 7. Gravely sand to sand
☐ 8. Very stiff sand to
☐ 9. Very stiff fine grained

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.69	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.64	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	18.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

F.S. color scheme

- ☐ Almost certain it will liquefy
- ☐ Very likely to liquefy
- ☐ Liquefaction and no liq. are equally likely
- ☐ Unlike to liquefy
- ☐ Almost certain it will not liquefy

LPI color scheme

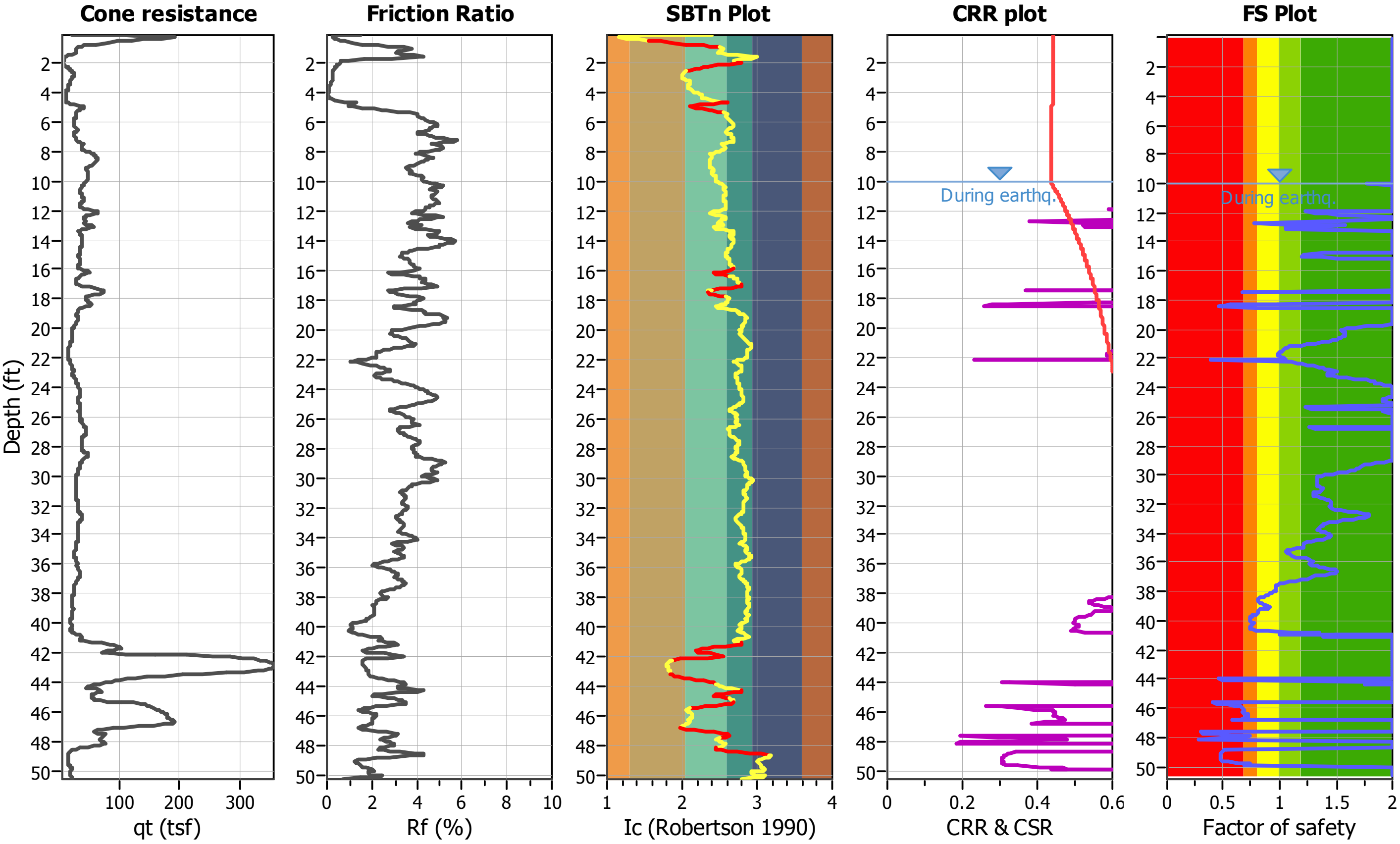
- ☐ Very high risk
- ☐ High risk
- ☐ Low risk

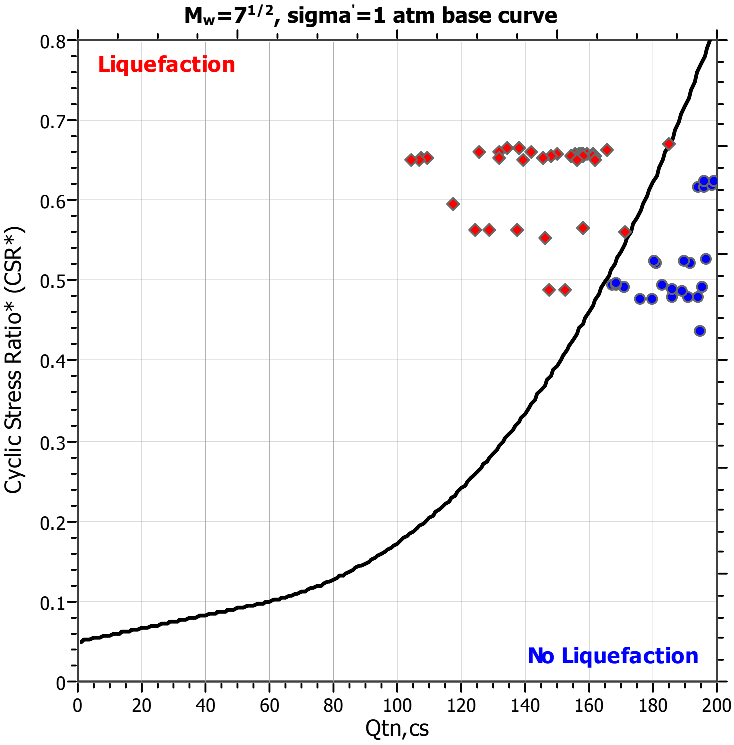
Project title : **Location :**

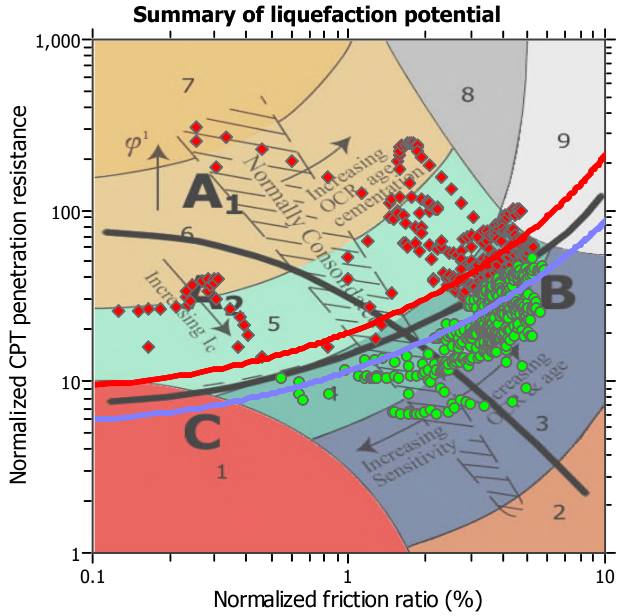
CPT file : CPT-3

Input parameters and analysis data

Analysis method:	Robertson (2009)	G.W.T. (in-situ):	18.00 ft	Use fill:	No	Clay like behavior applied:	All soils
Fines correction method:	Robertson (2009)	G.W.T. (earthq.):	10.00 ft	Fill height:	N/A	Limit depth applied:	Yes
Points to test:	Based on Ic value	Average results interval:	3	Fill weight:	N/A	Limit depth:	50.00 ft
Earthquake magnitude M_w:	7.69	Ic cut-off value:	2.60	Trans. detect. applied:	Yes	MSF method:	Method based
Peak ground acceleration:	0.64	Unit weight calculation:	Based on SBT	K_σ applied:	Yes		

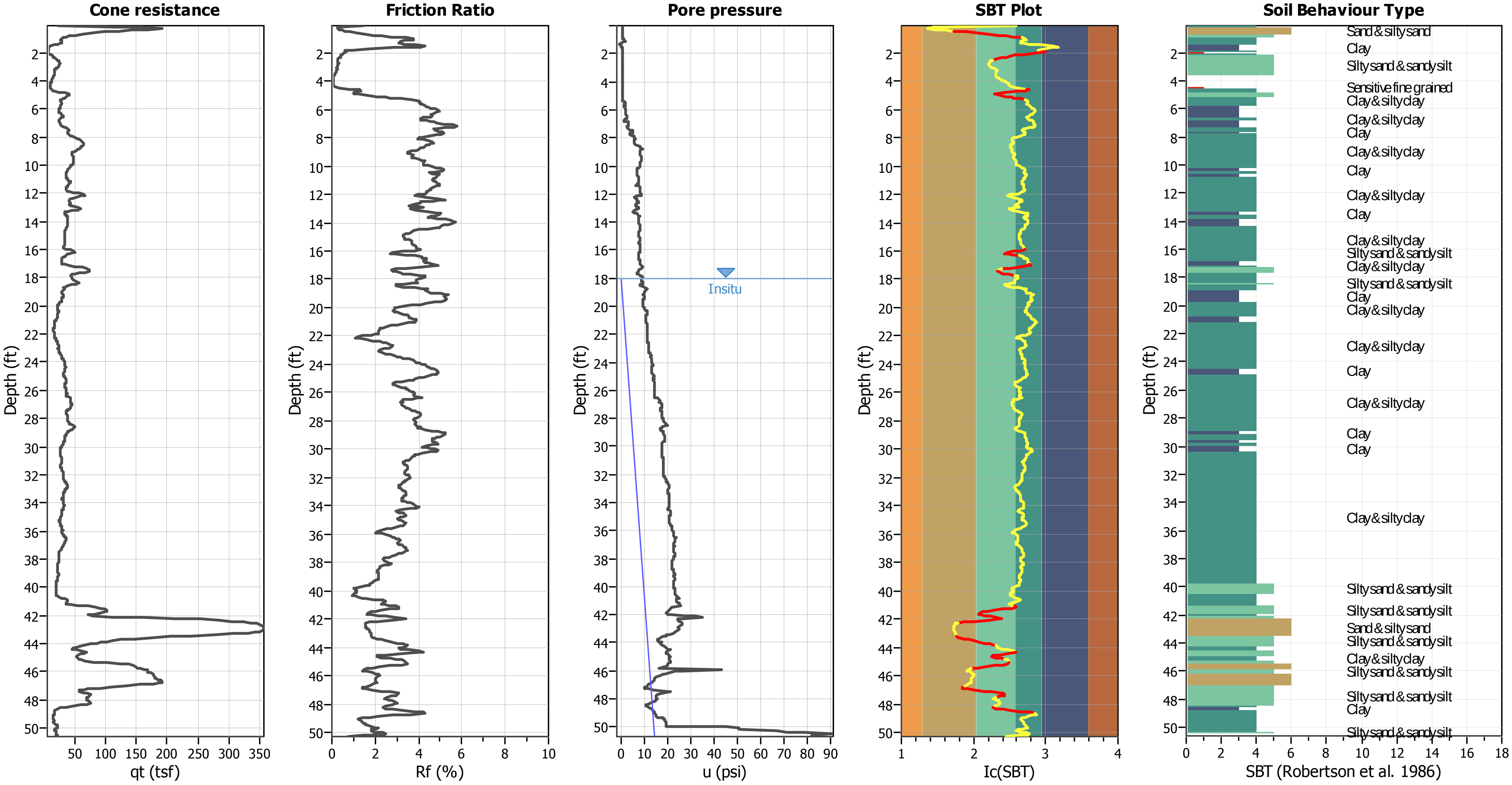






Zone A_1: Cyclic liquefaction likely depending on size and duration of cyclic loading
Zone A_2: Cyclic liquefaction and strength loss likely depending on loading and ground geometry
Zone B: Liquefaction and post-earthquake strength loss unlikely, check cyclic softening
Zone C: Cyclic liquefaction and strength loss possible depending on soil plasticity, brittleness/sensitivity, strain to peak undrained strength and ground geometry

CPT basic interpretation plots



Input parameters and analysis data

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Fines correction method: Robertson (2009)
Points to test: Based on Ic value
Earthquake magnitude M_w: 7.69
Peak ground acceleration: 0.64
Depth to water table (insitu): 18.00 ft

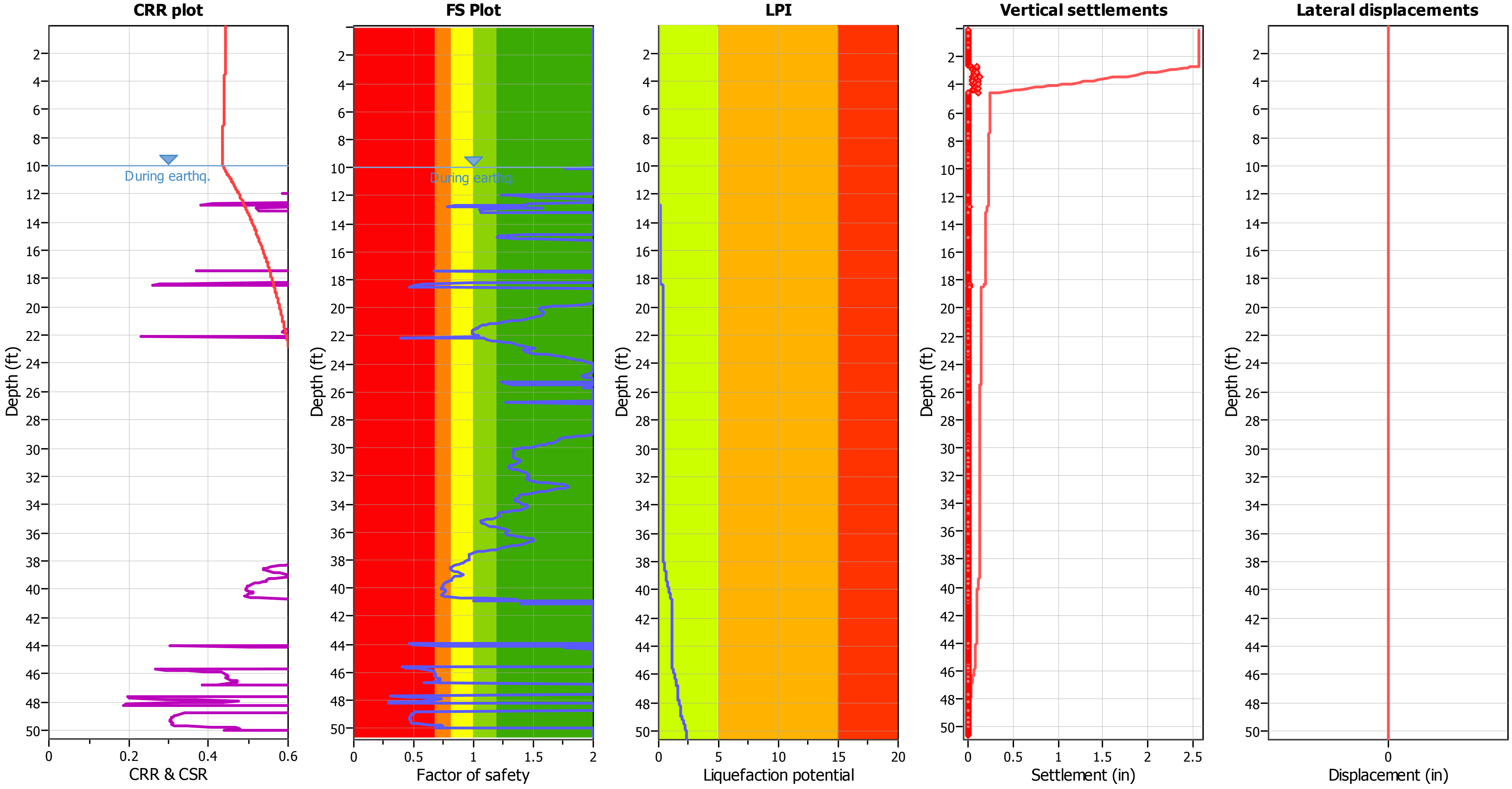
Depth to water table (erthq.): 10.00 ft
Average results interval: 3
Ic cut-off value: 2.60
Unit weight calculation: Based on SBT
Use fill: No
Fill height: N/A

Fill weight: N/A
Transition detect. applied: Yes
K_σ applied: Yes
Clay like behavior applied: All soils
Limit depth applied: Yes
Limit depth: 50.00 ft

SBT legend

☐ 1. Sensitive fine grained
☐ 2. Organic material
☐ 3. Clay to silty clay
☐ 4. Clayey silt to silty
☐ 5. Silty sand to sandy silt
☐ 6. Clean sand to silty sand
☐ 7. Gravely sand to sand
☐ 8. Very stiff sand to
☐ 9. Very stiff fine grained

Liquefaction analysis overall plots



Input parameters and analysis data

Analysis method:	Robertson (2009)	Depth to water table (erthq.):	10.00 ft	Fill weight:	N/A
Fines correction method:	Robertson (2009)	Average results interval:	3	Transition detect. applied:	Yes
Points to test:	Based on Ic value	Ic cut-off value:	2.60	K_σ applied:	Yes
Earthquake magnitude M_w:	7.69	Unit weight calculation:	Based on SBT	Clay like behavior applied:	All soils
Peak ground acceleration:	0.64	Use fill:	No	Limit depth applied:	Yes
Depth to water table (insitu):	18.00 ft	Fill height:	N/A	Limit depth:	50.00 ft

F.S. color scheme

- ☐ Almost certain it will liquefy
- ☐ Very likely to liquefy
- ☐ Liquefaction and no liq. are equally likely
- ☐ Unlike to liquefy
- ☐ Almost certain it will not liquefy

LPI color scheme

- ☐ Very high risk
- ☐ High risk
- ☐ Low risk

APPENDIX D

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

KCG KLING
Consulting
Group, Inc.

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 GENERAL INTENT

These specifications present general procedures and requirements for grading and earthwork as shown on the project grading plans, including preparation of areas to be filled, placement of fill, installation of subsurface drainage, and excavations. The recommendations contained in the geotechnical report(s) are a part of the earthwork and grading specifications and shall supersede the provisions contained hereinafter in the case of conflict. Evaluations performed by the geotechnical consultant during the course of grading may result in new specifications or recommendations in addition to those contained in the geotechnical report(s).

2.0 EARTHWORK OBSERVATION AND TESTING

Prior to the commencement of grading, a qualified geotechnical consultant (soils engineer and engineering geologist, and their representatives) shall be employed for the purpose of observing earthwork procedures and testing the fills for conformance with the recommendations of the geotechnical report and these specifications. It will be necessary that the geotechnical consultant provide adequate testing and observation so that he may determine that the work was accomplished as specified. If conditions exposed during grading differ significantly from those interpreted during the preliminary design investigation, the geotechnical consultant shall inform the client, recommend appropriate changes in the geotechnical design to account for the observed conditions, and notify City or County grading authorities, as necessary. It shall be the responsibility of the contractor to assist the geotechnical consultant and keep him apprised of work schedules and changes so that he may schedule his personnel accordingly.

The Project Geotechnical Consultant shall observe processing, moisture conditioning, and compaction of fill and subgrade materials. Testing of compacted fill in representative locations shall be performed by the Project Geotechnical Consultant’s field representative. Daily reports and test results shall be provided to the client representative on a regular and frequent basis. Maximum dry density tests used to determine the degree of compaction and optimum moisture content shall be performed in accordance with the American Society for Testing and Materials test method ASTM D1557.

It shall be the sole responsibility of the contractor to provide adequate equipment and methods to accomplish the work in accordance with the geotechnical report(s) applicable grading codes and project grading plans. If, in the opinion of the geotechnical consultant, unsatisfactory conditions, such as questionable soil, poor moisture condition, inadequate compaction, adverse weather, etc., are resulting in the quality of work less than required in these specifications, the geotechnical consultant will be empowered to reject the work and recommend that construction be stopped until the conditions are rectified.

3.0 PREPARATION OF AREA TO BE FILLED

3.1 Clearing and Grubbing

All brush, vegetation, trash, debris and other deleterious material shall be removed from fill areas and disposed of off site. Vegetation cleared from the site shall not be placed within engineered compacted fill areas.

3.2 Processing

The existing ground which is determined to be satisfactory for support of fill shall be scarified to a minimum depth of six (6) inches. Existing ground which is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until the soils are broken down and free of large clay lumps or clods and until the working surface is reasonably uniform and free of uneven features which would inhibit uniform compaction.

3.3 Overexcavation

Soft, dry, spongy, highly fractured or otherwise unsuitable ground, extending to such a depth that surface processing cannot adequately improve the condition, shall be overexcavated to firm ground, and verified by the project geotechnical consultant.

3.4 Moisture Conditioning

Overexcavated and processed soils shall be watered, dried-back, blended, and/or mixed as required to attain a uniform moisture content near optimum.

3.5 Recompaction

Overexcavated and processed soils which have been properly mixed and moisture-conditioned shall be recompacted to a minimum relative compaction of 90 percent, ASTM D1557.

3.6 Benching

Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal: vertical units), the ground shall be stepped or benched. The lowest bench shall be a minimum of 15 feet wide, shall be at least 2 feet deep, shall expose firm material, and shall be verified by the geotechnical consultant. Other benches shall be excavated in firm material for a minimum width of 4 feet. Ground sloping flatter than 5:1 shall be benched or otherwise overexcavated when considered necessary by the geotechnical consultant.

3.7 Evaluation of Areas to Receive Fill

All areas to receive fill, including processed areas, removal areas and toe-of-fill benches shall be observed, tested, and/or mapped by the geotechnical consultant prior to fill placement. A written evaluation of the area to be filled shall be obtained by the Contractor prior to placement of fill.

4.0 FILL MATERIAL

4.1 General

Material to be placed as fill shall be free of roots, grasses, branches, wood or other organic matter and other deleterious materials, and shall be tested by the geotechnical consultant prior to use as fill. Soils of poor gradation, expansion, or strength characteristics shall be placed in areas designated by the geotechnical consultant or shall be mixed with other soils to serve as satisfactory fill material.

4.2 Oversize Material

Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fills, unless the location, materials, and disposal methods are specifically recommended by the geotechnical consultant. Oversized disposal operations shall be such that nesting of oversize material does not occur, and such that the oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 feet vertically of finish grade or construction, unless specifically recommended by the geotechnical consultant.

4.3 Import

If importing of fill material is required for grading, the import material shall meet the requirements of Section 4.1. Samples of import soils shall be provided for testing a minimum of 48 hours before the import materials are brought on site.

5.0 FILL PLACEMENT AND COMPACTION

5.1 Fill Lifts

Fill material shall be placed in prepared areas in near-horizontal layers not exceeding 8 inches in loose thickness. Each layer shall be spread evenly and shall be thoroughly mixed during spreading to attain uniformity of material and moisture in each layer.

5.2 Fill Moisture

Fill layers at a moisture content less than optimum shall be watered and mixed, and wet fill layers shall be aerated by scarification or shall be blended with drier material. Moisture-conditioning and mixing of fill layers shall continue until the fill material is at a uniformly processed at a minimum of 125 percent of the optimum moisture content.

5.3 Fill Compaction

Each layer of fill shall be evenly spread, moisture-conditioned, mixed, and shall be uniformly compacted to not less than 90 percent of the maximum dry density at a minimum of 125 percent of the optimum moisture content. Compaction equipment shall be adequately sized and shall be either specifically designed for soil compaction or of proven reliability, to efficiently achieve the specified degree of compaction.

5.4 Fill Slopes

Compacting of slopes shall be accomplished, in addition to normal compacting procedures, by overfilling and compacting the slope face a minimum of four feet horizontally from finish grade, and cutting the slope face back to the core of compacted fill. In restricted spaces where overfilling is not possible, fill slopes may be compacted by back-rolling of slopes, with sheepsfoot rollers at frequent increments of 1 to 2 feet in fill elevation gain. At the completion of grading, the relative compaction of the slope out to the slope face shall be a minimum of 90 percent.

5.5 Compaction Testing

Field tests to check the fill moisture and degree of compaction will be performed by the geotechnical consultant. The location and frequency of tests shall be at the geotechnical consultant's discretion. In general, the tests will be taken at an interval not exceeding 2 feet in vertical elevation and/or 1,000 cubic yards of fill placed.

6.0 SUBDRAIN INSTALLATION

Subdrain systems shall be installed in locations recommended by the geotechnical consultant to conform to the approximate alignment and details shown on the plans or herein. The subdrain location or materials shall not be changed or modified without the recommendation of the geotechnical consultant. The geotechnical consultant; however, may recommend changes in subdrain line, grade or material. All subdrains should be surveyed for line and grade after installation. Sufficient time shall be allowed for the surveys, prior to commencement of filling over subdrain areas.

7.0 EXCAVATION

Excavation and cut slopes will be geologically mapped and examined during grading. Sufficient time shall be allowed by the contractor to permit geologic mapping of excavation bottoms and cut slopes. If directed by the geotechnical consultant, further excavation or overexcavation and refilling of cut areas shall be performed, and/or remedial grading of cut slopes. All fill-over-cut slopes are to be graded, unless otherwise stated, shall be constructed as a fill slope with the use of minimum width stabilization fills, as necessary.

APPENDIX E

HARDSCAPE RECOMMENDATIONS

HARDSCAPE RECOMMENDATIONS FOR EXPANSIVE SOILS (COMMERCIAL/INDUSTRIAL BUILDING)[4]

Description	Minimum Concrete Thickness (Inches)	Subgrade Pre-Soaking Depth	Reinforcement (1)	Cutoff Barrier or Edge Thickness	Joint (2) Spacing (Max)	Base
Common Sidewalks - Isolated EI<21 EI 21-50 EI 51-90 EI 91-130 EI>130	4 4 4 5 5	Optimum to 12" 120% of/or 5% over optimum (whichever is greater) to 12” 120% of/or 5% over optimum (whichever is greater) to 18” 120% of/or 5% over optimum (whichever is greater) to 24” 130% of/or 5% over optimum (whichever is greater) to 24”	N.R.	N.R.	5-10 Feet 5-10 Feet 5-10 Feet 6 feet 6 feet	N.R.
Common Sidewalks - Not Isolated (adjacent to curbs or structures) EI<21 EI 21-50 EI 51-90 EI 91-130 EI>130	4 4 4 5 5	Optimum to 12" 120% of/or 5% over optimum (whichever is greater) to 12” 120% of/or 5% over optimum (whichever is greater) to 18” 120% of/or 5% over optimum (whichever is greater) to 24” 120% of/or 5% over optimum (whichever is greater) to 24”	Dowel into curbs and entries with #4 Re-bar at 24” O.C.	N.R.	5-10 Feet 5-10 Feet 5-10 Feet 6 feet 6 feet	N.R.
Enhanced or Decorative Concrete (where higher degree of crack control is desired) E<21 EI 21-50 EI 51-90 EI 91-130 EI>130	5 5 5 6 6	Optimum to 12" 120% of/or 5% over optimum (whichever is greater) to 12” 120% of/or 5% over optimum (whichever is greater) to 18” 120% of/or 5% over optimum (whichever is greater) to 24” 120% of/or 5% over optimum (whichever is greater) to 24”	6x6 – W1.4xW1.4 Mesh 6x6 – W2.9xW2.9 Mesh #3 re-bar @ 18” O.C., E.W. #3 re-bar @ 12” O.C., E.W. #4 re-bar @ 12” O.C., E.W.	12” thick x 12” wide 12” thick x 12” wide 12” thick x 12” wide 12” thick x 12” wide 12” thick x 12” wide	5-10 Feet 5-10 Feet 5-10 Feet 6 feet 6 feet	N.R.
Curb and Gutter	C.S.	Scarify 6”/Pre-Moisten	N.R.	N.R.	10 Feet	N.R.
General Concrete Paving[3]	7	N.R.	N.R.	12”x12” where adjacent to landscape	10 Feet	6”
Trash Enclosure/Loading Bay[3]	8	N.R.	N.R.	12”x12” where adjacent to landscape	10 Feet	6"

N.R. = Not Recommended
C.S. = City/County Standard
O.C. = On Center
E.W. = Each Way

General Notes:

(A) All concrete thickness should be “full”
(B) Square concrete panels when possible
(C) Maintain positive drainage from concrete flatwork
(D) All slab reinforcement should be placed at mid-height of slab
(E) The above recommendations are intended to mitigate expansive soils independent of other design considerations. The recommendations of the structural engineer and/or architect should also be incorporated into the final design.

Footnotes:

(1) Reinforcement to extend into cutoff barrier in thickened edge.
(2) Joint at curves or angle points.
(3) The above concrete paving recommendations are for planning purposes only. An actual pavement design should be generated based on concrete strength, and frequency and magnitude of anticipated axle loads.
(4) The above recommendations are intended to mitigate expansive soils independent of other design considerations. The recommendations of the structural engineer and/or architect should also be incorporated into the final design.

APPENDIX F

ASFE INSERT

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one - not even you* - should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from alight industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes - even minor ones - and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ-sometimes significantly from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in-this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely on Your ASFE-Member Geotechnical Engineer For Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE
The Best People on Earth

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone:' 301/565-2733 Facsimile: 301/589-2017
e-mail: info@asfe.org www.asfe.org

Appendix D

Phase I Environmental Site Assessment

AES Due Diligence, Inc.
Architectural/Environmental/Seismic Consultants

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April 22, 2021

John Hancock Life Insurance Company (U.S.A.)
197 Clarendon Street, C-2
Boston MA 02116

Re: Phase I Environmental Site Assessment
Dove Street Building
1600 Dove Street
Newport Beach, California 92660
Project No. 21001016

Dear Sir or Madam:

In accordance with our accepted proposal, AES performed a walk-through survey of the above-referenced property on April 6, 2021. An electronic copy of the report is provided for your use. AES Due Diligence, Inc. is not affiliated with the client or any other parties to this transaction.

We appreciate the opportunity to provide consulting services to you. If you have any questions, please contact Richard T. Sawyer at our San Francisco Regional Office at (707) 996-5529 or our Corporate Office at (858) 569-0211.

Very truly yours,

AES DUE DILIGENCE, INC.

Robert Presta, MBA
President
Registered Environmental Assessor in the former EPA Program

RP:RTS/aw

Enclosures

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Prepared for

John Hancock Life Insurance Company (U.S.A.)

Phase I Environmental Site Assessment

Dove Street Building
1600 Dove Street
Newport Beach, California 92660
April 22, 2021

Prepared by

AES Due Diligence, Inc.
Architectural/Environmental/Seismic Due Diligence Consultants
4542 Ruffner Street, Suite 330
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(858) 569-0275 - Fax

AES Regional Offices

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Northwest Region *(503) 296-0711*	***Texas Region*** *(972) 754-0673*	***Northern California*** *(707) 996-5529*

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Dove Street Building
1600 Dove Street
Newport Beach, California 92660
Project No. 21001016

ISSUE		**ENVIRONMENTAL CONDITION IDENTIFIED**					**ASSESSMENT**				
	NONE	**REC**	**BER**	**CREC**	**HREC**	***de minimis***	**ACCEPTABLE**	**O&M**	**PHASE 2**	**PHASE 3**	**COST**
Historic Use	X						X				
UST\AST	X						X				
Chemical Use, Storage or Disposal	X						X				
Waste Storage or Disposal	X						X				
PCBs	X						X				
Environmental Records Review	X						X				
REC on Adjoining Property	X						X				
Stains or Odors	X						X				
Solid Waste or Fill	X						X				
Septic Fields, Wells or Drywells	X						X				
Pits, Ponds, Lagoons	X						X				
Vapor Encroachment	X						X				
NON-SCOPE CONSIDERATIONS											
Asbestos						X	X	X			**O&M Plan in place**
Lead Based Paint						X	X				
Lead in Water	X						X				
Mold	X						X				
Wetlands	X						X				
Radon	X						X				

I IDENTIFICATION

Subject Site:	Dove Street Building
Location:	1600 Dove Street Newport Beach, California 92660
Observation Date:	April 6, 2021
Site Contact:	Ms. Mandy Webb 949-852-0900
Client/Lender:	John Hancock Life Insurance Company (U.S.A.)
Reliance:	John Hancock Life Insurance Company (U.S.A.) as collateral agent for John Hancock GA Mortgage Trust**,** for itself, and as agent for any parties who now or hereafter hold any portion of or interest in, the indebtedness, and their successors and assigns, its parent, affiliates, bond holders and potential bond holders, the underwriters of any securitization of the loan secured by the Property, the rating agencies rating such securitization, and each of such parties' counsel, are entitled to rely upon this Report and to use its contents and conclusions as may be appropriate

Environmental Professional Statement

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. We have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Prepared by:

Richard T. Sawyer
Environmental Professional

Reviewed by:
Stephen J. Baker
California Registered Geologist – California License # 4354

II OBJECTIVE AND SCOPE

Objective

The purpose of this Phase I Environmental Site Assessment is to identify recognized environmental conditions that may have an impact on the subject site, using readily available sources of information, interviews and field observations. It is our understanding the Client intends to finance the site.

Procedures

This Assessment is a Phase I Environmental Site Assessment (ESA) for the improvements located at 1600 Dove Street in Newport Beach, California 92660, performed in general accordance with ASTM Designation E 1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* and following the Scope of Work outlined in AES Due Diligence, Inc.'s proposal and in conformance with John Hancock Life Insurance Company's (U.S.A.) guidelines and the scope and limitations of the Guide. AES Due Diligence, Inc. (AES) conducted on-site observations on April 6, 2021, interviewed site operations personnel and observed adjacent properties. Environmental Data Resources, Inc. (EDR) conducted database searches following ASTM guidelines. Such searches are generally limited to a radius of one mile from the subject site. Additionally, ASTM Non-Scope items are addressed in this Assessment, including Asbestos, Lead-Based Paint, Radon Gas, Mold, Wetlands and Lead in Drinking Water. No testing was conducted for ASTM Non-Scope items.

Limitations

The purpose of the Phase I ESA of the site is to address the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products. If requested by the Client, certain non-scope business environmental risks are addressed in the Assessment. The Phase I ESA is intended to allow the Client to satisfy one of the requirements to qualify for the innocent landowner defense, contiguous property Owner or bonafide prospective purchaser limitations on CERCLA liability: i.e. the practice that constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined in 42 USC § 9601(35)(B). The Phase I ESA does not address whether requirements in addition to appropriate inquiry were met in order to qualify for CERCLA's innocent landowner defense.

The objectives of the Phase I ESA are as follows:

1. Evaluate if recognized environmental conditions (REC), controlled recognized environmental conditions (CREC), historic recognized environmental conditions (HREC) or *de minimis* environmental conditions are present on the site.

2. Provide sufficient documentation of sources, records and resources utilized in conducting the Phase I ESA.

3. Prepare a professional opinion regarding the presence of RECs at the site.

Special Terms and Conditions

The Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the site.

A Phase I ESA attempts to identify the environmental conditions of the site and vicinity. Environmental conditions and regulations are subject to change and re-interpretation. Current conditions or regulatory requirements should not be assumed to continue to represent conditions at some future time. This Assessment represents AES's professional judgments and opinions based on information presented in this Assessment and no warranty, either expressed or implied, are contained herein.

Limitations and Exceptions of Assessment

The surface conditions of the site were noted by visual observations or information obtained during interviews. No physical testing, soil/groundwater sampling or laboratory analysis was included unless otherwise noted in the Assessment.

The executive summary was prepared for the convenience of the users of this Assessment. This summary does not contain all the information presented in this Assessment and, therefore, the entire Assessment should be read to assure all pertinent information is transmitted.

AES performed the Phase I ESA of the site in substantial conformance with the scope and limitations of ASTM E 1527-13, Standard Practice for Environmental Site Assessments: *Phase I Environmental Site Assessment Process* unless otherwise noted in the Assessment. Certain environmental conditions may exist on a site that are beyond the scope of the Standard, but may warrant consideration. Per the Standard, this environmental site assessment is presumed to be valid for a specific time limit as defined in ASTM Designation E-1527-13.

AES utilized the following methods to complete the reconnaissance of the site. AES observed the site and adjoining properties for indicators of existing or potential recognized environmental conditions. The site walkover consisted of walking the site boundary and several transects across the site. For a site with buildings, the accessible areas of the buildings were entered and observed. Please note that AES did not look under floors, above ceilings or inside walls. The adjoining properties were observed from the periphery of the site, if possible. The observations were documented with representative photographs.

Documents

Our Assessment represents our professional experience and judgment, and a good faith effort to obtain all available information. Documents and data provided by the Client, its designated representatives, or other interested parties, and consulted in the preparation of this Assessment, have been reviewed and may be referenced herein, with the understanding that AES assumes no responsibility or liability for their accuracy or for the withholding by any of the involved parties of any assessments or other information that could affect the transaction.

Intended Use

AES Due Diligence, Inc. is not affiliated with the borrower or any other parties to this transaction. This Assessment is intended to be used in its entirety. No portion of it may be deleted or used out of context without the written consent of AES. The opinions and information contained in this Assessment are time sensitive and represent our evaluation of the environmental site conditions at the time the services were provided. This Assessment was prepared for a limited use involving a single transaction, as set forth herein, and may not be used for any other purpose without the written consent of AES. except as noted below in the Reliance Section.

Proprietary Information

Field data, field notes, and other data and documents assembled by AES to produce this Assessment represent the work product of AES's training, experience and professional skill. This information belongs to and remains the property of AES Due Diligence, Inc.

Definitions

ASTM defines a Recognized Environmental Condition (REC) as “the presence or likely presence of a hazardous substance or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment.”

A Controlled Recognized Environmental Condition (CREC) is defined as “a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, of meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

A Historic Recognized Environmental Condition (HREC) is defined as ”a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”

A *de minimis* environmental condition “generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate government agencies.” Conditions determined to be *de minimis* are not a REC.

Business Environmental Risk (BER) is a risk, which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of the parcel of commercial real estate, not necessarily limited to those environmental issues investigated in this Phase I ESA. Business environmental risk issues may involve addressing one or more non-scope considerations.

III PROPERTY DESCRIPTION

Site Visit and Interviews

On April 6, 2021, AES visited the subject site and reviewed the fixed facility. Ms. Mandy Webb, Property Manager with Optima Asset Management, accompanied Richard T. Sawyer of AES during the site visit.

AES observed the interiors and contents of representative tenant spaces, common areas and maintenance areas and noted operations and activities at the subject site. AES looked for suspect asbestos-containing building materials, stored chemicals, underground and aboveground storage tanks, unusual surface appearance, wetlands and other issues that may indicate environmental conditions on the subject site. AES noted the location of on-site electrical power transformers and storm drainage structures where these were encountered. AES observed sites adjoining the subject site and areas within the immediate vicinity of the subject site.

AES photographed selected features at or near the subject site to support this written Assessment. The photographs are identified, described, and appended to this Assessment.

Subject Site

The project is situated on a tract of land estimated to contain approximately 2.48 acres. The site is located at the northeast corner of the intersection of Dove Street and Dolphin-Striker Way, in a commercial district of Newport Beach, California. The original improvements were completed in 1975.

According to the EDR Database Report the topography of the site is nearly level and slopes to the south. The site has a maximum surface elevation difference of approximately two feet. Additional slopes are provided around the improvements for storm water drainage. On-site storm water drainage is by sheet flow to catch basins and curb inlets connected to the Newport Beach storm sewer system.

The parking and driveway areas are asphaltic concrete paved. Entry driveway aprons, rubbish dumpster pads, and public and private sidewalks are concrete paved.

Pad-mounted, utility company owned electrical transformers are provided on site. The Southern California Edison Company is the electrical supplier and is responsible for transformer-related incidents. Natural gas service is provided by The Gas Company. The site is provided with municipal water and sanitary sewer services from buried utilities along the adjacent thoroughfares.

Building

The property has one four-story office building (designed for multiple tenants). The Owner indicates that there is a total of 59,938 square feet (sf) of net rentable floor area. The site is occupied by multiple office tenants. The original improvements were completed in 1975. The Architect of Record is unknown. Construction plans were not provided for review.

The foundation system consists of conventional concrete spread footings, to the best of our knowledge. The ground floor has a concrete slab-on-grade and the structure above consists of a concrete and steel frame with concrete decking at the elevated floors and roof structure. There are no basements, other than a small sub-grade elevator equipment room. The building has a central courtyard that is open to the sky.

The exterior walls are finished with precast concrete panels and have glazed storefront window systems. The roofing is a built-up bituminous membrane. Heating and cooling are provided within the building by rooftop natural gas and electric HVAC equipment. There are two hydraulic elevators at the subject site.

The floor treatments within the interior areas consist of carpet, ceramic tile, vinyl tile, and laminate. The walls are finished with painted gypsum board or various tenant wall treatments. The ceilings consist of painted/textured gypsum board and acoustic ceiling tiles. Lighting is provided by fluorescent fixtures at the tenant interiors and common areas. There is high intensity discharge lighting for the outdoor areas.

Adjoining Properties

Properties observed to be immediately adjoining the subject site are listed in the following table. The adjoining properties are located in Newport Beach, California 92660.

Adjoining Properties

Name	Operation	Direction from Site	Concerns
Retail buildings 1660 Dove Street	Commercial Uses	North	None
Saagar Restaurant 4241 McArthur Blvd.	Restaurant	East	None
Parking structure 1320 Dove Street	Parking Garage	South	None
Newport Atrium 1601 Dove Street	Office Uses	West	None

Because of the controlled surface drainage and the predominantly non-hazardous uses on the adjoining properties, they do not, in our opinion, pose a significant environmental risk to the subject site.

Vicinity

AES observed other properties located near the subject site for current uses or conditions that might be environmentally significant. The local area properties observed by AES did not appear to be engaged in environmentally significant activities.

Topography and Hydrogeology

AES reviewed the United States Geological Survey (USGS) Topographic Map, which indicates that the subject site is approximately 49 feet above mean sea level. AES observed that the general drainage flows in a southerly direction across the surface of the site. No substantial grade changes appear to have been made to the subject site when compared to the topography of surrounding sites. A copy of the USGS topographic map that covers the subject site is appended.

AES did not observe site grading activities at the site.

Geology and Surficial Soils

According to the EDR Database Report, the subject site is located above Quaternary era stratified sequence bedrock. The depth to bedrock is unknown.

According to the information obtained through the EDR Database Report, the subject site is located in an area of sandy loam soils. These soil types have moderate permeability and would be expected to have moderate susceptibility as a result of surface spreading of wastes, depending upon local soil conditions.

Surface and Ground Water Flow

The regional surface water flows in a southerly direction according to the EDR Database Report. The ground water flow in the area is assumed to be to the south. The depth to ground water has been measured to range from 20 feet to 30 feet below ground surface within a half mile radius of the subject site (4200 Birch Street).

IV SITE HISTORY

No prior Environmental Reports were provided to AES for review. AES conducted a limited historical review regarding the subject site. The following summarizes AES's review of readily available historical records and maps gathered from government agencies and commercial enterprises regarding the subject site history and use. This should not be considered a listing of all available information.

Interviews

Ms. Webb was not aware of the use of the site prior to the construction of the current improvements in 1975.

Building Department Records Review

The earliest Certificate of Occupancy found is dated August 1975. We found no permit records for any prior developed use of the site.

Aerial Photograph and Historical Map Review

Aerial photographs are reviewed to identify past site use and areas of environmental concern on the subject site. AES has reviewed aerial photographs of the subject site. The photographs were obtained from E Data Resources. Copies of the aerial photographs that were obtained and reviewed by AES are appended. Please see chart below for the specific dates and description summary.

Beginning in the 1860s, the Sanborn Fire Insurance Company, and others, prepared maps that depict site improvements and commercial activities in many metropolitan areas in the United States. AES attempted to obtain fire insurance maps, specific to the site, to review as part of this Phase I Environmental Site Assessment. According to EDR, no Sanborn Maps were produced for this site.

Historical maps provide information concerning historical site boundaries and improvements. Historic Topographic Maps were reviewed for the site; please see the chart below for enumeration of years and findings.

The historical maps reviewed were obtained from EDR and are appended.

Site History Summary

Date	Record Type	Land Use
1896	Historical Topographic Map	Undeveloped land
1901	Historical Topographic Map	Undeveloped land
1902	Historical Topographic Map	Undeveloped land

Site History Summary

Date	Record Type	Land Use
1932	Historical Topographic Map	Undeveloped land
1935	Historical Topographic Map	Undeveloped land
1938	Aerial Photograph	Undeveloped land
1942	Historical Topographic Map	Undeveloped land
1946	Aerial Photograph	Undeveloped land
1948	Historical Topographic Map	Undeveloped land
1950	Historical Topographic Map	Undeveloped land
1952	Aerial Photograph	Undeveloped land
1963	Aerial Photograph	Undeveloped land
1965	Historical Topographic Map	Undeveloped land
1972	Aerial Photograph	Undeveloped land
1972	Historical Topographic Map	Undeveloped land
1977	Aerial Photograph	Current structures
1981	Historical Topographic Map	Current structures
1985	Aerial Photograph	Current structures
1989	Aerial Photograph	Current structures
1990	Aerial Photograph	Current structures
1994	Aerial Photograph	Current structures
2005	Aerial Photograph	Current structures
2009	Aerial Photograph	Current structures
2012	Aerial Photograph	Current structures
2016	Aerial Photograph	Current structures

Based on AES's interpretation of the available documentation noted above the first developed and historic site use is the current structure, in use as an office building. Prior to that the site was undeveloped land. No evidence of long-term fill activity, surface scarring, staining or other issues of environmental concern were visible in the aerial photographs during the review process.

Directories

City directories often provide information concerning historical site ownership and use. City Directories were reviewed for the years 1920 through 2015, in roughly five-year intervals. No listings were found for the site from 1920 through 1971. Beginning in 1975 and continuing to the present, there are listings for various prior or current office tenants (including financial, medical, legal, and banking tenants).

We found no listings to suggest obvious environmental hazards.

Title Records Review

A title records review, or chain-of-title, can be used to identify prior ownership of a property and to evaluate previous activities or operations in terms of environmental significance. Significant easements, covenants, restrictions, and environmental liens may be indicated in title records. A chain-of-title regarding the subject site was not provided to AES for review as part of this Phase I Environmental Site Assessment.

Document Review

A previously prepared Asbestos Operations and Maintenance Plan for the property was provided for review. This document is undated but appears to have been prepared shortly after prior environmental investigations that were concluded in late 2000. Asbestos containing materials were detected at the property at that time. The O&M Plan was prepared by Batchelor Environmental Services, Inc.

Data Gaps

The history and land use of the subject site has been determined by review of available historical aerial photographs, city directories, old topographic maps, personal interviews, public agency records, and other available resources. This history has been extended back as far as "it can be shown that the property contained structures or from the time the property was first used for residential, agricultural, commercial, industrial or governmental purposes." Necessary and available historical resources (aerial photographs, fire insurance maps, USGS topographic maps, historical city directories, building department records, zoning/land use records, interviews, etc.) were reviewed to establish a thorough land use history in order to identify historical environmental conditions. The following is a list of data gaps (insufficient data) and associated potential environmental significance:

None.

V ENVIRONMENTAL SITE ASSESSMENT

Fixed Facilities Review

The improvements observed by AES on April 6, 2021, were reported to have been completed in 1975. Minor repair activities to meet maintenance requirements and tenant needs are ongoing.

Ms. Webb indicated that no asbestos containing materials or lead-based paint were utilized in the above noted recent improvements.

Ms. Webb stated that landscape maintenance services are performed by outside contractors. No landscape equipment is stored on the subject site. Neither automotive nor landscape equipment is maintained at the subject site.

Site Tenant Activities

AES reviewed the current tenant for operations that may use regulated materials or generate waste products. AES observed the accessible interior and exterior common areas and maintenance areas. The site is occupied by multiple office tenants. Interview remarks by Ms. Webb indicated that this facility is currently 95% occupied.

AES confirmed the nature of tenant activities in the building, which primarily consist of typical professional office uses. AES entered and observed the activities at sample areas of the building, including: representative tenant suites. Also visited were common areas, mechanical rooms, and the roof.

Upon review of the activities at the above locations, AES found no specific environmental concerns regarding these operations.

On-Site Chemical and Petroleum Product Storage

AES looked for chemicals, hazardous substances, petroleum-based fuels and lubricants, and janitorial and cleaning supplies stored on the subject site. No other chemicals or hazardous substances were observed on the subject site other than shelf quantities of commonly available janitorial and cleaning supplies and paints.

Waste Disposal Practices

AES identified the current wastes generated at the subject site. According to Ms. Webb and AES's observations, general and recycled wastes are disposed of from the subject site. Areas of waste storage appeared to be well kept and free of debris.

General wastes are collected, placed in a dumpster, removed from the subject site on an as-needed basis, and disposed of by the local disposal company.

Underground and Aboveground Storage Tanks

Owners and operators of certain USTs are required to register those USTs with the state agency responsible for administering the federally mandated UST program. A search of the list of registered USTs in California, prepared by EDR, showed that there are no registered USTs located on the subject site.

AES interviewed Ms. Webb regarding the presence of USTs and ASTs on the subject site. Ms. Webb stated that there are no registered USTs and no registered ASTs located on the subject site. We found no records of USTs and no records of ASTs on the subject site.

AES interviewed Ms. Webb regarding the past use of heating fuels on the subject site to ascertain whether USTs or ASTs may have been utilized on site for the storage of heating fuels or oils. Ms. Webb stated that to her knowledge the improvements have always been heated by natural gas. AES's observations confirmed the nature of the current heating systems at the subject site.

AES visually observed the subject site for surficial evidence of USTs and ASTs. AES did not observe evidence of USTs or ASTs at the subject site.

Polychlorinated Biphenyls (PCBs)

Federal regulations put into effect following the Toxic Substances Control Act (TSCA) require that electrical transformers be labeled to identify their PCB content. Manufacture and distribution of PCBs was banned in 1979. Transformer owners are responsible for compliance with all applicable regulations governing those transformers, including maintenance of the transformer and any remediation work resulting from a transformer-related incident.

Pad-mounted, utility company owned electrical transformers are provided on site. The observed electrical transformers appeared to be in good condition with no visible leaks. Areas around the electrical transformers exhibited no signs of visible staining or abnormal appearance. AES did not observe any labels on the electrical transformers identifying the PCB content.

Based on utility ownership and no observed leaks, AES recommends no further action with regard to PCBs in transformers.

Exterior Surface Condition

AES observed the exterior surface of the subject site. It is estimated that 90% of the subject site surface was covered by improvements and pavement. AES's observation of the site soil surfaces was therefore limited to the landscaped areas.

None of the historical documentation reviewed, indicated that the subject site was previously utilized as a quarry and/or solid waste disposal facility.

No pits, ponds or lagoons were observed at the subject site during the site visit. No areas of distressed or dead vegetation, surface depressions or surface stains attributed to chronic leaks or spills were observed during the site visit.

Interior Surface Condition

AES observed portions of the interior surfaces of the building for evidence of unusual conditions. We found no evidence of unusual conditions in the areas we observed.

Vapor Encroachment Condition (VEC)

A Vapor Encroachment Screening was performed for the subject site following the guidelines of ASTM E2600-15, Tier 1 Vapor Encroachment Screening. The screening consists of an initial search of all standard government record databases and EDR's proprietary historical records related to former dry cleaners, gas stations and manufactured gas plants within the 1/3 mile radius (default Area of Concern-AOC). Based on local ground water flow direction knowledge, AES reduced the AOC by the Buonicore Method. Individual facilities within the remaining AOC were evaluated.

Based on this evaluation, a VEC can be ruled out because a VEC does not exist or is not likely to exist.

VI DATABASE RECORDS REVIEW

Environmental Records Review

An environmental records database search report dated April 2, 2021, was provided by Environmental Data Resources (EDR). A copy of EDR's report is appended. The following discussion excerpts specific items from the report that deserve additional description.

In addition to the mapped sites in the EDR report, there may also be a list of unmapped sites. These are reported database sites that, due to incomplete addressing information, could not be accurately plotted by EDR. In an attempt to locate all unmappable sites, AES compared each address provided on the unmappable site list to known addresses of the site and vicinity, and attempted to locate unmappable sites during reconnaissance of the vicinity. AES concludes that no unmappable sites were identified that meet the search radius criteria of the scope of work and are considered to be environmentally significant to the subject site.

Superfund Enterprise Management System (SEMS) – Formerly Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)

Since 1982, the U.S. EPA has maintained lists of contaminated sites under the federal Superfund Program in accord with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The U.S. EPA discovers these sites from citizen reports, routine inspection of hazardous waste generators, treatment, storage and disposal facilities, and reporting requirements.

Superfund Enterprise Management System (SEMS) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list 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). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Review of the CERCLIS list provided by EDR identifies no CERCLIS sites within the approximate minimum search distance of one-half mile from the subject site.

Federal CERCLIS-NFRAP List (SEMS Archive)

CERCLA sites designated No Further Remedial Action Planned (NFRAP) have been removed from CERCLIS. CERC-NFRAP sites may be where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the National Priorities List (NPL), or the contamination was not serious enough to require Federal Superfund action or NPL consideration. CERCLIS-NFRAP sites, however, may continue to represent a concern to local or state regulators. CERCLIS-NFRAP was renamed to SEMS Archive by the EPA in 2015.

Review of the CERC-NFRAP list provided by EDR identifies only one CERC-NFRAP site listed. There is one CERC-NFRAP site within the ASTM standard minimum search distance of one-half mile from the subject site. There are no CERC-NFRAP facilities on the subject site. The listed facility is more than one-fourth mile to the west of the subject site and not considered significant due to that separation distance.

The above referenced CERC-NFRAP facility was evaluated based on the following criteria: violator status, area geology, gradient relationship and separation distance. Based on this evaluation, and due to their regulated nature, it is believed that this does not represent an environmental concern to the subject site.

National Priorities List

The U.S. EPA maintains this list as a subset of CERCLIS, identifying over 1,200 CERCLA sites for priority cleanup under the Superfund Program. Once sites have been designated on the CERCLIS list, the U.S. EPA uses its Hazard Ranking System to determine the potential risks of those sites to human health and the environment. Only the sites that present the greatest risk are added to the NPL, which qualifies the sites to receive CERCLA remedial funding.

Review of the NPL list provided by EDR identifies no NPL sites within the approximate minimum search distance of one mile from the subject site.

RCRA – Generators

The U.S. EPA’s RCRA (Resource Conservation and Recovery Act, 42 U.S.C. '6991 *et seq.*) Program identifies and tracks hazardous waste from the point of generation to the point of disposal. Generators are also listed in the FINDS database.

Review of the RCRA Generator lists provided by EDR identifies no RCRA-Generator sites adjacent to or at the subject site.

RCRA - Treatment, Storage, Disposal Facilities (TSD)

The Resource Conservation and Recovery Act Information System (RCRIS) is a compilation of selective information on facilities that generate, store, transport, treat or dispose of hazardous waste. Inclusion of a facility on the RCRIS database is not necessarily an indication of an environmental problem.

Review of the RCRIS-TSD list provided by EDR identifies no RCRIS-TSD sites within the approximate minimum search distance of one mile from the subject site.

Emergency Response Notification System (ERNS)

The ERNS is a compilation of reported releases of hazardous substances into the environment. The database contains information from Spill reports made to federal authorities, including the U.S. EPA, the U.S. Coast Guard, the National Response Center, and the U.S. Department of Transportation.

Review of the ERNS list provided by EDR identifies no ERNS listings at the subject site.

Underground Storage Tanks (USTs)

Certain USTs are regulated under the RCRA Act, and must be registered with the state agency responsible for administering the UST program. USTs are also listed in the CA FID database. Inclusion of a facility on the UST database is not necessarily an indication of an environmental problem.

Review of the list provided by EDR identifies no listings adjacent to or at the subject site. Leaking tanks are discussed in the following section.

Leaking Underground Storage Tanks (LUSTs)

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. LUSTs are also listed in the CORTESE database.

Review of the list provided by EDR identifies a total of 23 sites. There are 23 facilities within the ASTM standard minimum search distance of one-half mile from the subject site. There are no facilities on the subject site and there are no facilities on adjoining properties. All the listed facilities within one-fourth mile of the subject site are noted to have case closed status, indicating that mitigations are complete. No significant risk is identified.

The above referenced facilities were evaluated based on the following criteria: violator status, area geology, gradient relationship, and separation distance. Based on this evaluation, and due to their regulated nature, it is believed that this does not represent an environmental concern to the subject site.

Solid Waste Facilities/Landfills (SWF/LS)

Solid waste records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Section 2004 criteria for solid waste landfills or disposal sites.

Review of the list provided by EDR identifies no sites within the approximate minimum search distance of one-half mile from the subject site.

EnviroStor

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies 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.

Review of the list provided by EDR identifies a total of ten sites. There are ten sites within the ASTM standard minimum search distance of one mile from the subject site. There are no facilities on the subject site and there are no facilities on adjoining properties.

All the listed facilities are more than one-fourth mile from the subject site and are not considered significant due to that separation distance. No significant risk is identified.

The above referenced facilities were evaluated based on the following criteria: violator status, area geology, gradient relationship and separation distance. Based on this evaluation, and due to their regulated nature, it is believed that this does not represent an environmental concern to the subject site.

DEED (Institutional Controls)

Site Mitigation and Brownfield's Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfield's 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.

Review of the list provided by EDR identifies no sites within the approximate minimum search distance of one mile from the subject site.

California Hazardous Material Incident Reporting System (CHMIRS)

The California Office of Emergency Services database contains reported information on incidents involving accidental releases or spills of hazardous materials.

Review of the list provided by EDR identifies no listings at the subject site.

Hazardous Waste and Substances Sites List (CORTESE)

The Cal-EPA publishes a listing of potential and confirmed hazardous waste sites throughout the State of California. Under California Government Code Section 65962.5, these sites are submitted to the Cal-EPA by the State Department of Health Services, State Water Resources Control Board, the Integrated Waste Management Board and the Department of Toxic Substances Control.

The database identifies public drinking water wells with detectable levels of contamination, hazardous substance sites selected for remedial action, sites with known toxic material identified through the abandoned site assessment program, sites with USTs having a reportable release, and all solid waste disposal facilities from which there is a known migration.

This database is no longer updated. Applicable sites have been referred to alternate governing agencies for action as appropriate. Those would be addressed under the corresponding headings within this Report.

VCP (Voluntary Cleanup Program)

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have requested that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Review of the list provided by EDR identifies no listings at or adjacent to the subject site.

Hazardous Waste Information System (HAZNET)

The California Department of Health Services, Toxic Substances Control Division, has developed and maintained lists of hazardous waste generators and hazardous waste treatment, storage and disposal facilities in the State of California, in accordance with the Hazardous Waste Control Law (California Health and Safety Code Section 25100 *et seq.*) And the Hazardous Waste Management Act of 1976 (California Health and Safety Code Section 25179.1 *et seq.*). Inclusion of a facility in the HAZNET list is not necessarily an indication of an environmental problem.

Additionally, the California Health and Safety Code requires all counties to prepare and submit hazardous waste management plans. To assist the counties, the Toxic Substances Control Division maintains lists containing hazardous waste generation and disposal data within each county. The Toxic Substances Control Division has assembled this information from manifest reports required from hazardous waste generators. This database currently lists over 20,000 facilities in the State of California.

Review of the list provided by EDR identifies two such listings for the subject site. Both are in connection with former tenants in the 1980's and 1990's that registered for the removal of photo development wastes, alkaline solutions, and surplus organics from the site for off-site disposal.

Based on this evaluation, and due to their regulated nature, it is believed that this does not represent an environmental concern to the subject site.

Historic USTs

The Hazardous Substance Storage Container Database is a historical listing of former UST sites that are closed and typically not listed with the current UST sites.

Review of the list provided by EDR identifies no listings adjacent to or at the subject site.

EDR Historical Auto Service Stations

EDR Historical Auto 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.

Review of the list provided by EDR identifies no listings adjacent to or at the subject site.

Dry Cleaners and EDR Historical Dry Cleaners

This database provides a list of drycleaner facilities that have EPA ID numbers. These facilities have certain SIC codes including: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; dry cleaning plants, except rugs; carpet and upholstery cleaning; industrial launderers and laundry and garment services.

Review of the list provided by EDR identifies no listings adjacent to or at the subject site.

EDR Historical 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.

Review of the list provided by EDR identifies no Historical Dry Cleaner listings adjacent to or at the subject site.

Waste Management Unit Database System (WMUDS/SWAT)

The California Integrated Waste Management Board maintains an inventory list of both open as well as closed and inactive solid waste disposal facilities and transfer stations in accordance with the Solid Waste Management and Resource Recovery Act of 1972, California Government Code Section 2.66790(b). Generally, the California Integrated Waste Management Board learns of locations of disposal facilities through permit applications and from local enforcement agencies. The Waste Management Unit Database System is used by the California Water Resources Control Board and the Regional Water Quality Control Boards for program tracking and inventory of waste management units.

Review of the latest WMUDS/SWAT listing identifies no WMUDS/SWAT facilities within the approximate minimum search distance of one-half mile from the subject site.

Manufactured Gas Plants (MGP)

Manufactured Gas Plants produced combustible gas for urban use prior to the widespread use and pipeline distribution of natural gas in the 1950s. The main fuels used in production of this gas were coke, coal and oil; the by-products of this manufacturing process include a variety of tars, sludge and other chemicals. MGP sites tend to have subsurface contamination due to the common practice of disposing of the waste products on site.

Review of the MGP list provided by EDR identifies no MGP sites within the approximate minimum search distance of one mile from the subject site.

US Brownfields

Included in the listing are brownfields properties addresses by Cooperative Agreement Recipients and brownfields properties addressed by Targeted Brownfields Assessments. Targeted Brownfields Assessments-EPA's Targeted Brownfields Assessments (TBA) program is designed to help states, tribes, and municipalities minimize the uncertainties of contamination often associated with brownfields. Under the TBA program, EPA provides funding and/or technical assistance for environmental assessments at brownfields sites throughout the country. Targeted Brownfields Assessments supplement and work with other efforts under EPA's Brownfields Initiative to promote cleanup and redevelopment of brownfields.

Review of the list provided by EDR identifies no sites within the approximate minimum search distance of one-half mile from the subject site.

Federal Superfund Lien Searches

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.

Review of the list provided by EDR identifies no listings at the subject site.

In, addition, there are no Federal, State or non-priority liens on the subject property listed in the EDR Database Report or Activity and Use Limitations (AULs) associated with the subject site.

VII ASTM NON-SCOPE ITEMS

Asbestos

In 1977, the U.S. EPA acted to eliminate friable asbestos from building materials. Friable materials are defined as those that can be crushed or reduced to powder by hand pressure. Materials do not have to be damaged to be identified as friable. Additionally, the United States Occupational Safety and Health Administration (OSHA) now requires certain untested materials to be presumed to contain asbestos for buildings constructed prior to 1981.

During the site visit, AES observed reasonably accessible interior areas of the building for the existence and condition of suspect ACM. Construction plans were not provided for review. Asbestos can be identified only by specialized equipment and not by the unaided human eye. The site visit was not intended to be a comprehensive search for all ACM at the subject site.

Based on the construction date of 1975, and our observations, the present building is suspect for materials containing asbestos. The suspect materials include: vinyl floor tiles, drywall compounds, insulation, acoustic ceiling tiles and floor or roof mastic. No sampling or analytical testing of ASTM Non-Scope items was conducted. The observed suspect ACM appeared to be in good condition. Asbestos was also detected in certain materials via prior testing as described in the existing Asbestos O&M Plan. An O&M Plan is currently in place for the property. Thus, the suspected and confirmed presence of asbestos is considered a *de minimis* condition.

Renovation or demolition of areas containing ACM is governed by certain local, state, and/or federal regulations, and should not be attempted without contacting the appropriate agency. Per OSHA regulations, untested materials are presumed to contain asbestos (PACM) until testing and laboratory analysis confirm otherwise. Additionally, if ACM is to be removed, a qualified, licensed abatement contractor should be consulted.

Lead-Based Paint

In 1978, the Consumer Product Safety Commission banned the use of lead as an additive in paint. During the site visit, accessible areas were observed for evidence of damaged and/or peeling paint. In general, the painted surfaces appeared to be in good condition. Based on the construction date of 1975, and our on-site observations the present building is suspect for containing lead-based paint. As the improvements are used for non-residential purposes, the presence of lead-based paint is considered to be a de minimis environmental condition.

Potable Water Supply

The subject site is serviced by a municipally operated, public water system, which is regulated by the Safe Drinking Water Act of 1974. This Act requires that public water supplies be tested for the presence of lead in water. AES contacted the local water utility company, the City of Newport Beach, regarding the results of water tests. The utility company reports that the lead content of the water is below the U.S. EPA action level of 0.015 milligrams per liter.

Radon Gas

Radon gas is a naturally occurring, colorless, odorless gas that is the by-product of the decay of radioactive materials found within bedrock and soil. Radon gas enters buildings through cracks, structural joints, and plumbing openings in floor levels that are in direct contact with the soil. Radon gas, when inhaled, has been found to be carcinogenic in some humans. The U.S. EPA recommended action level for radon gas is 4.0 pCi/L (picoCuries per liter).

The State of California, in conjunction with the U.S. EPA, has conducted residential screening tests in Orange County. The results of that screening indicate that Orange County is predicted to have an average indoor radon screening level of 0.76 pCi/L, with 100% of tests less than 4.0 pCi/L.

AES reviewed the U.S. EPA’s Map of Radon Zones for California, which identifies Orange County as being within radon zone 3. Counties within radon zone 3 have a predicted average indoor radon gas screening level of less than 2 pCi/L.

Based on the literature reviewed, it is our opinion that the risk of radon gas accumulation is not a significant environmental concern at the subject site.

No sampling or analytical testing of ASTM Non-Scope items was conducted.

Wetlands

AES did not observe ponded water, flowing water, saturated soils or hydrophytic vegetation at the subject site.

Mold

AES observed portions of the exposed exterior and interior material surfaces of the improvements for signs of mold and/or mildew and none was observed. Based on the condition of these surfaces, the general quality of the exterior details to keep moisture out of the building and the general interior air quality observed in the improvements without the assistance of specialized testing equipment, mold and/or mildew were not an environmental concern to the subject property at the time of our site visit.

Please note that AES did not perform any probes behind surface materials, use moisture meters to test materials or use specialized equipment to test air quality for signs of existing mold and/or mildew. If further confirmation is required for determining if mold and/or mildew is present in the subject improvements AES recommends that a qualified Industrial Hygienist be retained to perform the necessary industry standard tests and provide a report of their findings.

VIII CONCLUSIONS

Findings and Opinion

AES completed a Phase I ESA for the site in substantial conformance with the scope and limitations of the Standard. Any exceptions to, or deletions from, the Standard are described in the Assessment.

Historical Recognized Environmental Conditions (HRECs)

Based on site observations, interviews and review of available documents and the database records search, AES concludes that no HRECs were identified at the subject site. AES recommends no additional investigation at this time.

Current Recognized Environmental Conditions (RECs)

Based on site observations, interviews and review of available documents and the database records search, AES concludes that no RECs were identified at the subject site. AES recommends no additional investigation at this time.

Business Environmental Risk (BER)

Based on site observations, interviews and review of available documents and the database records search, AES concludes that no *BER's* were identified at the subject site. AES recommends no additional investigation at this time.

Controlled Recognized Environmental Conditions (CREC)

Based on site observations, interviews and review of available documents and the database records search, AES concludes that no CRECs were identified at the subject site. AES recommends no additional investigation at this time.

de minimis Environmental Conditions

Based on site observations, interviews and review of available documents and the database records search, AES concludes that two *de minimis* conditions were identified at the subject site. These are the suspected or confirmed presence of asbestos and lead-based paints. Since there is an Asbestos O&M Plan in place and that the property is not used for residential purposes, these conditions are considered *de minimis conditions.*

AES recommends no additional investigation at this time.

Conclusions

{We have performed a *Phase I Environmental Site Assessment* in conformance with the scope and limitations ASTM Practice E 1527-13 of 1600 Dove Street, the *property*. Any exceptions to or deletions from, this practice are described in Section II of this *report*. This assessment has revealed no evidence of *Recognized Environmental Conditions, Controlled Recognized Environmental Conditions, Business Environmental Risk or Historical Recognized Environmental Conditions* with the *property*.

AES concludes that two *de minimis* conditions were identified at the subject site. These are the suspected or confirmed presence of asbestos and lead-based paints. Since there is an Asbestos O&M Plan in place and that the property is not used for residential purposes, these conditions are considered *de minimis conditions.*

AES recommends no additional investigation at this time.

IX INTERVIEWS

Name	**Title/Affiliation**	**Phone**
Ms. Mandy Webb	Property Manager Optima Asset Management	949-852-0900
Self help	Permit Records City of Newport Beach	Web site

X QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

Richard T. Sawyer - Mr. Sawyer is a former California Registered Environmental Assessor with more than 20 years of experience in preparing Phase I Environmental Reports. Richard is also a licensed Architect in the State of California. He has performed environmental assessments of commercial properties throughout the western United States.

Stephen J. Baker – Mr. Baker is a California and Washington Registered Geologist and Certified Hydrogeologist. He has conducted cursory environmental surveys, Phase I Evaluations, site characterization of sediment and groundwater, remedial design and implementation, post monitoring and achievement of "No Further Action" status by the lead regulating agencies. Mr. Baker holds a degree in geology from Ohio State University and a California Registered Geologist License number 4354.

Appendix E

Preliminary Water Quality Management Plan

County of Orange/Santa Ana Region Priority Project Preliminary Water Quality Management Plan (pWQMP)

Project Name:

1600 Dove St.

Newport Beach, CA 92660

Prepared for:

KCN MANAGEMENT, LLC

5000 Birch St. East Tower, Suite 600

Newport Beach, CA 92660

(949)267-1507

Prepared by:

Tait & Associates, INC

801 N. Parkcenter Drive

Santa Ana, CA 92705

(714)560-8643

Prepared: April 24, 2024

Project Owner's Certification

Planning Application No. (If applicable)	PA2023-XXX	Grading Permit No.	
Tract/Parcel Map and Lot(s) No.		Building Permit No.	
Address of Project Site and APN (If no address, specify Tract/Parcel Map and Lot Numbers)			427-181-03

This Water Quality Management Plan (WQMP) has been prepared for The Picerne Group by Tait & Associates, Inc. The WQMP is intended to comply with the requirements of the County of Orange NPDES Stormwater Program requiring the preparation of the plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan , including the ongoing operation and maintenance of all best management practices (BMPs), and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the Santa Ana Region. Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Owner:			
Title	Willis Locke / Director of Preconstruction		
Company	The Picerne Group, LLC		
Address	5000 Birch, Suite 600, Newport Beach, CA 92660		
Email	wlocke@picereneconstruction.com		
Telephone #	(949) 267-1590		
I understand my responsibility to implement the provisions of this WQMP including the ongoing operation and maintenance of the best management practices (BMPs) described herein.			
Owner Signature	TO BE SIGNED AT FINAL WQMP	Date	

Preparer (Engineer):			
Title	David Sloan, PE / Director of Engineering	PE Registration #	C82595
Company	Tait & Associates, Inc.		
Address	801 N. Parkcenter Dr., Santa Ana, CA 92705		
Email	dsloan@tait.com		
Telephone #	(714) 560-8643		
I hereby certify that this Water Quality Management Plan is in compliance with, and meets the requirements set forth in, Order No. R8-2009-0030/NPDES No. CAS618030, of the Santa Ana Regional Water Quality Control Board**.**			
Preparer Signature	**TO BE SIGNED AT FINAL WQMP**	Date	
Place Stamp Here			

Contents

Page No.

Attachments

Section I Permit(s) and Water Quality Conditions of Approval or Issuance

Provide discretionary or grading/building permit information and water quality conditions of approval, or permit issuance, applied to the project. If conditions are unknown, please request applicable conditions from staff. *Refer to Section 2.1 in the Technical Guidance Document (TGD) available on the OC Planning website (ocplanning.net).*

Project Infomation			
Permit/Application No. (If applicable)	N/A	Grading or Building Permit No. (If applicable)	N/A
Address of Project Site (or Tract Map and Lot Number if no address) and APN	APN: 427-181-03		

Water Quality Conditions of Approval or Issuance	
Water Quality Conditions of Approval or Issuance applied to this project. (Please list verbatim.)	Prior to the issuance of a grading permit, the Applicant shall prepare and submit a Water Quality Management Plan (WQMP) for the proposed project, subject to the approval of the Building Division and Code and Water Quality Enforcement Division. The WQMP shall provide appropriate Best Management Practices BMPs) to ensure that no violations of water quality standards or waste discharge requirements occur. A list of "good housekeeping" practices will be incorporated into the long- term post - construction operation of the site to minimize the likelihood that pollutants will be used, stored or spilled on the site that could impair water quality. These may include frequent parking area vacuum truck sweeping, removal of wastes or spills, limited use of harmful fertilizers or pesticides, and the diversion of storm water away from potential sources of pollution (e. g., trash receptacles and parking structures). The Stage 2 WQMP shall list and describe all structural and non- structural BMPs. In addition, the WQMP must also identify the entity responsible for the long- term inspection, maintenance, and funding for all structural (and if applicable Treatment Control) BMPs.

Conceptual WQMP

Was a Conceptual Water Quality Management Plan previously approved for this project?	This is a preliminary WQMP
Watershed-Based Plan Conditions	
Provide applicable conditions from watershed - based plans including WIHMPs and TMDLS.	WIHMP: Not Applicable 303(d) Listed Impairments for San Diego Creek and Newport Bay: Selenium, Toxaphene, Fecal Coliform, Metals, Copper, Sediment Toxicity, Chlordane, DDT, PCB's (Polychlorinated Biphenyls), Indicator Bacteria, Nutrients, Pesticides, Sedimentation/Siltation TMDL's for San Diego Creek and Newport Bay: Bacteria Indicators/Pathogens, Nutrients, Pesticides, Sedimentation/Siltation

Section II Project Description

II.1 Project Description

Provide a detailed project description including:

- Project areas;
- Land uses;
- Land cover;
- Design elements;
- A general description not broken down by drainage management areas (DMAs).

Include attributes relevant to determining applicable source controls. *Refer to Section 2.2 in the Technical Guidance Document (TGD) for information that must be included in the project description.*

<table>
<tr><th colspan="5">Description of Proposed Project</th></tr>
<tr><td>Development Category (From Model WQMP, Table 7.11-2; or -3):</td><td colspan="4">Category 8: Significant Redevelopment Project</td></tr>
<tr><td>Project Area (ft²): 108,340 (2.49 AC)</td><td colspan="2">Number of Dwelling Units:</td><td colspan="2">SIC Code: 59 (Residential)</td></tr>
<tr><td rowspan="2">Project Area</td><td colspan="2">Pervious</td><td colspan="2">Impervious</td></tr>
<tr><td>Area
(acres or sq ft)</td><td>Percentage</td><td>Area
(acres or sq ft)</td><td>Percentage</td></tr>
<tr><td>Pre-Project Conditions</td><td>0.35</td><td>14%</td><td>2.14</td><td>86%</td></tr>
<tr><td>Post-Project Conditions</td><td>0.52</td><td>21%</td><td>1.97</td><td>79%</td></tr>
<tr><td>Drainage Patterns/Connections</td><td colspan="4"></td></tr>
</table>

Narrative Project Description: (Use as much space as necessary.)	The proposed development is in the City of Newport Beach, Orange County, California. In general, the property is bordered by a commercial development to the North, an existing parking lot to the East, Dolphin-Striker Way to the South and Dove Street to the West. The project is comprised of a 6-story 282-unit podium apartment building with two levels of subterranean parking. Project leasing offices are accessed directly from the Dove Street. **Existing (Pre-Developed) Hydrologic Conditions:** The property is currently an office parking consisting of a 4-story office complexes with surface parking. Soil classification is largely comprised of 'D' type soils. The site currently drains towards Dove Street, with approximately 60% of the drainage running towards the north west and 40% to the south west. The site is considered relatively flat at 1% to 2% to provide sheet flow within the existing parking lots. The parking lot drainage is collected by a series of concrete swales which are collected by onsite private catch basins. The drainage is then conveyed to the public curb and gutter via various curb drains located along Dove Street. The drainage is then conveyed to the North and is collected by an existing public catch basin which discharges the stormwater to an existing 54" RCP storm drain owned and maintained by the City. The drainage is eventually discharged to the San Diego Creek and finally to the Newport Bay. **Developed (Post-Developed) Hydrologic Conditions:** The project will maintain the existing drainage pattern of the site. Approximately 0.52 ac of the 2.49 ac site will be landscaped or have a pervious surface. The impervious surface includes walkway areas in the podium area, roads that allow for vehicular traffic, which are anticipated to be paved with asphalt or decorative pavement. The roof drainage will be collected by a series of roof drains that will be routed to proposed bioretention basins via storm drain system. The bioretention basins will be sized for the DCV. The project will propose (2) connections to the existing 54" RCP storm drain in Dove Street. Once the DCV is achieved, the water quality flows and 25-year storm events will be discharged to the existing 54" RCP storm drain pipe. The project will propose individual parkway drains for each bioretention basin designed for the 100-year storm events. Since the impervious percentage is decreased, runoff volume is decreased and will not exceed the allowable 5%, therefore no hydrologic conditions of concern (HCOC) are anticipated.

II.2 Potential Stormwater Pollutants

Determine and list expected stormwater pollutants based on land uses and site activities. *Refer to Section 2.2.2 and Table 2.1 in the Technical Guidance Document (TGD) for guidance.*

Pollutants of Concern			
Pollutant	Check One for each: E=Expected to be of concern N=Not Expected to be of concern		Additional Information and Comments
Suspended-Solid/ Sediment	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Nutrients	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Heavy Metals	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Pathogens (Bacteria/Virus)	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Pesticides	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Oil and Grease	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Toxic Organic Compounds	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components
Trash and Debris	E ☒	N ☐	Attached Residential, Retail, Parking, and Street project components

II.3 Hydrologic Conditions of Concern

Determine if streams located downstream from the project area are potentially susceptible to hydromodification impacts. *Refer to Section 2.2.3.1 in the Technical Guidance Document (TGD) for North Orange County or Section 2.2.3.2 for South Orange County.*

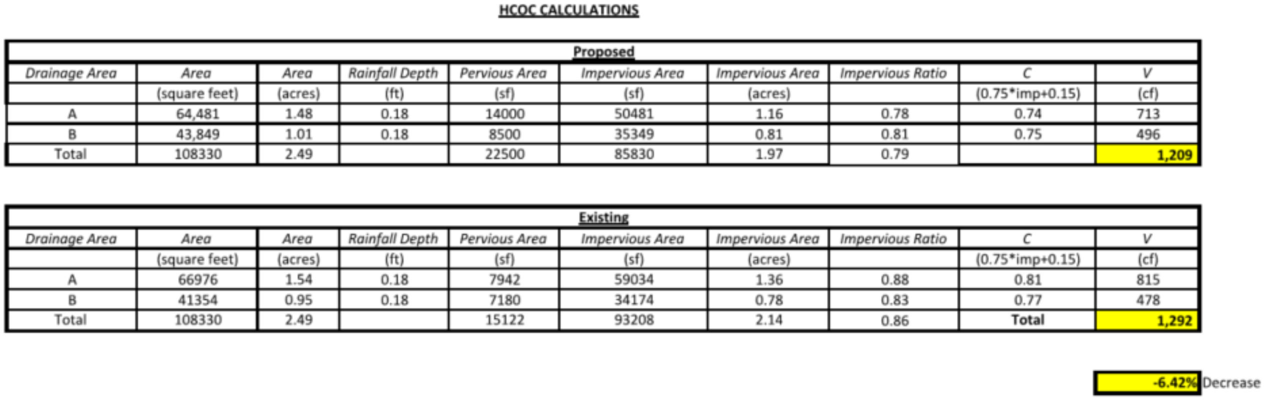
☐ No – Show map

☒ Yes – Describe applicable hydrologic conditions of concern below. *Refer to Section 2.2.3 in the Technical Guidance Document (TGD).*

While streams located downstream of the project site are potentially susceptible to hydromodification impacts, there are no 'Hydrologic Conditions of Concern' (HCOC). The impervious percentage is decreased which results in a decrease of runoff volume and does not exceed the allowable 5%, therefore no hydrologic conditions of concern (HCOC) are anticipated.

Approximately 1,209 cu-ft of runoff volume is produced by a 2-year, 24-hour storm event under the post developed condition. The same frequency and duration storm produces approximately 1,292 cu-ft in the pre-developed condition. This represents a decrease in the runoff volume. A summary of runoff volumes is provided in the following table. Hydrology calculations for the 2-year, 24-hour storm event are included in the Appendix of this report. Hydrology maps can be found in the Attachment D of this report.

Additionally, due to roof runoff starting at the building roof 6 stories above ground, the time of concentration will be reduced as a result of the project.



HCOC CALCULATIONS

Proposed

Drainage Area	*Area*	*Area*	*Rainfall Depth*	*Pervious Area*	*Impervious Area*	*Impervious Area*	*Impervious Ratio*	*C*	*V*
	(square feet)	(acres)	(ft)	(sf)	(sf)	(acres)		(0.75*imp+0.15)	(cf)
A	64,481	1.48	0.18	14000	50481	1.16	0.78	0.74	713
B	43,849	1.01	0.18	8500	35349	0.81	0.81	0.75	496
Total	108330	2.49		22500	85830	1.97	0.79		**1,209**

Existing

Drainage Area	*Area*	*Area*	*Rainfall Depth*	*Pervious Area*	*Impervious Area*	*Impervious Area*	*Impervious Ratio*	*C*	*V*
	(square feet)	(acres)	(ft)	(sf)	(sf)	(acres)		(0.75*imp+0.15)	(cf)
A	66976	1.54	0.18	7942	59034	1.36	0.88	0.81	815
B	41354	0.95	0.18	7180	34174	0.78	0.83	0.77	478
Total	108330	2.49		15122	93208	2.14	0.86	**Total**	**1,292**

-6.42% Decrease

II.4 Post Development Drainage Characteristics

Describe post development drainage characteristics. *Refer to Section 2.2.4 in the Technical Guidance Document (TGD).*

The proposed storm drain system will largely maintain the same drainage pattern(s), and connectivity that exists today. Currently there are two storm drain discharge locations. Refer to the Existing & Proposed Hydrology Exhibit attached with this report.

1. Drainage Area “A” collects a portion of the building, hardscape, and landscape runoff which drains to a proposed bioretention planter. Once the DCV is achieved, the peak flows are discharged to the existing 54” storm drain main in Dove Street.
2. Drainage Area “B” collects the remaining portion of the building, hardscape, and landscape runoff. The runoff is conveyed to a proposed bioretention planter via storm drain pipes. Once the DCV is achieved, the, the peak flows are discharged to the existing 54” storm drain main in Dove Street.

Capture Efficiency Method

Drainage Area	Area (sf)	Area (AC)	Rainfall Depth (in)	Pervious Area (sf)	Pervious Area (ac)	Impervious Area (ac)	Impervious ratio	C (0.75ximp+0.15)	TC (MIN)	I1	Q_{DESIGN} (CFS)	DCV(cf) (CxdxA)	BMP USED
A	64,481	1.48	0.281	14000	0.32	1.16	0.78	0.74	-	-	-	1,113	Bioretention Planter
B	43,849	1.01	0.281	8500	0.20	0.81	0.81	0.75	-	-	-	775	Bioretention Planter
Total	108,330	2.49		22,500	0.52	1.97	0.79	0.74				1,888	

II.5 Property Ownership/Management

Describe property ownership/management. *Refer to Section 2.2.5 in the Technical Guidance Document (TGD).*

The property will be privately owned and maintained. This includes all street and storm drain improvements as well as all applicable site design, source control, and treatment control BMP's.

Section III Site Description

III.1 Physical Setting

Fill out table with relevant information. *Refer to Section 2.3.1 in the Technical Guidance Document (TGD).*

Name of Planned Community/Planning Area (if applicable)	
Location/Address	1600 Dove St. Newport Beach, CA 92660
General Plan Land Use Designation	Mixed Use: Residential/Commercial
Zoning	PC 11
Acreage of Project Site	2.49 AC
Predominant Soil Type	D

III.2 Site Characteristics

Fill out table with relevant information and include information regarding BMP sizing, suitability, and feasibility, as applicable. *Refer to Section 2.3.2 in the Technical Guidance Document (TGD).*

Site Characteristics	
Precipitation Zone	Between 0.7-inches and 0.75-inches (24-hour, 85th percentile rainfall) from Figure XVI-1 (Rainfall Zones) from the Orange County Technical Guidance Document.
Topography	The site is relatively flat.
Drainage Patterns/Connections	The existing condition contains 2 points of connection. The proposed condition will follow the same drainage pattern and maintain the same points of connection.

Soil Type, Geology, and Infiltration Properties	According to the soils maps provided in Attachment C, the hydrologic soils group is D.
Hydrogeologic (Groundwater) Conditions	Per the TGD maps, groundwater is relatively deep in the project area.
Geotechnical Conditions (relevant to infiltration)	Since the site soils consist mainly of Soil Group D, infiltration is not feasible.
Off-Site Drainage	N/A
Utility and Infrastructure Information	Existing utilities are not anticipated to constrain site design in regards to implementing BMP strategies.

III.3 Watershed Description

Fill out table with relevant information and include information regarding BMP sizing, suitability, and feasibility, as applicable. *Refer to Section 2.3.3 in the Technical Guidance Document (TGD).*

Receiving Waters	San Diego Creek (Reach 1) Newport Bay (Lower) Newport Bay (Upper) Pacific Ocean
303(d) Listed Impairments	**San Diego Creek (Reach 1)** - Selenium, Toxaphene, Fecal Coliform, Sedimentation/Siltation, Nutrients, Pesticides, Metal/Metalloids, Pathogens, Sediment **Newport Bay (Upper)** - Metals, Copper, Sediment Toxicity, Chlordane, DDT (Dichlorodiphenyl Trichloroethane), PCB's (Polychlorinated Biphenyls), Indicator Bacteria, Nutrients, Pesticides, Sedimentation/Siltation, Other Organics **Newport Bay (Lower)** - Copper, Sediment Toxicity, Chlordane, DDT, PCB's, Indicator Bacteria, Nutrients, Pesticides, Other Organics
Applicable TMDLs	**San Diego Creek (Reach 1)** - Indicator Bacteria, Nutrients, Pesticides, Sedimentation/Siltation **Newport Bay (Upper)** - Indicator Bacteria, Nutrients, Pesticides,

	Sedimentation/Siltation **Newport Bay (Lower)** - Nutrients, Pesticides
Pollutants of Concern for the Project	Primary Pollutants of Concern: Suspended-Solid / Sediment, Nutrients, Heavy Metals, Pathogens (Bacteria/Virus), Pesticides, and Toxic Organic Compounds Other Pollutants of Concern: Oil and Grease, Trash and Debris
Environmentally Sensitive and Special Biological Significant Areas	San Diego Creek (Reach 1) Newport Bay (Upper) Newport Bay (Lower)

Section IV Best Management Practices (BMPs)

IV. 1 Project Performance Criteria

Describe project performance criteria. Several steps must be followed in order to determine what performance criteria will apply to a project. These steps include:

- If the project has an approved WIHMP or equivalent, then any watershed specific criteria must be used and the project can evaluate participation in the approved regional or sub-regional opportunities. (Please ask your assigned planner or plan checker regarding whether your project is part of an approved WIHMP or equivalent.)
- Determine applicable hydromodification control performance criteria. *Refer to Section 7.II-2.4.2.2 of the Model WQMP.*
- Determine applicable LID performance criteria. *Refer to Section 7.II-2.4.3 of the Model WQMP.*
- Determine applicable treatment control BMP performance criteria. *Refer to Section 7.II-*3.2.2 *of the Model WQMP.*
- Calculate the LID design storm capture volume for the project. *Refer to Section 7.II-2.4.3 of the Model WQMP.*

(NOC Permit Area only) Is there an approved WIHMP or equivalent for the project area that includes more stringent LID feasibility criteria or if there are opportunities identified for implementing LID on regional or sub-regional basis?	YES ☐	NO ☒
If yes, describe WIHMP feasibility criteria or regional/sub-regional LID opportunities.		

Project Performance Criteria	
If HCOC exists, list applicable hydromodification control performance criteria (Section 7.II-2.4.2.2 in MWQMP)	This project does not have HCOCs due to the fact that the existing site has already been fully developed, the proposed condition does not modify the proposed drainage patterns and the proposed redevelopment will not significantly exceed the volumes and time of concentration of the storm water runoff for the pre-development condition for a two-year frequency storm event (a difference of five percent or less is considered insignificant). Reference Attachment B for calculations.
List applicable LID performance criteria (Section 7.II-2.4.3 from MWQMP)	Per Section 7.II-2.4.3 of the WQMP, “Priority Projects must infiltrate, harvest and use, evapotranspire, or biotreat/biofilter, the 85th percentile, 24-hour storm event (Design Capture Volume).” “A properly designed biotreatment system may only be considered if infiltration, harvest and use, and evapotranspiration (ET) cannot be feasibly implemented for the full design capture volume. In this case, infiltration, harvest and use, and ET practices must be implemented to the greatest extent feasible and biotreatment may be provided for the remaining design capture volume.” The required DCV will be treated via proposed biotreatment basins. The biotreatment planters will remove stormwater pollutants through physical and biological processes. Pollutants removed from stormwater include particulate organic matter, phosphorus, suspended solids, nitrogen, metals, TKN, and bacteria. Refer to the info sheet in Attachment D.
List applicable treatment control BMP performance criteria (Section 7.II-3.2.2 from MWQMP)	Per Section 7.II-2.4.3 of the WQMP, “If it is not feasible to meet LID performance criteria through retention and/or biotreatment provided on-site or at a sub-regional/regional scale, then treatment control BMPs shall be provided on-site or offsite prior to discharge to waters of the US. Sizing of treatment control BMP(s) shall be based on either the unmet volume after claiming applicable water quality credits, if appropriate (See Section 7.II-3.1 Water Quality Credits) and as calculated in TGD Appendix VI. If treatment control BMPs can treat all of the remaining unmet volume and have a medium to high effectiveness for reducing the primary POCs, the project is considered to be in compliance; a waiver application and participation in an alternative program is not required. If the cost of providing treatment control BMPs greatly outweighs the pollution control benefits they would provide, a waiver of treatment control and LID requirements can be requested and alternative compliance approaches must be used to fulfill the remaining unmet volume (See Section 7.II-3.3).” Treatment control BMP’s will not be utilized for this project.

Calculate LID design storm capture volume for Project.	LID DCV calculations are provided in Attachment B.

IV.2. Site Design and Drainage

Describe site design and drainage including

- A narrative of site design practices utilized or rationale for not using practices;
- A narrative of how site is designed to allow BMPs to be incorporated to the MEP
- A table of DMA characteristics and list of LID BMPs proposed in each DMA.
- Reference to the WQMP "BMP Exhibit."
- Calculation of Design Capture Volume (DCV) for each drainage area.
- A listing of GPS coordinates for LID and Treatment Control BMPs.

Refer to Section 2.4.2 in the Technical Guidance Document (TGD).

BMP utilization in Site Design to Maximum Extent Practicable (MEP):

Since infiltration and harvest and reuse are not feasible, the next hierarchy will utilize the biofiltration and bioretention strategy for treating the design capture volume. Due to geotechnical concerns related to clayey layers of soil, infiltration strategies were not proposed. Areas shall incorporate a bioretention planters. The biotreatment basins with underdrains will be lined with an impermeable membrane to ensure infiltration does not occur in these areas.

Streets, Landscape, Sidewalks, & Building Roof

Per the reasons stated above, infiltration and/ or Harvest and use methods are not considered for these areas of the project site. The streets area lack either adequate space or are infeasible to implement these LID BMP strategies. The proposed bio treatment strategy consists of using a biotreatment planter sized for the design capture volume. The location of the biotreatment basins can be seen on the WQMP Plot Plan included in Attachment D.

IV.3 LID BMP Selection and Project Conformance Analysis

Each sub-section below documents that the proposed design features conform to the applicable project performance criteria via check boxes, tables, calculations, narratives, and/or references to worksheets. *Refer to Section 2.4.2.3 in the Technical Guidance Document (TGD) for selecting LID BMPs and Section 2.4.3 in the Technical Guidance Document (TGD) for conducting conformance analysis with project performance criteria.*

IV.3.1 Hydrologic Source Controls (HSCs)

If required HSCs are included, fill out applicable check box forms. If the retention criteria are otherwise met with other LID BMPs, include a statement indicating HSCs not required.

Name	Included?
Localized on-lot infiltration	☐
Impervious area dispersion (e.g. roof top disconnection)	☐
Street trees (canopy interception)	☐
Residential rain barrels (not actively managed)	☐
Green roofs/Brown roofs	☐
Blue roofs	☐
Impervious area reduction (e.g. permeable pavers, site design)	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐
Other:	☐

IV.3.2 Infiltration BMPs

Identify infiltration BMPs to be used in project. If design volume cannot be met, state why.

Name	**Included?**
Bioretention without underdrains	☐
Rain gardens	☐
Porous landscaping	☐
Infiltration planters	☐
Retention swales	☐
Infiltration trenches	☐
Infiltration basins	☐
Drywells	☐
Subsurface infiltration galleries	☐
French drains	☐
Permeable asphalt	☐
Permeable concrete	☐
Permeable concrete pavers	☐
Other:	☐
Other:	☐

Show calculations below to demonstrate if the LID Design Strom Capture Volume can be met with infiltration BMPs. If not, document how much can be met with infiltration and document why it is not feasible to meet the full volume with infiltration BMPs.

Infiltration is not recommended because the site consists of Type D soils, which are not feasible for infiltration.

IV.3.3 Evapotranspiration, Rainwater Harvesting BMPs

If the full Design Storm Capture Volume cannot be met with infiltration BMPs, describe any evapotranspiration and/or rainwater harvesting BMPs included.

Name	**Included?**
All HSCs; *See Section IV.3.1*	☐
Surface-based infiltration BMPs	☐
Biotreatment BMPs	☐
Above-ground cisterns and basins	☐
Underground detention	☐
Other:	☐
Other:	☐
Other:	☐

Show calculations below to demonstrate if the LID Design Storm Capture Volume can be met with evapotranspiration and/or rainwater harvesting BMPs in combination with infiltration BMPs. If not, document below how much can be met with either infiltration BMPs, evapotranspiration, rainwater harvesting BMPs, or a combination, and document why it is not feasible to meet the full volume with these BMP categories.

N/A

IV.3.4 Biotreatment BMPs

If the full Design Storm Capture Volume cannot be met with infiltration BMPs, and/or evapotranspiration and rainwater harvesting BMPs, describe biotreatment BMPs included. Include sections for selection, suitability, sizing, and infeasibility, as applicable.

Name	**Included?**
Bioretention with underdrains	☒
Stormwater planter boxes with underdrains	☐
Rain gardens with underdrains	☐
Constructed wetlands	☐
Vegetated swales	☐
Vegetated filter strips	☐
Proprietary vegetated biotreatment systems	☐
Wet extended detention basin	☐
Dry extended detention basins	☐
Other:	☐
Other:	☐

Show calculations below to demonstrate if the LID Design Storm Capture Volume can be met with infiltration, evapotranspiration, rainwater harvesting and/or biotreatment BMPs. If not, document how much can be met with either infiltration BMPs, evapotranspiration, rainwater harvesting BMPs, or a combination, and document why it is not feasible to meet the full volume with these BMP categories.

Please Refer to Appendix ‘B’ of this report for BMP calculations.

IV.3.5 Hydromodification Control BMPs

Describe hydromodification control BMPs. *See Section 5 of the Technical Guidance Document (TGD).* Include sections for selection, suitability, sizing, and infeasibility, as applicable. Detail compliance with Prior Conditions of Approval (if applicable).

Hydromodification Control BMPs	
BMP Name	**BMP Description**
N/A	

IV.3.6 Regional/Sub-Regional LID BMPs

Describe regional/sub-regional LID BMPs in which the project will participate. *Refer to Section 7.II-2.4.3.2 of the Model WQMP.*

Regional/Sub-Regional LID BMPs
N/A

IV.3.7 Treatment Control BMPs

Treatment control BMPs can only be considered if the project conformance analysis indicates that it is not feasible to retain the full design capture volume with LID BMPs. Describe treatment control BMPs including sections for selection, sizing, and infeasibility, as applicable.

<table>
<tr><th colspan="2">Treatment Control BMPs</th></tr>
<tr><th>BMP Name</th><th>BMP Description</th></tr>
<tr><td>N/A</td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
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<tr><td></td><td></td></tr>
</table>

IV.3.8 Non-structural Source Control BMPs

Fill out non-structural source control check box forms or provide a brief narrative explaining if non-structural source controls were not used.

Non-Structural Source Control BMPs

Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
N1	Education for Property Owners, Tenants and Occupants	☒	☐	
N2	Activity Restrictions	☒	☐	
N3	Common Area Landscape Management	☒	☐	
N4	BMP Maintenance	☒	☐	
N5	Title 22 CCR Compliance (How development will comply)	☒	☐	
N6	Local Industrial Permit Compliance	☐	☒	No industrial waste discharges are anticipated
N7	Spill Contingency Plan	☐	☒	No storage of hazardous waste
N8	Underground Storage Tank Compliance	☒	☐	
N9	Hazardous Materials Disclosure Compliance	☒	☐	
N10	Uniform Fire Code Implementation	☒	☐	
N11	Common Area Litter Control	☒	☐	
N12	Employee Training	☒	☐	
N13	Housekeeping of Loading Docks	☐	☒	No loading docks on property
N14	Common Area Catch Basin Inspection	☒	☐	
N15	Street Sweeping Private Streets and Parking Lots	☒	☐	
N16	Retail Gasoline Outlets	☐	☒	No retail gasoline on property

N1-Education for property Owners, Tenants and occupants & N-12 Employee Training
The property owner shall prepare a training manual for all existing and future employees. The manual shall include information regarding proper practices that contribute to the protection of the stormwater quality. Training shall be provided upon hire of new associates. A copy of the training manual shall remain in the building at all times for employees to use as needed. The manual shall include all Educational Material included on Attachment A of this report. Additional education material may be found in the following website:
http://www.ocwatershed.com/PublicEd/resources/business-brochures.html

N2-Activity Restrictions
The property owner shall ensure that the rules and guidelines as determined on the project conditions, covenants and restrictions (CC&R's) and lease terms or other policies are followed at all times once the project is operations. Prohibited activities for the project that promoted water quality includes:
· Prohibit discharges of fertilizer, pesticides, or animal wastes to streets or storm drains.
· Prohibit blowing or sweeping of debris (leaf litter, grass clippings, litter, etc.) into streets or storm drains.
· Requirement to keep dumpster lids closed at all times.
· Prohibit vehicle washing, maintenance, or repair on the premised or restrict those activities to designated areas.

N3-Common Area Landscape Management
Specific practices are followed for landscape maintenance. Ongoing maintenance is conducted to minimize erosion and over-irrigation, conserve water and reduce pesticide and fertilizer applications.
All maintenance must be consistent with the City of Tustin requirements. Proper maintenance practices should help reduce and/or eliminate pollution from pesticides, nutrients, trash/debris and sediments. The project common area landscape maintenance should be consistent with the following documents included in Attachment A:
· Building and Ground Maintenance Guidelines
· Housekeeping practices
· Plaza and sidewalk cleaning
· Landscape maintenance

N4-BMP Maintenance
BMP maintenance, implementation schedules and responsible parties are included with each specific BMP narrative in section V.

N5-Title 22 CCR compliance
Hazardous waste shall be managed properly trough compliance with applicable title 22 regulations.
Storage and transportation of hazardous materials shall be per the title 22 of the California Code of Regulations and the Health and Safety Code.

N9-Hazardous Material Disclosure Compliance
The Owner is responsible for obtaining the required permits for the use and transportation of hazardous materials. Permits may be required from the County of Orange Health Department, City of Tustin, and other local authorities.

N10-Uniform Fire Code Implementation
The Owner is responsible for complying with the Los Angeles Fire Department requirements regarding proper management of hazardous materials and emergency response plans. An inventory of hazardous materials should be maintained on-site and an emergency response plans should be established.

N11-Common area litter control
The Owner will be required to implement trash management and litter control procedures in the common areas aimed at reducing pollution of drainage water. The Owner may contract with their landscape maintenance firm to provide this service with regularly scheduled maintenance, which should consist of litter patrol, emptying of trash receptacles in common areas, and noting trash disposal violations and reporting the violations to the Owner for investigation.

N12-Employee Training
The Owner will be required to implement an education program as it would apply to future employees.

N14-Common area catch basin inspection
The Owner must ensure that the on-site drain inlets, grates, and drain pipes will be periodically inspected visually. Cleaning should take place in the late summer/early fall prior to the start of the rainy season. If necessary, clean, repair, or replace any drainage facility prior to the start of each rainy season (no later than October 15 of each year). Also refer to "Drainage System Maintenance" in Attachment A.

N15-Street Sweeping Private Streets and Parking Lots
The Owner must sweep outdoor lots regularly (minimum monthly), and prior to the storm season (no later than October 15 each year). Sweeping shall be done with a vacuum-type sweeper. Under no circumstances are outdoor areas/lots to be rinsed or washed with water unless said rinse/wash water is collected and disposed of properly (i.e. into the sewer).

IV.3.9 Structural Source Control BMPs

Fill out structural source control check box forms or provide a brief narrative explaining if structural source controls were not used.

Structural Source Control BMPs

Identifier	Name	Check One		If not applicable, state brief reason
		Included	Not Applicable	
S1	Provide storm drain system stenciling and signage	☒	☐	
S2	Design and construct outdoor material storage areas to reduce pollution introduction	☐	☒	
S3	Design and construct trash and waste storage areas to reduce pollution introduction	☒	☐	
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	☒	☐	
S5	Protect slopes and channels and provide energy dissipation	☒	☐	
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	☐	☒	
S6	Dock areas	☐	☒	
S7	Maintenance bays	☐	☒	
S8	Vehicle wash areas	☐	☒	
S9	Outdoor processing areas	☐	☒	
S10	Equipment wash areas	☐	☒	
S11	Fueling areas	☐	☒	
S12	Hillside landscaping	☐	☒	
S13	Wash water control for food preparation areas	☒	☐	
S14	Community car wash racks	☐	☒	

S1-Provide storm drain system stenciling and signage
All catch basins/inlets/outlets on site must be marked using the City's "No Dumping – Drains to Ocean" curb marker or stenciled. An approved stencil shall be used to paint this message on the top of curb directly above the inlet, and on one side of the curb face. Labeling for catch basins is to be inspected regularly and maintained so as to be reasonably legible at all times. The inspection and maintenance is to be performed by the Owner. This stencil is to alert the public/employees to the destination of pollutants discharged into the storm water.

S3-Design and construct trash and waste storage areas to reduce pollution introduction
The owner shall post signs on trash enclosure gates that state "Keep Dumpster Lids Closed." The Owner will monitor dumpster usage such that dumpsters are not overfilled and the dumpster lids can close completely. The Owner shall increase the trash pickup schedule as necessary to prevent dumpsters from overfilling. The Owner will observe and damage to the trash enclosure wall and any discharge from the trash storage area.

S4-Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control
All irrigation systems will be inspected to ensure that the systems are functioning properly and that the programmable timers are set correctly.

IV.4 Alternative Compliance Plan (If Applicable)

Describe an alternative compliance plan (if applicable). Include alternative compliance obligations (i.e., gallons, pounds) and describe proposed alternative compliance measures. *Refer to Section 7.II 3.0 in the WQMP.*

IV.4.1 Water Quality Credits

Determine if water quality credits are applicable for the project. *Refer to Section 3.1 of the Model WQMP for description of credits and Appendix VI of the Technical Guidance Document (TGD) for calculation methods for applying water quality credits.*

<table>
<tr><th colspan="6">Description of Proposed Project</th></tr>
<tr><td colspan="6">Project Types that Qualify for Water Quality Credits (Select all that apply):</td></tr>
<tr><td>☐Redevelopment projects that reduce the overall impervious footprint of the project site.</td><td colspan="3">☐Brownfield redevelopment, meaning redevelopment, expansion, or reuse of real property which may be complicated by the presence or potential presence of hazardous substances, pollutants or contaminants, and which have the potential to contribute to adverse ground or surface WQ if not redeveloped.</td><td colspan="2">☐ Higher density development projects which include two distinct categories (credits can only be taken for one category): those with more than seven units per acre of development (lower credit allowance); vertical density developments, for example, those with a Floor to Area Ratio (FAR) of 2 or those having more than 18 units per acre (greater credit allowance).</td></tr>
<tr><td colspan="2">☐ Mixed use development, such as a combination of residential, commercial, industrial, office, institutional, or other land uses which incorporate design principles that can demonstrate environmental benefits that would not be realized through single use projects (e.g. reduced vehicle trip traffic with the potential to reduce sources of water or air pollution).</td><td colspan="3">☐ Transit-oriented developments, such as a mixed use residential or commercial area designed to maximize access to public transportation; similar to above criterion, but where the development center is within one half mile of a mass transit center (e.g. bus, rail, light rail or commuter train station). Such projects would not be able to take credit for both categories, but may have greater credit assigned</td><td>☐ Redevelopment projects in an established historic district, historic preservation area, or similar significant city area including core City Center areas (to be defined through mapping).</td></tr>
<tr><td>☐Developments with dedication of undeveloped portions to parks, preservation areas and other pervious uses.</td><td>☐ Developments in a city center area.</td><td>☐ Developments in historic districts or historic preservation areas.</td><td colspan="2">☐ Live-work developments, a variety of developments designed to support residential and vocational needs together – similar to criteria to mixed use development; would not be able to take credit for both categories.</td><td>☐In-fill projects, the conversion of empty lots and other underused spaces into more beneficially used spaces, such as residential or commercial areas.</td></tr>
</table>

Calculation of Water Quality Credits (if applicable)	N/A

IV.4.2 Alternative Compliance Plan Information

Describe an alternative compliance plan (if applicable). Include alternative compliance obligations (i.e., gallons, pounds) and describe proposed alternative compliance measures. *Refer to Section 7.II 3.0 in the Model WQMP.*

N/A

Section V Inspection/Maintenance Responsibility for BMPs

Fill out information in table below. Prepare and attach an Operation and Maintenance Plan. Identify the funding mechanism through which BMPs will be maintained. Inspection and maintenance records must be kept for a minimum of five years for inspection by the regulatory agencies. *Refer to Section 7.II 4.0 in the Model WQMP.*

BMP Inspection/Maintenance

BMP	Reponsible Party(s)	Inspection/ Maintenance Activities Required	Minimum Frequency of Activities
Biotreatment Basin	Owner	Biotreatment BMP (Bioretention with Underdrains) Inspection and repair of treatment area's components. Check for standing water. Corrective measures such as removal and replacement of top soil layer, top 3 inches of engineered soil; or more as needed to ensure proper infiltration rate to achieve sufficient drawdown time are necessary to prevent creating mosquito and other vector habitat if drawdown time exceeds 72 hours after a storm event. Replant eroded and bare areas prior to each rainy season. Replace vegetation as needed if dying or an invasive species takes over. Most BMP vegetation is anticipated to be native however vegetation surrounding visible areas to the public will include specific non-native species.	Weekly and as needed, replant eroded and bare areas prior to each rainy season. Test draw down time once a year at a minimum.
N1 - Education for Property Owners, Tenants and Occupants	Property Management Association	Provide environmental awareness educational materials made available by the City of Anaheim and/or the County of Orange. These materials will describe the use of chemicals that should be limited to the property, with no discharges of wastes via hosing or other direct discharge to gutters, catch basins and storm drains.	Upon initial tenancy and ongoing thereafter.

N2 - Activity Restrictions	Property Management Association	Use restrictions that may include car washing, rinsing, waste disposal, or other activity potentially detrimental to downstream receiving waters. Restricted activities to be developed by the PMA and implemented through lease terms.	Upon initial tenancy and ongoing thereafter.
N3 - Common Area Landscape Management	Property Management Association	Utilize landscape maintenance practices aimed at minimizing use of irrigation, fertilizers and pesticides. Usage shall be consistent with Management Guidelines for Use of Fertilizers (DAMP Section 5.5). Landscaping shall correlate to the climate, soil, and related natural resources of the area. Plantings shall be grouped with plants of similar water requirements.	Ongoing. Review and revise annually, and as needed.
N4 - BMP Maintenance	Property Management Association	Inspection of all structural and non- structural BMP's. Scheduling of required cleaning and maintenance activities. BMP inspection and any resulting maintenance activity shall be performed at regular intervals as part of the overall Landscape Management program, and prior to the start of the rainy season.	Varies by BMP. Annually at a minimum (prior to the rainy season).
N5 - Title 22 CCR Compliance	Property Management Association	Comply with all applicable local water quality ordinances. The local jurisdiction (City), under local water quality ordinances, have authority to ensure clean stormwater discharges from areas of concern to public properties.	Ongoing. Review and revise annually, and as needed.
N9 - Hazardous Materials Disclosure Compliance	Property Management Association	Comply with State regulations dealing with hazardous materials, enforced by the City on behalf of the State. Hazardous materials shall either be placed in an enclosure that prevents contact	Ongoing. Review and revise annually, and as needed.

		with runoff or is protected by a secondary containment structure such as a berm, dyke, or curb. Any storage area containing hazardous materials shall be paved and sufficiently impervious to contain any leaks and/or spills. Storage areas containing hazardous materials shall have a roof or awning to minimize direct precipitation and collection of stormwater within the secondary containment area. Any stormwater retained within the containment area shall be disposed of in accordance with the applicable hazardous material disposal ordinances. Hazardous materials shall be disposed of at the nearest Hazard Materials Disposal Center. CASQA BMP Handbook SC-34 and SC-60 shall be used as a resource when developing applicable hazardous material cleanup and prevention strategies.	
N10 - Uniform Fire Code Implementation	Property Management Association	Comply with Article 80 of the Uniform Fire Code enforced by the fire protection agency.	Ongoing. Review and revise annually, and as needed.
N11 - Common Area Litter Control	Property Management Association	Good housekeeping practices shall be adhered to that aim to minimize litter and trash production on the site. Good housekeeping practices include but are not limited to: covering storage areas, using drip pans or absorbent materials when working with oils/greases, checking storage containers regularly for leaks or damage, regular sweeping and clean-up of trash storage and recycling areas, and regular clean-up of loose trash and debris around site.	Ongoing. Review and revise annually, and as needed.
N12 - Employee Training	Property Management Association	Provide employee training / education information to janitorial, maintenance, landscaping, and other staff for activities that may impact water quality. Educational materials will utilize brochures obtained	Employee training shall take place at a minimum at the time of hiring, and annually thereafter.

		from the City, County and State resources Public Education Materials is available in Attachment A of this WQMP.	
N14 - Common Area Catch Basin Inspection	Property Management Association	Conduct regular inspection, cleaning, and maintenance of common area catch basins. Cleaning and maintenance activities may include removal of trash, sediment, debris, or other deleterious material from the catch basin. Catch basins shall be visually inspected for illegal dumping. If illegal dumping has occurred the proper authorities shall be notified as soon as practicable.	At minimum 2-times per year, both before the rainy season and after at least one major storm to check for standing water. Adjust inspection schedule as needed.
N15 - Street Sweeping Private Streets and Parking Lots	Property Management Association	Provide vacuum sweeping for paved areas. Sweeping operations shall be performed during dry weather. CASQA BMP Handbook SC- 43 and SC-70 shall be used as a resource for determining the frequency and procedures for providing vacuum sweeping of the paved areas. Sweeping and/or spraying of permeable paver areas is not recommended as it tends to move the sediment rather than remove it. Also, sweeping and spraying may move the sediment deeper into the surface openings, making them more difficult to remove.	At minimum 2-times per year, both before the rainy season and after at least one major storm to check for standing water. Adjust inspection schedule as needed.
S1 - Provide storm drain system stenciling and signage	Property Management Association	Provide stenciling that is easily visible on or near each catch basin. Stenciling shall provide a brief statement, which prohibits the dumping of improper materials into the storm drain.	Stenciling shall be inspected annually and maintained or repainted as needed.
S3 - Design and construct trash and waste storage areas to reduce pollution	Owner then Property Management Association	All trash enclosure areas shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, designed to divert drainage from adjoining roofs and pavements around the area,	During design/construction activities. Ongoing inspection and maintenance thereafter.

introduction		screened or walled to prevent off- site transport of trash, and shall include solid roofing or an awning to prevent direct precipitation. Trash area drains to the storm drain system is prohibited.	
S4 - Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	Owner then Property Management Association	Implement irrigation methods to minimize runoff of excess irrigation water across impervious surfaces and into the stormwater conveyance system. Such measures include employing rain-triggered shutoff devices to eliminate or reduce irrigation during and immediately after precipitation, using mulches (such as wood chips) to minimize sediment in runoff and to maintain soil infiltration capacity, and coordinating design of the irrigation system and landscape to minimize overspray and runoff. Irrigation systems should consider the use of flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or water supply lines. Water conservation devices such as programmable irrigation timers, drip irrigation, and soil moisture sensors should also be considered.	During design/construction activities. Ongoing inspection and maintenance thereafter.
S5 - Protect slopes and channels and provide energy dissipation	Property Management Association	Protect slopes, channels, and energy dissipation devices so function is maintained. The potential for erosion of slopes and/or channels shall be minimized by incorporating the following BMP's, as applicable: immediate stabilization of disturbed slopes; vegetate slopes with native or drought tolerant vegetation; control and treat flows in landscaping prior to reaching existing natural	Regular inspection and any resulting maintenance of slopes, channels, and energy dissipation devices shall be on- going and part of the overall Landscape/Site Management

		drainage system.	program.

Section VI BMP Exhibit (Site Plan)

VI.1 BMP Exhibit (Site Plan)

Include a BMP Exhibit (Site Plan), <u>at a size no less than 24" by 36</u>," which includes the following minimum information:

- Insert in the title block (lower right hand corner) of BMP Exhibit: the WQMP Number (assigned by staff) and the grading/building or Planning Application permit numbers
- Project location (address, tract/lot number(s), etc.)
- Site boundary
- Land uses and land covers, as applicable
- Suitability/feasibility constraints
- Structural BMP locations
- Drainage delineations and flow information
- Delineate the area being treated by each structural BMP
- GIS coordinates for LID and Treatment Control BMPs
- Drainage connections
- BMP details
- Preparer name and stamp

Please do not include any areas outside of the project area or any information not related to drainage or water quality. The approved BMP Exhibit (Site Plan) shall be submitted as a plan sheet on all grading and building plan sets submitted for plan check review and approval. The BMP Exhibit shall be at the same size as the rest of the plan sheets in the submittal and shall have an approval stamp and signature prior to plan check submittal.

VI.2 Submittal and Recordation of Water Quality Management Plan

Following approval of the Final Project-Specific WQMP, three copies of the approved WQMP (including BMP Exhibit, Operations and Maintenance (O&M) Plan, and Appendices) shall be submitted. In addition, these documents shall be submitted in a PDF format.

Each approved WQMP (including BMP Exhibit, Operations and Maintenance (O&M) Plan, and Appendices) shall be recorded in the Orange County Clerk-Recorder's Office, prior to close-out of grading and/or building permit. Educational Materials are not required to be included.

Section VII Educational Materials

Refer to the Orange County Stormwater Program (ocwatersheds.com) for a library of materials available. Please only attach the educational materials specifically applicable to this project. Other materials specific to the project may be included as well and must be attached.

Education Materials

Residential Material **(http://www.ocwatersheds.com)**	**Check If Applicable**	**Business Material** **(http://www.ocwatersheds.com)**	**Check If Applicable**
The Ocean Begins at Your Front Door	☒	Tips for the Automotive Industry	☐
Tips for Car Wash Fund-raisers	☐	Tips for Using Concrete and Mortar	☒
Tips for the Home Mechanic	☐	Tips for the Food Service Industry	☒
Homeowners Guide for Sustainable Water Use	☒	Proper Maintenance Practices for Your Business	☒
Household Tips	☒	**Other Material**	**Check If Attached**
Proper Disposal of Household Hazardous Waste	☒		
Recycle at Your Local Used Oil Collection Center (North County)	☒		☐
Recycle at Your Local Used Oil Collection Center (Central County)	☐		☐
Recycle at Your Local Used Oil Collection Center (South County)	☐		☐
Tips for Maintaining a Septic Tank System	☐		☐
Responsible Pest Control	☒		☐
Sewer Spill	☒		☐
Tips for the Home Improvement Projects	☒		☐
Tips for Horse Care	☐		☐
Tips for Landscaping and Gardening	☒		☐
Tips for Pet Care	☒		☐
Tips for Pool Maintenance	☒		☐
Tips for Residential Pool, Landscape and Hardscape Drains	☒		☐
Tips for Projects Using Paint	☒		☐

Attachment A

Educational Materials

For More Information

California Environmental Protection Agency
www.calepa.ca.gov

- **Air Resources Board**
  www.arb.ca.gov
- **Department of Pesticide Regulation**
  www.cdpr.ca.gov
- **Department of Toxic Substances Control**
  www.dtsc.ca.gov
- **Integrated Waste Management Board**
  www.ciwmb.ca.gov
- **Office of Environmental Health Hazard Assessment**
  www.oehha.ca.gov
- **State Water Resources Control Board**
  www.waterboards.ca.gov

Earth 911 - Community-Specific Environmental Information 1-800-cleanup or visit www.1800cleanup.org

Health Care Agency's Ocean and Bay Water Closure and Posting Hotline
(714) 433-6400 or visit www.ocbeachinfo.com

Integrated Waste Management Dept. of Orange County (714) 834-6752 or visit www.oclandfills.com for information on household hazardous waste collection centers, recycling centers and solid waste collection

O.C. Agriculture Commissioner
(714) 447-7100 or visit www.ocagcomm.com

Stormwater Best Management Practice Handbook
Visit www.cabmphandbooks.com

UC Master Gardener Hotline
(714) 708-1646 or visit www.uccemg.com

The Orange County Stormwater Program has created and moderates an electronic mailing list to facilitate communications, take questions and exchange ideas among its users about issues and topics related to stormwater and urban runoff and the implementation of program elements. To join the list, please send an email to ocstormwaterinfo-join@list.ocwatersheds.com

Orange County Stormwater Program

Aliso Viejo	(949)	425-2535
Anaheim Public Works Operations	(714)	765-6860
Brea Engineering	(714)	990-7666
Buena Park Public Works	(714)	562-3655
Costa Mesa Public Services	(714)	754-5323
Cypress Public Works	(714)	229-6740
Dana Point Public Works	(949)	248-3584
Fountain Valley Public Works	(714)	593-4441
Fullerton Engineering Dept.	(714)	738-6853
Garden Grove Public Works	(714)	741-5956
Huntington Beach Public Works	(714)	536-5431
Irvine Public Works	(949)	724-6315
La Habra Public Services	(562)	905-9792
La Palma Public Works	(714)	690-3310
Laguna Beach Water Quality	(949)	497-0378
Laguna Hills Public Services	(949)	707-2650
Laguna Niguel Public Works	(949)	362-4337
Laguna Woods Public Works	(949)	639-0500
Lake Forest Public Works	(949)	461-3480
Los Alamitos Community Dev.	(562)	431-3538
Mission Viejo Public Works	(949)	470-3056
Newport Beach, Code & Water Quality Enforcement	(949)	644-3215
Orange Public Works	(714)	532-6480
Placentia Public Works	(714)	993-8245
Rancho Santa Margarita	(949)	635-1800
San Clemente Environmental Programs	(949)	361-6143
San Juan Capistrano Engineering	(949)	234-4413
Santa Ana Public Works	(714)	647-3380
Seal Beach Engineering	(562)	431-2527 x317
Stanton Public Works	(714)	379-9222 x204
Tustin Public Works/Engineering	(714)	573-3150
Villa Park Engineering	(714)	998-1500
Westminster Public Works/Engineering	(714)	898-3311 x446
Yorba Linda Engineering	(714)	961-7138
Orange County Stormwater Program	(877)	897-7455

Orange County 24-Hour
Water Pollution Problem Reporting Hotline
1-877-89-SPILL (1-877-897-7455)

On-line Water Pollution Problem Reporting Form
www.ocwatersheds.com

Printed on Recycled Paper

The Ocean Begins at Your Front Door

PROJECT POLLUTION PREVENTION

Even if you live miles from the Pacific Ocean, you may be unknowingly polluting it.

Did You Know?

- Most people believe that the largest source of water pollution in urban areas comes from specific sources such as factories and sewage treatment plants. In fact, the largest source of water pollution comes from city streets, neighborhoods, construction sites and parking lots. This type of pollution is sometimes called "non-point source" pollution.
- There are two types of non-point source pollution: stormwater and urban runoff pollution.
- Stormwater runoff results from rainfall. When rainstorms cause large volumes of water to rinse the urban landscape, picking up pollutants along the way.
- Urban runoff can happen any time of the year when excessive water use from irrigation, vehicle washing and other sources carries trash, lawn clippings and other urban pollutants into storm drains.

Where Does It Go?

- Anything we use outside homes, vehicles and businesses – like motor oil, paint, pesticides, fertilizers and cleaners – can be blown or washed into storm drains.
- A little water from a garden hose or rain can also send materials into storm drains.
- Storm drains are separate from our sanitary sewer systems; unlike water in sanitary sewers (from sinks or toilets), water in storm drains is not treated before entering our waterways.

Sources of Non-Point Source Pollution

- Automotive leaks and spills.
- Improper disposal of used oil and other engine fluids.
- Metals found in vehicle exhaust, weathered paint, rust, metal plating and tires.
- Pesticides and fertilizers from lawns, gardens and farms.
- Improper disposal of cleaners, paint and paint removers.
- Soil erosion and dust debris from landscape and construction activities.
- Litter, lawn clippings, animal waste, and other organic matter.
- Oil stains on parking lots and paved surfaces.

The Effect on the Ocean

Non-point source pollution can have a serious impact on water quality in Orange County. Pollutants from the storm drain system can harm marine life as well as coastal and wetland habitats. They can also degrade recreation areas such as beaches, harbors and bays.

Stormwater quality management programs have been developed throughout Orange County to educate and encourage the public to protect water quality, monitor runoff in the storm drain system, investigate illegal dumping and maintain storm drains.

Support from Orange County residents and businesses is needed to improve water quality and reduce urban runoff pollution. Proper use and disposal of materials will help stop pollution before it reaches the storm drain and the ocean.

Dumping one quart of motor oil into a storm drain can contaminate 250,000 gallons of water.

The Ocean Begins at Your Front Door

Never allow pollutants to enter the street, gutter or storm drain!

Follow these simple steps to help reduce water pollution:

Household Activities

- Do not rinse spills with water. Use dry cleanup methods such as applying cat litter or another absorbent material, sweep and dispose of in the trash. Take items such as used or excess batteries, oven cleaners, automotive fluids, painting products and cathode ray tubes, like TVs and computer monitors, to a Household Hazardous Waste Collection Center (HHWCC).
- For a HHWCC near you call (714) 834-6752 or visit www.oclandfills.com.
- Do not hose down your driveway, sidewalk or patio to the street, gutter or storm drain. Sweep up debris and dispose of it in the trash.

Automotive

- Take your vehicle to a commercial car wash whenever possible. If you wash your vehicle at home, choose soaps, cleaners, or detergents labeled non-toxic, phosphate- free or biodegradable. Vegetable and citrus-based products are typically safest for the environment.
- Do not allow washwater from vehicle washing to drain into the street, gutter or storm drain. Excess washwater should be disposed of in the sanitary sewer (through a sink or toilet) or onto an absorbent surface like your lawn.
- Monitor your vehicles for leaks and place a pan under leaks. Keep your vehicles well maintained to stop and prevent leaks.
- Never pour oil or antifreeze in the street, gutter or storm drain. Recycle these substances at a service station, a waste oil collection center or used oil recycling center. For the nearest Used Oil Collection Center call 1-800-CLEANUP or visit www.1800cleanup.org.

Pool Maintenance

- Pool and spa water must be dechlorinated and free of excess acid, alkali or color to be allowed in the street, gutter or storm drain.
- When it is not raining, drain dechlorinated pool and spa water directly into the sanitary sewer.
- Some cities may have ordinances that do not allow pool water to be disposed of in the storm drain. Check with your city.

Landscape and Gardening

- Do not over-water. Water your lawn and garden by hand to control the amount of water you use or set irrigation systems to reflect seasonal water needs. If water flows off your yard onto your driveway or sidewalk, your system is over-watering. Periodically inspect and fix leaks and misdirected sprinklers.
- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of waste by composting, hauling it to a permitted landfill, or as green waste through your city's recycling program.
- Follow directions on pesticides and fertilizer, (measure, do not estimate amounts) and do not use if rain is predicted within 48 hours.
- Take unwanted pesticides to a HHWCC to be recycled. For locations and hours of HHWCC, call (714) 834-6752 or visit www.oclandfills.com.

Trash

- Place trash and litter that cannot be recycled in securely covered trash cans.
- Whenever possible, buy recycled products.
- Remember: Reduce, Reuse, Recycle.

Pet Care

- Always pick up after your pet. Flush waste down the toilet or dispose of it in the trash. Pet waste, if left outdoors, can wash into the street, gutter or storm drain.
- If possible, bathe your pets indoors. If you must bathe your pet outside, wash it on your lawn or another absorbent/permeable surface to keep the washwater from entering the street, gutter or storm drain.
- Follow directions for use of pet care products and dispose of any unused products at a HHWCC.

Common Pollutants

Home Maintenance

- Detergents, cleaners and solvents
- Oil and latex paint
- Swimming pool chemicals
- Outdoor trash and litter

Lawn and Garden

- Pet and animal waste
- Pesticides
- Clippings, leaves and soil
- Fertilizer

Automobile

- Oil and grease
- Radiator fluids and antifreeze
- Cleaning chemicals
- Brake pad dust

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities such as pest control can lead to water pollution if you're not careful. Pesticide treatments must be planned and applied properly to ensure that pesticides do not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump pesticides into the ocean, so don't let it enter the storm drains. Pesticides can cause significant damage to our environment if used improperly. If you are thinking of using a pesticide to control a pest, there are some important things to consider.

For more information,
please call
University of California Cooperative Extension Master Gardeners at
(714) 708-1646
or visit these Web sites:
www.uccemg.org
www.ipm.ucdavis.edu

For instructions on collecting a specimen sample visit the Orange County Agriculture Commissioner's website at:
http://www.ocagcomm.com/ser_lab.asp

To report a spill, call the
Orange County 24-Hour Water Pollution Problem Reporting Hotline at 1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

Information From:
Cheryl Wilen, Area IPM Advisor; Darren Haver, Watershed Management Advisor; Mary Louise Flint, IPM Education and Publication Director; Pamela M. Geisel, Environmental Horticulture Advisor; Carolyn L. Unruh, University of California Cooperative Extension staff writer. Photos courtesy of the UC Statewide IPM Program and Darren Haver.

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Help Prevent Ocean Pollution:

Responsible Pest Control

The Ocean Begins at Your Front Door

PROJECT
Pollution
PREVENTION

Tips for Pest Control

Key Steps to Follow:

Step 1: Correctly identify the pest (insect, weed, rodent, or disease) and verify that it is actually causing the problem.

Three life stages of the common lady beetle, a beneficial insect.

This is important because beneficial insects are often mistaken for pests and sprayed with pesticides needlessly.

Consult with a Certified Nursery Professional at a local nursery or garden center or send a sample of the pest to the Orange County Agricultural Commissioner's Office.

Determine if the pest is still present – even though you see damage, the pest may have left.

Step 2: Determine how many pests are present and causing damage.

Small pest populations may be controlled more safely using non-pesticide techniques. These include removing food sources, washing off leaves with a strong stream of water, blocking entry into the home using caulking and replacing problem plants with ones less susceptible to pests.

Integrated Pest Management (IPM) usually combines several least toxic pest control methods for long-term prevention and management of pest problems without harming you, your family, or the environment.

UC CE University of California Cooperative Extension

Step 3: If a pesticide must be used, choose the least toxic chemical.

Obtain information on the least toxic pesticides that are effective at controlling the target pest from the UC Statewide Integrated Pest Management (IPM) Program's Web site at www.ipm.ucdavis.edu.

Seek out the assistance of a Certified Nursery Professional at a local nursery or garden center when selecting a pesticide. Purchase the smallest amount of pesticide available.

Apply the pesticide to the pest during its most vulnerable life stage. This information can be found on the pesticide label.

Step 4: Wear appropriate protective clothing.

Follow pesticide labels regarding specific types of protective equipment you should wear. Protective clothing should always be washed separately from other clothing.

Step 5: Continuously monitor external conditions when applying pesticides such as weather, irrigation, and the presence of children and animals.

Never apply pesticides when rain is predicted within the next 48 hours. Also, do not water after applying pesticides unless the directions say it is necessary.

Apply pesticides when the air is still; breezy conditions may cause the spray or dust to drift away from your targeted area.

In case of an emergency call 911 and/or the regional poison control number at (714) 634-5988 or (800) 544-4404 (CA only).

For general questions you may also visit www.calpoison.org.

Step 6: In the event of accidental spills, sweep up or use an absorbent agent to remove any excess pesticides. Avoid the use of water.

Be prepared. Have a broom, dust pan, or dry absorbent material, such as cat litter, newspapers or paper towels, ready to assist in cleaning up spills.

Contain and clean up the spill right away. Place contaminated materials in a doubled plastic bag. All materials used to clean up the spill should be properly disposed of according to your local Household Hazardous Waste Disposal site.

Step 7: Properly store and dispose of unused pesticides.

Purchase Ready-To-Use (RTU) products to avoid storing large concentrated quantities of pesticides.

Store unused chemicals in a locked cabinet.

Unused pesticide chemicals may be disposed of at a Household Hazardous Waste Collection Center.

Empty pesticide containers should be triple rinsed prior to disposing of them in the trash.

Household Hazardous Waste
Collection Center
(714) 834-6752
www.oclandfills.com

PROJECT Pollution PREVENTION

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- Cleaning chemicals
- Brake pad dust

For More Information

Orange County Stormwater Program

California Environmental Protection Agency
www.calepa.ca.gov

- **Air Resources Board**
  www.arb.ca.gov
- **Department of Pesticide Regulation**
  www.cdpr.ca.gov
- **Department of Toxic Substances Control**
  www.dtsc.ca.gov
- **Integrated Waste Management Board**
  www.ciwmb.ca.gov
- **Office of Environmental Health Hazard Assessment**
  www.oehha.ca.gov
- **State Water Resources Control Board**
  www.waterboards.ca.gov

Earth 911 - Community-Specific Environmental Information 1-800-cleanup or visit www.1800cleanup.org

Health Care Agency's Ocean and Bay Water Closure and Posting Hotline
(714) 433-6400 or visit www.ocbeachinfo.com

Integrated Waste Management Dept. of Orange County (714) 834-6752 or visit www.oclandfills.com for information on household hazardous waste collection centers, recycling centers and solid waste collection

O.C. Agriculture Commissioner
(714) 447-7100 or visit www.ocagcomm.com

Stormwater Best Management Practice Handbook
Visit www.cabmphandbooks.com

UC Master Gardener Hotline
(714) 708-1646 or visit www.uccemg.com

The Orange County Stormwater Program has created and moderates an electronic mailing list to facilitate communications, take questions and exchange ideas among its users about issues and topics related to stormwater and urban runoff and the implementation of program elements. To join the list, please send an email to ocstormwaterinfo-join@list.ocwatersheds.com

Aliso Viejo	(949)	425-2535
Anaheim Public Works Operations	(714)	765-6860
Brea Engineering	(714)	990-7666
Buena Park Public Works	(714)	562-3655
Costa Mesa Public Services	(714)	754-5323
Cypress Public Works	(714)	229-6740
Dana Point Public Works	(949)	248-3584
Fountain Valley Public Works	(714)	593-4441
Fullerton Engineering Dept.	(714)	738-6853
Garden Grove Public Works	(714)	741-5956
Huntington Beach Public Works	(714)	536-5431
Irvine Public Works	(949)	724-6315
La Habra Public Services	(562)	905-9792
La Palma Public Works	(714)	690-3310
Laguna Beach Water Quality	(949)	497-0378
Laguna Hills Public Services	(949)	707-2650
Laguna Niguel Public Works	(949)	362-4337
Laguna Woods Public Works	(949)	639-0500
Lake Forest Public Works	(949)	461-3480
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The Ocean Begins at Your Front Door

The Pollution Solution

Several residential activities can result in water pollution. Among these activities are car washing and hosing off driveways and sidewalks. Both activities can waste water and result in excess runoff. Water conservation methods described in this pamphlet can prevent considerable amounts of runoff and conserve water. By taking your car to a commercial car wash and by sweeping driveways and sidewalks, you can further prevent the transport of pollutants to Orange County waterways. Here are some of the common pollutants for which you can be part of the solution:

1 Pesticides and Fertilizer

- **Pollution:** The same pesticides that are designed to be toxic to pests can have an equally lethal impact on our marine life. The same fertilizer that promotes plant growth in lawns and gardens can also create nuisance algae blooms, which remove oxygen from the water and clog waterways when it decomposes.

- **Solution:** Never use pesticides or fertilizer within 48 hours of an anticipated rainstorm. Use only as much as is directed on the label and keep it off driveways and sidewalks.

2 Dirt and Sediment

- **Pollution:** Dirt or sediment can impede the flow of the stormwater and negatively impact stream habitat as it travels through waterways and deposits downstream. Pollutants can attach to sediment, which can then be transported through our waterways.

- **Solution:** Protect dirt stockpiles by covering them with tarps or secure plastic sheets to prevent wind or rain from allowing dirt or sediment to enter the storm drain system.

3 Metals

- **Pollution:** Metals and other toxins present in car wash water can harm important plankton, which forms the base of the aquatic food chain.

- **Solution:** Take your car to a commercial car wash where the wash water is captured and treated at a local wastewater treatment plant.

DID YOU KNOW?

Did you know that most of the pollution found in our waterways is not from a single source, but from a "non-point" source meaning the accumulation of pollution from residents and businesses throughout the community

4 Pet Waste

- **Pollution:** Pet waste carries bacteria through our watersheds and eventually will be washed out to the ocean. This can pose a health risk to swimmers and surfers.

- **Solution:** Pick up after your pets!

5 Trash and Debris

- **Pollution:** Trash and debris can enter waterways by wind, littering and careless maintenance of trash receptacles. Street sweeping collects some of this trash; however, much of what isn't captured ends up in our storm drain system where it flows untreated out to the ocean.

- **Solution:** Don't litter and make sure trash containers are properly covered. It is far more expensive to clean up the litter and trash that ends up in our waterways than it is to prevent it in the first place. Come out to one of Orange County's many locations for Coastal and Inner-Coastal Cleanup Day, which is held in September.

6 Motor Oil / Vehicle Fluids

- **Pollution:** Oil and petroleum products from our vehicles are toxic to people, wildlife and plants.

- **Solution:** Fix any leaks from your vehicle and keep the maintenance up on your car. Use absorbent material such as cat litter on oil spills, then sweep it up and dispose of it in the trash. Recycle used motor oil at a local Household Hazardous Waste Collection Center.

A TEAM EFFORT

The Orange County Stormwater Program has teamed with the Municipal Water District of Orange County (MWDOC) and the University of California Cooperative Extension Program (UCCE) to develop this pamphlet.

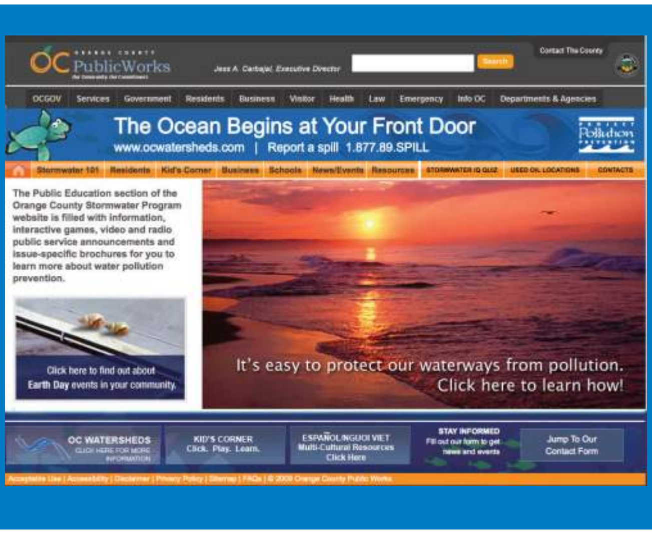
Low Impact Development (LID) and sustainable water use prevents water pollution and conserves water for drinking and reuse. Reducing your water use and the amount of water flowing from your home protects the environment and saves you money.

Thank you for making water protection a priority!

For more information, please visit www.ocwatersheds.com/publiced/

www.mwdoc.com

www.uccemg.com



The Ocean Begins at Your Front Door

www.ocwatersheds.com | Report a spill 1.877.89.SPILL

The Public Education section of the Orange County Stormwater Program website is filled with information, interactive games, video and radio public service announcements and issue-specific brochures for you to learn more about water pollution prevention.

Click here to find out about **Earth Day** events in your community.

It's easy to protect our waterways from pollution. Click here to learn how!

To report a spill, call the Orange County 24-Hour Water Pollution Prevention Reporting Hotline at 1-877-89-SPILL \ (1-877-897-7455)

Special Thanks to

The City of Los Angeles Stormwater Program for the use of its artwork

The Metropolitan Water District of Southern California for the use of the California-Friendly Plant and Native Habitat photos

RUNOFF, RAINWATER AND REUSE

Where Does Water Runoff Go?

Stormwater, or water from rainfall events, and runoff from outdoor water use such as sprinklers and hoses flows from homes directly into catch basins and the storm drain system. After entering the storm drain, the water flows untreated into streams, rivers, bays and ultimately the Pacific Ocean. Runoff can come from lawns, gardens, driveways, sidewalks and roofs. As it flows over hard, impervious surfaces, it picks up pollutants. Some pollutants carried by the water runoff include trash, pet waste, pesticides, fertilizer, motor oil and more.

Water Conservation

Pollution not only impairs the water quality for habitat and recreation, it can also reduce the water available for reuse. Runoff allowed to soak into the ground is cleaned as it percolates through the soil, replenishing depleted groundwater supplies. Groundwater provides at least 50% of the total water for drinking and other indoor household activities in north and central Orange County. When land is covered with roads, parking lots, homes, etc., there is less land to take in the water and more hard surfaces over which the water can flow.

In Orange County, 60-70% of water used by residents and businesses goes to irrigation and other outdoor uses. Reusing rainwater to irrigate our lawn not only reduces the impact of water pollution from runoff, but it also is a great way to conserve our precious water resources and replenish our groundwater basin.

What is Low Impact Development (LID)?

Low Impact Development (LID) is a method of development that seeks to maintain the natural hydrologic character of an area. LID provides a more sustainable and pollution-preventative approach to water management.

New water quality regulations require implementation of LID in larger new developments and encourage implementation of LID and other sustainable practices in existing residential areas. Implementing modifications to your lawn or garden can reduce pollution in our environment, conserve water and reduce your water bill.

Permeable pavement allows water runoff to infiltrate through the soil and prevents most pollutants from reaching the storm drain system.

OPTIONS FOR RAINWATER HARVESTING AND REUSE

Rainwater harvesting is a great way to save money, prevent pollution and reduce potable water use. To harvest your rainwater, simply redirect the runoff from roofs and downspouts to rain barrels. Rain gardens are another option; these reduce runoff as well as encourage infiltration.

Downspout Disconnection/Redirection

Disconnecting downspouts from pipes running to the gutter prevents runoff from transporting pollutants to the storm drain. Once disconnected, downspouts can be redirected to rain gardens or other vegetated areas, or be connected to a rain barrel.

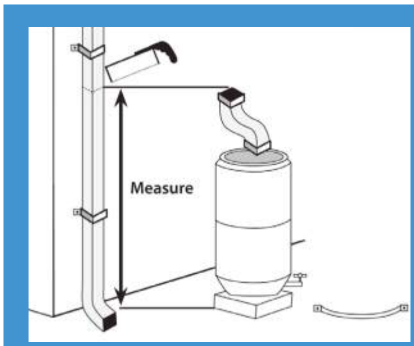
Rain Barrels

Rain barrels capture rainwater flow from roofs for reuse in landscape irrigation. Capacity of rain barrels needed for your home will depend on the amount of roof area and rainfall received. When purchasing your rain barrel, make sure it includes a screen, a spigot to siphon water for use, an overflow tube to allow for excess water to run out and a connector if you wish to connect multiple barrels to add capacity of water storage.

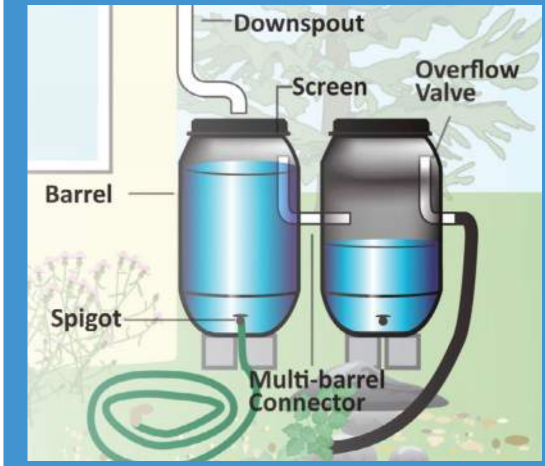
Mosquito growth prevention is very important when installing a rain barrel. The best way to prevent mosquito breeding is to eliminate entry points by ensuring all openings are sealed tightly. If these methods are unsuccessful, products are available to kill mosquito larvae, but that are harmless to animals and humans. Regular application of these products is essential. Please visit the Orange County Vector Control website for more information at www.ocvcd.org/mosquitoes3.php.

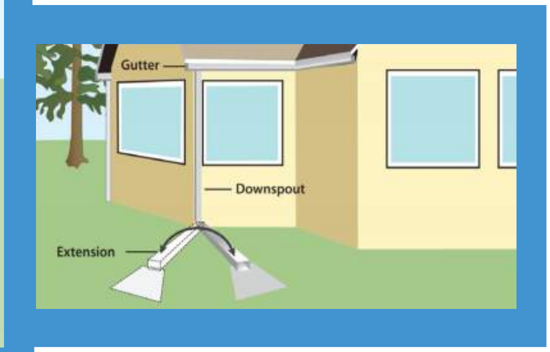
Rain Gardens

Rain gardens allow runoff to be directed from your roof downspout into a landscaped area. Vegetation and rocks in the garden will slow the flow of water to allow for infiltration into the soil. Plants and soil particles will absorb pollutants from the roof runoff. By utilizing a native plant palate, rain gardens can be maintained all year with minimal additional irrigation. These plants are adapted to the semi-arid climate of Southern California, require less water and can reduce your water bill.



Before modifying your yard to install a rain garden, please consult your local building and/or planning departments to ensure your garden plan follows pertinent building codes and ordinances. Besides codes and ordinances, some home owner associations also have guidelines for yard modifications. If your property is in hill areas or includes engineered slopes, please seek professional advice before proceeding with changes.





For information on how to disconnect a downspout or to install and maintain a rain barrel or rain garden at your home, please see the Los Angeles Rainwater Harvesting Program, A Homeowner's "How-To" Guide, November 2009 at www.larainwaterharvesting.org/

OTHER WATER CONSERVATION AND POLLUTION PREVENTION TECHNIQUES

Native Vegetation and Maintenance

"California Friendly" plants or native vegetation can significantly reduce water use. These plants often require far less fertilizers and pesticides, which are two significant pollutants found in Orange County waterways. Replacing water "thirsty" plants and grass types with water efficient natives is a great way to save water and reduce the need for potentially harmful pesticides and fertilizer.

Please see the California Friendly Garden Guide produced by the Metropolitan Water District of Southern California and associated Southern California Water Agencies for a catalog of California friendly plants and other garden resources at www.bewaterwise.com/Gardensoft.

Weed Free Yards

Weeds are water thieves. They often reproduce quickly and rob your yard of both water and nutrients. Weed your yard by hand if possible. If you use herbicides to control the weeds, use only the amount recommended on the label and never use it if rain is forecast within the next 48 hours.

Soil Amendments

Soil amendments such as green waste (e.g. grass clippings, compost, etc.) can be a significant source of nutrients and can help keep the soil near the roots of plants moist. However, they can cause algal booms if they get into our waterways, which reduces the amount of oxygen in the water and impacts most aquatic organisms. It is important to apply soil amendments more than 48 hours prior to predicted rainfall.

IRRIGATE EFFICIENTLY

Smart Irrigation Controllers

Water runoff from sprinklers left on too long will carry pollutants into our waterways.

Smart Irrigation Controllers have internal clocks as well as sensors that will turn off the sprinklers in response to environmental changes. If it is raining, too windy or too cold, the smart irrigation control sprinklers will automatically shut off.

Check with your local water agency for available rebates on irrigation controllers and smart timers.

- Aim your sprinklers at your lawn, not the sidewalk – By simply adjusting the direction of your sprinklers you can save water, prevent water pollution from runoff, keep your lawn healthy and save money.

- **Set a timer for your sprinklers** – lawns absorb the water they need to stay healthy within a few minutes of turning on the sprinklers. Time your sprinklers; when water begins running off your lawn, you can turn them off. Your timer can be set to water your lawn for this duration every time.

- **Water at Sunrise** – Watering early in the morning will reduce water loss due to evaporation. Additionally, winds tend to die down in the early morning so the water will get to the lawn as intended.

- **Water by hand** – Instead of using sprinklers, consider watering your yard by hand. Hand-watering ensures that all plants get the proper amount of water and you will prevent any water runoff, which wastes water and carries pollutants into our waterways.

- **Fix leaks** - Nationwide, households waste one trillion gallons of water a year to leaks – that is enough water to serve the entire state of Texas for a year. If your garden hose is leaking, replace the nylon or rubber hose washer and ensure a tight connection. Fix broken sprinklers immediately.

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities such as pest control can lead to water pollution if you're not careful. Pesticide treatments must be planned and applied properly to ensure that pesticides do not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump pesticides into the ocean, so don't let it enter the storm drains. Pesticides can cause significant damage to our environment if used improperly. If you are thinking of using a pesticide to control a pest, there are some important things to consider.

For more information,
please call
University of California Cooperative
Extension Master Gardeners at
(714) 708-1646
or visit these Web sites:
www.uccemg.org
www.ipm.ucdavis.edu

For instructions on collecting a specimen sample visit the Orange County Agriculture Commissioner's website at: http://www.ocagcomm.com/ser_lab.asp

To report a spill, call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
at 1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

Information From:
Cheryl Wilen, Area IPM Advisor; Darren Haver, Watershed Management Advisor; Mary Louise Flint, IPM Education and Publication Director; Pamela M. Geisel, Environmental Horticulture Advisor; Carolyn L. Unruh, University of California Cooperative Extension staff writer. Photos courtesy of the UC Statewide IPM Program and Darren Haver.

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Help Prevent Ocean Pollution:

Responsible Pest Control

The Ocean Begins
at Your Front Door

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Pollution
PREVENTION

Tips for Pest Control

Key Steps to Follow:

Step 1: **Correctly identify the pest (insect, weed, rodent, or disease) and verify that it is actually causing the problem.**

Three life stages of the common lady beetle, a beneficial insect.

This is important because beneficial insects are often mistaken for pests and sprayed with pesticides needlessly.

Consult with a Certified Nursery Professional at a local nursery or garden center or send a sample of the pest to the Orange County Agricultural Commissioner's Office.

Determine if the pest is still present – even though you see damage, the pest may have left.

Step 2: **Determine how many pests are present and causing damage.**

Small pest populations may be controlled more safely using non-pesticide techniques. These include removing food sources, washing off leaves with a strong stream of water, blocking entry into the home using caulking and replacing problem plants with ones less susceptible to pests.

Integrated Pest Management (IPM) usually combines several least toxic pest control methods for long-term prevention and management of pest problems without harming you, your family, or the environment.

UC CE
University of California
Cooperative Extension

Step 3: **If a pesticide must be used, choose the least toxic chemical.**

Obtain information on the least toxic pesticides that are effective at controlling the target pest from the UC Statewide Integrated Pest Management (IPM) Program's Web site at www.ipm.ucdavis.edu.

Seek out the assistance of a Certified Nursery Professional at a local nursery or garden center when selecting a pesticide. Purchase the smallest amount of pesticide available.

Apply the pesticide to the pest during its most vulnerable life stage. This information can be found on the pesticide label.

Step 4: **Wear appropriate protective clothing.**

Follow pesticide labels regarding specific types of protective equipment you should wear. Protective clothing should always be washed separately from other clothing.

Step 5: **Continuously monitor external conditions when applying pesticides such as weather, irrigation, and the presence of children and animals.**

Never apply pesticides when rain is predicted within the next 48 hours. Also, do not water after applying pesticides unless the directions say it is necessary.

Apply pesticides when the air is still; breezy conditions may cause the spray or dust to drift away from your targeted area.

In case of an emergency call 911 and/or the regional poison control number at (714) 634-5988 or (800) 544-4404 (CA only). For general questions you may also visit www.calpoison.org.

Step 6: **In the event of accidental spills, sweep up or use an absorbent agent to remove any excess pesticides. Avoid the use of water.**

Be prepared. Have a broom, dust pan, or dry absorbent material, such as cat litter, newspapers or paper towels, ready to assist in cleaning up spills.

Contain and clean up the spill right away. Place contaminated materials in a doubled plastic bag. All materials used to clean up the spill should be properly disposed of according to your local Household Hazardous Waste Disposal site.

Step 7: **Properly store and dispose of unused pesticides.**

Purchase Ready-To-Use (RTU) products to avoid storing large concentrated quantities of pesticides.

Store unused chemicals in a locked cabinet.

Unused pesticide chemicals may be disposed of at a Household Hazardous Waste Collection Center.

Empty pesticide containers should be triple rinsed prior to disposing of them in the trash.

Household Hazardous Waste
Collection Center
(714) 834-6752
www.oclandfills.com

PROJECT Pollution PREVENTION

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities can lead to water pollution if you're not careful. Fertilizers, pesticides and other chemicals that are left on yards or driveways can be blown or washed into storm drains that flow to the ocean. Overwatering lawns can also send materials into storm drains. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never pour gardening products into the ocean, so don't let them enter the storm drains. Follow these easy tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

UCCE Master Gardener Hotline:
(714) 708-1646

To report a spill,
call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
1-877-89-SPILL (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while landscaping or gardening. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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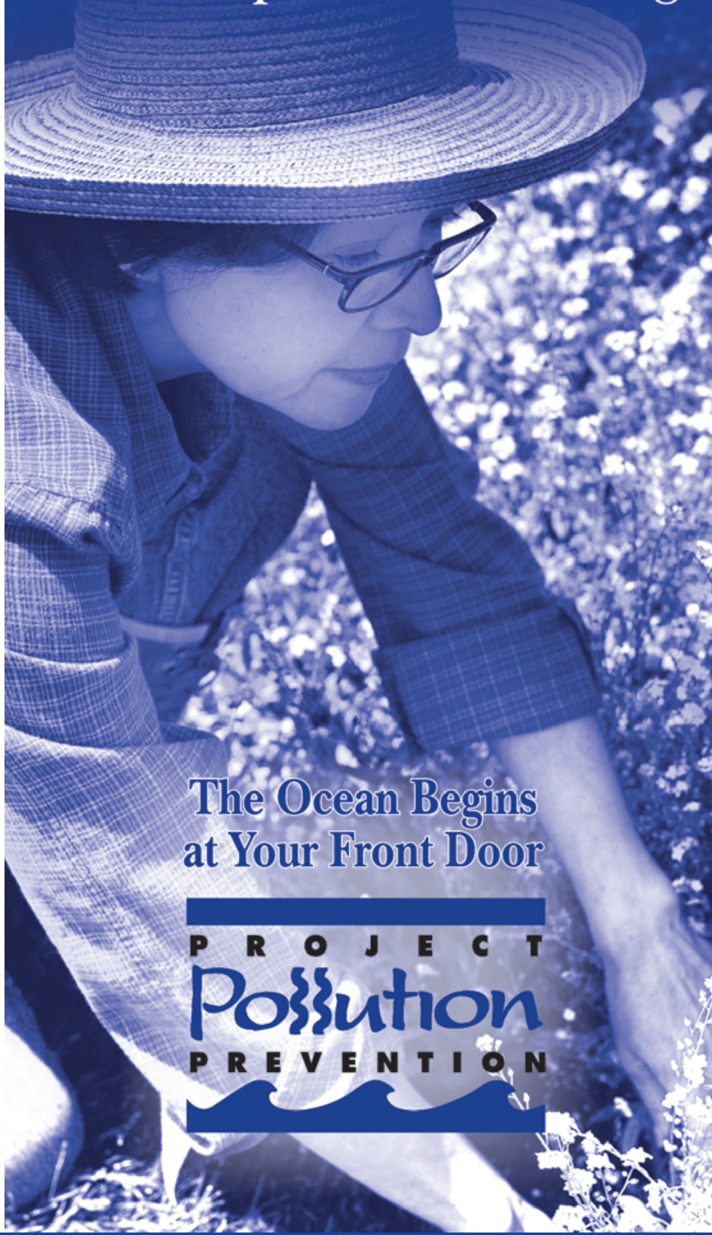
Help Prevent Ocean Pollution:

Tips for Landscape & Gardening



The Ocean Begins at Your Front Door

PROJECT
Pollution
PREVENTION

Tips for Landscape & Gardening

Never allow gardening products or polluted water to enter the street, gutter or storm drain.

General Landscaping Tips

- Protect stockpiles and materials from wind and rain by storing them under tarps or secured plastic sheeting.
- Prevent erosion of slopes by planting fast-growing, dense ground covering plants. These will shield and bind the soil.
- Plant native vegetation to reduce the amount of water, fertilizers, and pesticide applied to the landscape.

- Never apply pesticides or fertilizers when rain is predicted within the next 48 hours.

Garden & Lawn Maintenance

- Do not overwater. Use irrigation practices such as drip irrigation, soaker hoses or micro spray systems. Periodically inspect and fix leaks and misdirected sprinklers.

- Do not rake or blow leaves, clippings or pruning waste into the street, gutter or storm drain. Instead, dispose of green waste by composting, hauling it to a permitted landfill, or recycling it through your city's program.
- Use slow-release fertilizers to minimize leaching, and use organic fertilizers.
- Read labels and use only as directed. Do not over-apply pesticides or fertilizers. Apply to spots as needed, rather than blanketing an entire area.
- Store pesticides, fertilizers and other chemicals in a dry covered area to prevent exposure that may result in the deterioration of containers and packaging.

- Rinse empty pesticide containers and re-use rinse water as you would use the product. Do not dump rinse water down storm drains. Dispose of empty containers in the trash.
- When available, use non-toxic alternatives to traditional pesticides, and use pesticides specifically designed to control the pest you are targeting. For more information, visit **www.ipm.ucdavis.edu**.
- If fertilizer is spilled, sweep up the spill before irrigating. If the spill is liquid, apply an absorbent material such as cat litter, and then sweep it up and dispose of it in the trash.
- Take unwanted pesticides to a Household Hazardous Waste Collection Center to be recycled. Locations are provided below.

Household Hazardous Waste Collection Centers

Anaheim:	1071 N. Blue Gum St.
Huntington Beach:	17121 Nichols St.
Irvine:	6411 Oak Canyon
San Juan Capistrano:	32250 La Pata Ave.

For more information, call (714) 834-6752 or visit www.oclandfills.com

Clean beaches and healthy creeks, rivers, bays and ocean are important to Orange County. However, many common activities such as painting can lead to water pollution if you're not careful. Paint must be used, stored and disposed of properly to ensure that it does not enter the street, gutter or storm drain. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never dump paint into the ocean, so don't let it enter the storm drains. Follow these easy tips to help prevent water pollution.

For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com

To report a spill,
call the
Orange County 24-Hour
Water Pollution Problem
Reporting Hotline
at **1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

The tips contained in this brochure provide useful information to help prevent water pollution while using, storing and disposing of paint. If you have other suggestions, please contact your city's stormwater representatives or call the Orange County Stormwater Program.

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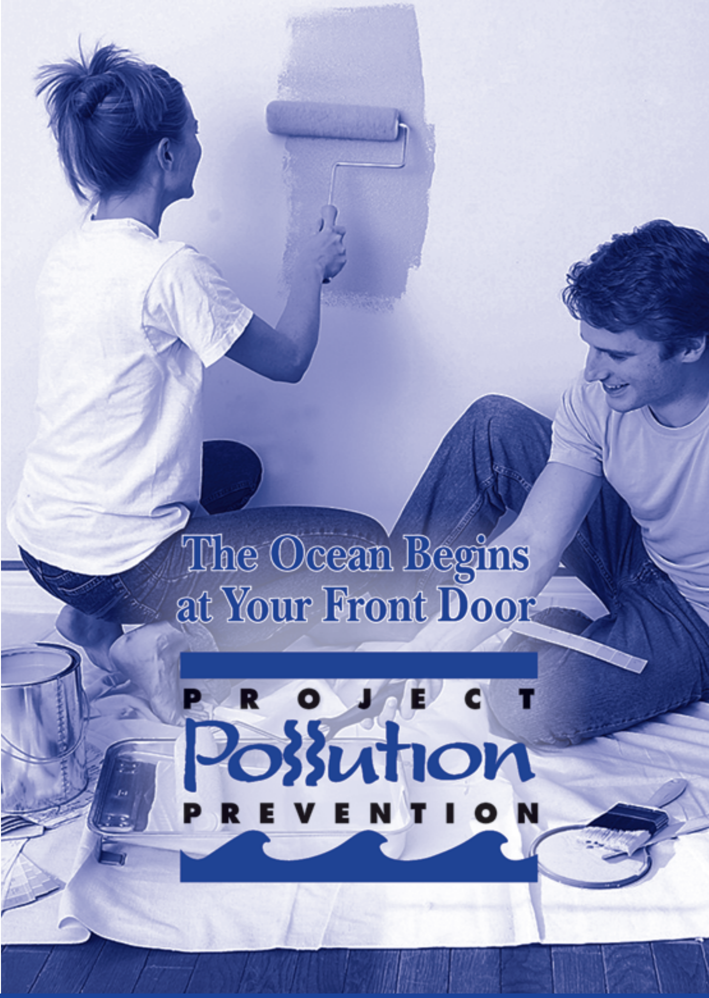
Help Prevent Ocean Pollution:

Tips for Projects Using Paint



The Ocean Begins
at Your Front Door

PROJECT
Pollution
PREVENTION

Tips for Projects Using Paint

Paint can cause significant damage to our environment. Whether you hire a contractor or do it yourself, it is important to follow these simple tips when purchasing, using, cleaning, storing and disposing of paint.

Purchasing Paint

- Measure the room or object to be painted, then buy only the amount needed.
- Whenever possible, use water-based paint since it usually does not require hazardous solvents such as paint thinner for cleanup.

Painting

- Use only one brush or roller per color of paint to reduce the amount of water needed for cleaning.
- Place open paint containers or trays on a stable surface and in a position that is unlikely to spill.
- Always use a tarp under the area or object being painted to collect paint drips and contain spills.

Cleaning

- Never clean brushes or rinse paint containers in the street, gutter or storm drain.
- For oil-based products, use as much of the paint on the brushes as possible. Clean brushes with thinner. To reuse thinner, pour it through a fine filter (e.g. nylon, metal gauze or filter paper) to remove solids such as leftover traces of paint.
- For water-based products, use as much of the paint on the brushes as possible, then rinse in the sink.
- Collect all paint chips and dust. Chips and dust from marine paints or paints containing lead, mercury or tributyl tin are hazardous waste. Sweep up and dispose of at a Household Hazardous Waste Collection Center (HHWCC).

Storing Paint

- Store paint in a dry location away from the elements.
- Store leftover water-based paint, oil-based paint and solvents separately in original or clearly marked containers.
- Avoid storing paint cans directly on cement floors. The bottom of the can will rust much faster on cement.
- Place the lid on firmly and store the paint can upside-down to prevent air from entering. This will keep the paint usable longer. Oil-based paint is usable for up to 15 years. Water-based paint remains usable for up to 10 years.

Alternatives to Disposal

- Use excess paint to apply another coat, for touch-ups, or to paint a closet, garage, basement or attic.
- Give extra paint to friends or family. Extra paint can also be donated to a local theatre group, low-income housing program or school.
- Take extra paint to an exchange program such as the **"Stop & Swap"** that allows you to drop off or pick up partially used home care products free of charge. **"Stop & Swap"** programs are available at most HHWCCs.
- For HHWCC locations and hours, call **(714) 834-6752** or visit **www.oclandfills.com**.

Disposing of Paint

- Never put wet paint in the trash.

For water-based paint:

- If possible, brush the leftover paint on cardboard or newspaper. Otherwise, allow the paint to dry in the can with the lid off in a well-ventilated area protected from the elements, children and pets. Stirring the paint every few days will speed up the drying.
- Large quantities of extra paint should be taken to a HHWCC.
- Once dried, paint and painted surfaces may be disposed of in the trash. When setting a dried paint can out for trash collection, leave the lid off so the collector will see that the paint has dried.

For oil-based paint:

- Oil-based paint is a household hazardous waste. All leftover paint should be taken to a HHWCC.

Aerosol paint:

- Dispose of aerosol paint cans at a HHWCC.

Spills

- Never hose down pavement or other impermeable surfaces where paint has spilled.
- Clean up spills immediately by using an absorbent material such as cat litter. Cat litter used to clean water-based paint spills can be disposed of in the trash. When cleaning oil-based paint spills with cat litter, it must be taken to a HHWCC.
- Immediately report spills that have entered the street, gutter or storm drain to the County's 24-Hour Water Pollution Problem Reporting Hotline at **(714) 567-6363** or visit **www.ocwatersheds.com** to fill out an incident reporting form.

PROJECT POLLUTION PREVENTION

Clean beaches and healthy creeks, rivers, bays, and ocean are important to Orange County. However, many common activities can lead to water pollution if you're not careful. Materials and excess concrete or mortar can be blown or washed into the storm drains that flow to the ocean. Unlike water in sanitary sewers (from sinks and toilets), water in storm drains is not treated before entering our waterways.

You would never throw building materials into the ocean, so don't let them enter the storm drains. Follow these easy tips to help prevent water pollution.

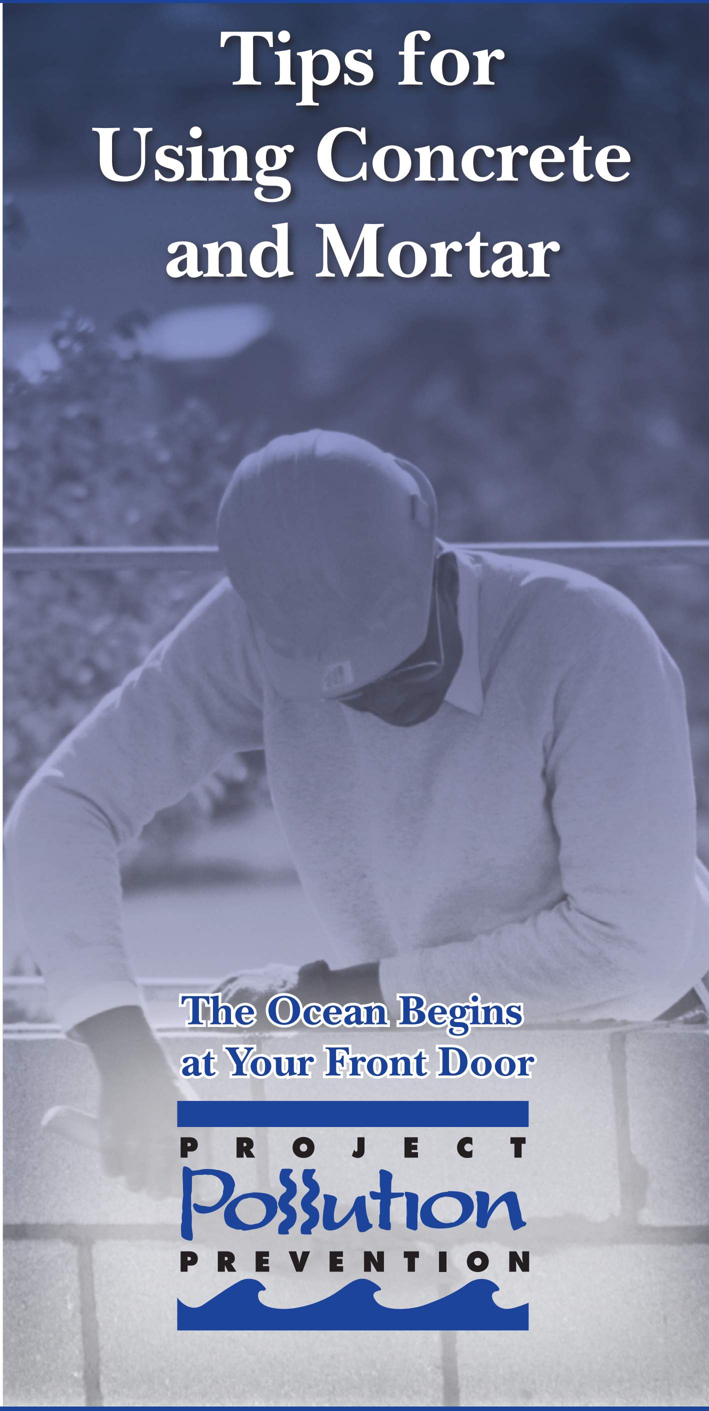
For more information,
please call the
Orange County Stormwater Program
at **1-877-89-SPILL** (1-877-897-7455)
or visit
www.ocwatersheds.com.

To report a spill,
call the
Orange County 24-Hour
Water Pollution Reporting Hotline
at **1-877-89-SPILL** (1-877-897-7455).

For emergencies, dial 911.

The Tips contained in this brochure provide useful information about how you can keep materials and washwater from entering the storm drain system. If you have other suggestions for how water and materials may be contained, please contact your city's stormwater representative or call the Orange County Stormwater Program.

Tips for Using Concrete and Mortar



The Ocean Begins
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PROJECT
Pollution
PREVENTION

Tips for Using Concrete and Mortar

Never allow materials or washwater to enter the street or storm drain.

Before the Project

- Schedule projects for dry weather.
- Store materials under cover, with temporary roofs or plastic sheets, to eliminate or reduce the possibility that the materials can be carried from the project site to streets, storm drains or adjacent properties via rainfall, runoff or wind.
- Minimize waste by ordering only the amount of materials needed to complete the job.
- Take measures to block nearby storm drain inlets.

During the Project

- Set up and operate small mixers on tarps or heavy drop cloths.
- Do not mix more fresh concrete or cement than is needed for the job.

- When breaking up pavement, pick up all chunks and pieces and recycle them at a local construction and demolition recycling company. (See information to the right)
- When making saw cuts in pavement, protect nearby storm drain inlets during the saw-cutting operation and contain the slurry. Collect the slurry residue from the pavement or gutter and remove from the site.

Clean-Up

- Dispose of small amounts of dry concrete, grout or mortar in the trash.
- Never hose materials from exposed aggregate concrete, asphalt or similar treatments into a street, gutter, parking lot, or storm drain.

- Wash concrete mixers and equipment in designated washout areas where the water can flow into a containment area or onto dirt. Small amounts of dried material can be disposed of in the trash. Large amounts should be recycled at a local construction and demolition recycling company. (See information below)
- Recycle cement wash water by pumping it back into cement mixers for reuse.

Spills

- Never hose down pavement or impermeable surfaces where fluids have spilled. Use an absorbent material such as cat litter to soak up a spill, then sweep and dispose in the trash.
- Clean spills on dirt areas by digging up and properly disposing of contaminated dry soil in trash.
- Immediately report significant spills to the County's 24-Hour Water Pollution Problem Reporting Hotline at 714-567-6363 or log onto the County's website at www.ocwatersheds.com and fill out an incident reporting form.

For a list of construction and demolition recycling locations in your area visit www.ciwmb.ca.gov/Recycle/.

For additional information on how to control, prevent, remove, and reduce pollution refer to the Stormwater Best Management Practice Handbook, available on-line at www.cabmphandbooks.com.

Building & Grounds Maintenance SC-41

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	✓
Nutrients	✓
Trash	
Metals	✓
Bacteria	✓
Oil and Grease	
Organics	

Description

Stormwater runoff from building and grounds maintenance activities can be contaminated with toxic hydrocarbons in solvents, fertilizers and pesticides, suspended solids, heavy metals, abnormal pH, and oils and greases. Utilizing the protocols in this fact sheet will prevent or reduce the discharge of pollutants to stormwater from building and grounds maintenance activities by washing and cleaning up with as little water as possible, following good landscape management practices, preventing and cleaning up spills immediately, keeping debris from entering the storm drains, and maintaining the stormwater collection system.

Approach

Reduce potential for pollutant discharge through source control pollution prevention and BMP implementation. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

Pollution Prevention

- Switch to non-toxic chemicals for maintenance when possible.
- Choose cleaning agents that can be recycled.
- Encourage proper lawn management and landscaping, including use of native vegetation.

CASQA
California
Stormwater
Quality
Association

- Encourage use of Integrated Pest Management techniques for pest control.
- Encourage proper onsite recycling of yard trimmings.
- Recycle residual paints, solvents, lumber, and other material as much as possible.

Suggested Protocols

Pressure Washing of Buildings, Rooftops, and Other Large Objects

- In situations where soaps or detergents are used and the surrounding area is paved, pressure washers must use a water collection device that enables collection of wash water and associated solids. A sump pump, wet vacuum or similarly effective device must be used to collect the runoff and loose materials. The collected runoff and solids must be disposed of properly.
- If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff.
- If you are pressure washing on a grassed area (with or without soap), runoff must be dispersed as sheet flow as much as possible, rather than as a concentrated stream. The wash runoff must remain on the grass and not drain to pavement.

Landscaping Activities

- Dispose of grass clippings, leaves, sticks, or other collected vegetation as garbage, or by composting. Do not dispose of collected vegetation into waterways or storm drainage systems.
- Use mulch or other erosion control measures on exposed soils.

Building Repair, Remodeling, and Construction

- Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.
- Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
- Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
- Clean paintbrushes and tools covered with water-based paints in sinks connected to sanitary sewers or in portable containers that can be dumped into a sanitary sewer drain. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.
- Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a catch basin. This is particularly necessary on rainy days. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be collected and disposed of before removing the containment device(s) at the end of the work day.

- If you need to de-water an excavation site, you may need to filter the water before discharging to a catch basin or off-site. If directed off-site, you should direct the water through hay bales and filter fabric or use other sediment filters or traps.

- Store toxic material under cover during precipitation events and when not in use. A cover would include tarps or other temporary cover material.

Mowing, Trimming, and Planting

- Dispose of leaves, sticks, or other collected vegetation as garbage, by composting or at a permitted landfill. Do not dispose of collected vegetation into waterways or storm drainage systems.

- Use mulch or other erosion control measures when soils are exposed.

- Place temporarily stockpiled material away from watercourses and drain inlets, and berm or cover stockpiles to prevent material releases to the storm drain system.

- Consider an alternative approach when bailing out muddy water: do not put it in the storm drain; pour over landscaped areas.

- Use hand weeding where practical.

Fertilizer and Pesticide Management

- Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of fertilizers and pesticides and training of applicators and pest control advisors.

- Use less toxic pesticides that will do the job when applicable. Avoid use of copper-based pesticides if possible.

- Do not use pesticides if rain is expected.

- Do not mix or prepare pesticides for application near storm drains.

- Use the minimum amount needed for the job.

- Calibrate fertilizer distributors to avoid excessive application.

- Employ techniques to minimize off-target application (e.g., spray drift) of pesticides, including consideration of alternative application techniques.

- Apply pesticides only when wind speeds are low.

- Fertilizers should be worked into the soil rather than dumped or broadcast onto the surface.

- Irrigate slowly to prevent runoff and then only as much as is needed.

- Clean pavement and sidewalk if fertilizer is spilled on these surfaces before applying irrigation water.

- Dispose of empty pesticide containers according to the instructions on the container label.

- Use up the pesticides. Rinse containers, and use rinse water as product. Dispose of unused pesticide as hazardous waste.
- Implement storage requirements for pesticide products with guidance from the local fire department and County Agricultural Commissioner. Provide secondary containment for pesticides.

Inspection

- Inspect irrigation system periodically to ensure that the right amount of water is being applied and that excessive runoff is not occurring. Minimize excess watering and repair leaks in the irrigation system as soon as they are observed.

Training

- Educate and train employees on pesticide use and in pesticide application techniques to prevent pollution.
- Train employees and contractors in proper techniques for spill containment and cleanup.
- Be sure the frequency of training takes into account the complexity of the operations and the nature of the staff.

Spill Response and Prevention

- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- Place a stockpile of spill cleanup materials, such as brooms, dustpans, and vacuum sweepers (if desired) near the storage area where it will be readily accessible.
- Have employees trained in spill containment and cleanup present during the loading/unloading of dangerous wastes, liquid chemicals, or other materials.
- Familiarize employees with the Spill Prevention Control and Countermeasure Plan.
- Clean up spills immediately.

Other Considerations

Alternative pest/weed controls may not be available, suitable, or effective in many cases.

Requirements

Costs

- Cost will vary depending on the type and size of facility.
- Overall costs should be low in comparison to other BMPs.

Maintenance

Sweep paved areas regularly to collect loose particles. Wipe up spills with rags and other absorbent material immediately, do not hose down the area to a storm drain.

Supplemental Information

Further Detail of the BMP

Fire Sprinkler Line Flushing

Building fire sprinkler line flushing may be a source of non-stormwater runoff pollution. The water entering the system is usually potable water, though in some areas it may be non-potable reclaimed wastewater. There are subsequent factors that may drastically reduce the quality of the water in such systems. Black iron pipe is usually used since it is cheaper than potable piping, but it is subject to rusting and results in lower quality water. Initially, the black iron pipe has an oil coating to protect it from rusting between manufacture and installation; this will contaminate the water from the first flush but not from subsequent flushes. Nitrates, polyphosphates and other corrosion inhibitors, as well as fire suppressants and antifreeze may be added to the sprinkler water system. Water generally remains in the sprinkler system a long time (typically a year) and between flushes may accumulate iron, manganese, lead, copper, nickel, and zinc. The water generally becomes anoxic and contains living and dead bacteria and breakdown products from chlorination. This may result in a significant BOD problem and the water often smells. Consequently dispose fire sprinkler line flush water into the sanitary sewer. Do not allow discharge to storm drain or infiltration due to potential high levels of pollutants in fire sprinkler line water.

References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Clark County Storm Water Pollution Control Manual http://www.co.clark.wa.us/pubworks/bmpman.pdf

King County Storm Water Pollution Control Manual http://dnr.metrokc.gov/wlr/dss/spcm.htm

Mobile Cleaners Pilot Program: Final Report. 1997. Bay Area Stormwater Management Agencies Association (BASMAA). http://www.basmaa.org/

Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA). http://www.basmaa.org/

Santa Clara Valley Urban Runoff Pollution Prevention Program http://www.scvurppp.org

The Storm Water Managers Resource Center http://www.stormwatercenter.net/

Parking/Storage Area Maintenance SC-43

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	✓
Bacteria	
Oil and Grease	✓
Organics	✓

Description

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, hydrocarbons, oil and grease, and heavy metals that can enter receiving waters through stormwater runoff or non-stormwater discharges. The protocols in this fact sheet are intended to prevent or reduce the discharge of pollutants from parking/storage areas and include using good housekeeping practices, following appropriate cleaning BMPs, and training employees.

Approach

The goal of this program is to ensure stormwater pollution prevention practices are considered when conducting activities on or around parking areas and storage areas to reduce potential for pollutant discharge to receiving waters. Successful implementation depends on effective training of employees on applicable BMPs and general pollution prevention strategies and objectives.

Pollution Prevention

- Encourage alternative designs and maintenance strategies for impervious parking lots. (See New Development and Redevelopment BMP Handbook)

- Keep accurate maintenance logs to evaluate BMP implementation.

CASQA
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SC-43 Parking/Storage Area Maintenance

Suggested Protocols

General

- Keep the parking and storage areas clean and orderly. Remove debris in a timely fashion.
- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low quantities.
- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.
- Discharge soapy water remaining in mop or wash buckets to the sanitary sewer through a sink, toilet, clean-out, or wash area with drain.

Controlling Litter

- Post "No Littering" signs and enforce anti-litter laws.
- Provide an adequate number of litter receptacles.
- Clean out and cover litter receptacles frequently to prevent spillage.
- Provide trash receptacles in parking lots to discourage litter.
- Routinely sweep, shovel, and dispose of litter in the trash.

Surface Cleaning

- Use dry cleaning methods (e.g., sweeping, vacuuming) to prevent the discharge of pollutants into the stormwater conveyance system if possible.
- Establish frequency of public parking lot sweeping based on usage and field observations of waste accumulation.
- Sweep all parking lots at least once before the onset of the wet season.
- Follow the procedures below if water is used to clean surfaces:
  - Block the storm drain or contain runoff.
  - Collect and pump wash water to the sanitary sewer or discharge to a pervious surface. Do not allow wash water to enter storm drains.
  - Dispose of parking lot sweeping debris and dirt at a landfill.
- Follow the procedures below when cleaning heavy oily deposits:
  - Clean oily spots with absorbent materials.
  - Use a screen or filter fabric over inlet, then wash surfaces.

  - Do not allow discharges to the storm drain.
  - Vacuum/pump discharges to a tank or discharge to sanitary sewer.
  - Appropriately dispose of spilled materials and absorbents.

Surface Repair

- Preheat, transfer or load hot bituminous material away from storm drain inlets.
- Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- Cover and seal nearby storm drain inlets where applicable (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal.
- Use only as much water as necessary for dust control, to avoid runoff.
- Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

Inspection

- Have designated personnel conduct inspections of parking facilities and stormwater conveyance systems associated with parking facilities on a regular basis.
- Inspect cleaning equipment/sweepers for leaks on a regular basis.

Training

- Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
- Train employees and contractors in proper techniques for spill containment and cleanup.

Spill Response and Prevention

- Keep your Spill Prevention Control and Countermeasure (SPCC) Plan up-to-date.
- Place a stockpile of spill cleanup materials where it will be readily accessible or at a central location.
- Clean up fluid spills immediately with absorbent rags or material.
- Dispose of spilled material and absorbents properly.

Other Considerations

Limitations related to sweeping activities at large parking facilities may include high equipment costs, the need for sweeper operator training, and the inability of current sweeper technology to remove oil and grease.

Requirements

Costs

Cleaning/sweeping costs can be quite large. Construction and maintenance of stormwater structural controls can be quite expensive as well.

Maintenance

- Sweep parking lot regularly to minimize cleaning with water.
- Clean out oil/water/sand separators regularly, especially after heavy storms.
- Clean parking facilities regularly to prevent accumulated wastes and pollutants from being discharged into conveyance systems during rainy conditions.

Supplemental Information

Further Detail of the BMP

Surface Repair

Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff. Where applicable, cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered manholes and drains for proper disposal. Only use only as much water as is necessary for dust control to avoid runoff.

References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Clark County Storm Water Pollution Control Manual http://www.co.clark.wa.us/pubworks/bmpman.pdf

King County Storm Water Pollution Control Manual http://dnr.metrokc.gov/wlr/dss/spcm.htm

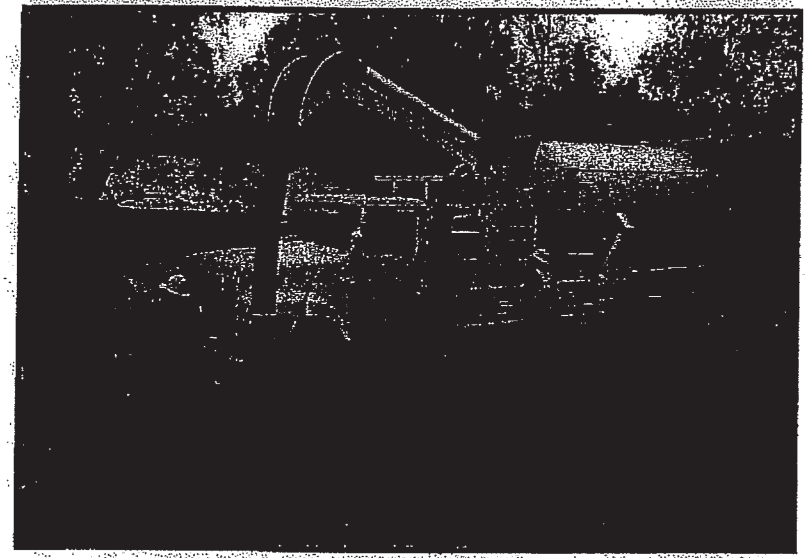
Pollution from Surface Cleaning Folder. 1996. Bay Area Stormwater Management Agencies Association (BASMAA). http://www.basmaa.org/

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program http://www.scvurppp.org

The Storm Water Managers Resource Center http://www.stormwatercenter.net/

Drainage System Maintenance SC-44



Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and stormwater that may contain certain pollutants. The protocols in this fact sheet are intended to reduce pollutants reaching receiving waters through proper conveyance system operation and maintenance.

Approach

Pollution Prevention

Maintain catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Suggested Protocols

Catch Basins/Inlet Structures

- Staff should regularly inspect facilities to ensure compliance with the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC34 Waste Handling and Disposal).

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	
Bacteria	✓
Oil and Grease	
Organics	

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- Clean catch basins, storm drain inlets, and other conveyance structures before the wet season to remove sediments and debris accumulated during the summer.

- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.

- Keep accurate logs of the number of catch basins cleaned.

- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.

- Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed. Do not dewater near a storm drain or stream.

Storm Drain Conveyance System

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.

- Collect and pump flushed effluent to the sanitary sewer for treatment whenever possible.

Pump Stations

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.

- Do not allow discharge to reach the storm drain system when cleaning a storm drain pump station or other facility.

- Conduct routine maintenance at each pump station.

- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.

Open Channel

- Modify storm channel characteristics to improve channel hydraulics, increase pollutant removals, and enhance channel/creek aesthetic and habitat value.

- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a Steam or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies (SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS.

Illicit Connections and Discharges

- Look for evidence of illegal discharges or illicit connections during routine maintenance of conveyance system and drainage structures:

  - Is there evidence of spills such as paints, discoloring, etc?

  - Are there any odors associated with the drainage system?
  - Record locations of apparent illegal discharges/illicit connections?
  - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of upgradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
  - Eliminate the discharge once the origin of flow is established.

- Stencil or demarcate storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Illegal Dumping

- Inspect and clean up hot spots and other storm drainage areas regularly where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Training

- Train crews in proper maintenance activities, including record keeping and disposal.
- Allow only properly trained individuals to handle hazardous materials/wastes.
- Have staff involved in detection and removal of illicit connections trained in the following:
  - OSHA-required Health and Safety Training (29 CFR 1910.120) plus annual refresher training (as needed).

  - OSHA Confined Space Entry training (Cal-OSHA Confined Space, Title 8 and Federal OSHA 29 CFR 1910.146).

  - Procedural training (field screening, sampling, smoke/dye testing, TV inspection).

Spill Response and Prevention

- Investigate all reports of spills, leaks, and/or illegal dumping promptly.

- Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) or dig up, remove, and properly dispose of contaminated soil.

- Refer to fact sheet SC-11 Spill Prevention, Control, and Cleanup.

Other Considerations (Limitations and Regulations)

- Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.

- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and prohibition against disposal of flushed effluent to sanitary sewer in some areas.

- Regulations may include adoption of substantial penalties for illegal dumping and disposal.

- Local municipal codes may include sections prohibiting discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.

Requirements

Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget.

- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal. The primary cost is for staff time. Cost depends on how aggressively a program is implemented. Other cost considerations for an illegal dumping program include:

  - Purchase and installation of signs.

  - Rental of vehicle(s) to haul illegally-disposed items and material to landfills.

  - Rental of heavy equipment to remove larger items (e.g., car bodies) from channels.

  - Purchase of landfill space to dispose of illegally-dumped items and material.

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary.

Maintenance

- Two-person teams may be required to clean catch basins with vactor trucks.
- Teams of at least two people plus administrative personnel are required to identify illicit discharges, depending on the complexity of the storm sewer system.
- Arrangements must be made for proper disposal of collected wastes.
- Technical staff are required to detect and investigate illegal dumping violations.

Supplemental Information

Further Detail of the BMP

Storm Drain Flushing

Flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in storm drainage systems. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as an open channel, another point where flushing will be initiated, or the sanitary sewer and the treatment facilities, thus preventing resuspension and overflow of a portion of the solids during storm events. Flushing prevents "plug flow" discharges of concentrated pollutant loadings and sediments. Deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, thereby releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce impacts of stormwater pollution, a second inflatable device placed well downstream may be used to recollect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to recollect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75% for organics and 55-65% for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm sewer flushing.

References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Clark County Storm Water Pollution Control Manual
http://www.co.clark.wa.us/pubworks/bmpman.pdf

Ferguson, B.K. 1991. Urban Stream Reclamation, p. 324-322, Journal of Soil and Water Conservation.

King County Storm Water Pollution Control Manual http://dnr.metrokc.gov/wlr/dss/spcm.htm

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program http://www.scvurppp.org

The Storm Water Managers Resource Center http://www.stormwatercenter.net

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Storm Drain System Cleaning. On line: http://www.epa.gov/npdes/menuofbmps/poll_16.htm

Housekeeping Practices SC-60

Description

Promote efficient and safe housekeeping practices (storage, use, and cleanup) when handling potentially harmful materials such as fertilizers, pesticides, cleaning solutions, paint products, automotive products, and swimming pool chemicals. Related information is provided in BMP fact sheets SC-11 Spill Prevention, Control & Cleanup and SC-34 Waste Handling & Disposal.

Approach

Pollution Prevention

- Purchase only the amount of material that will be needed for foreseeable use. In most cases this will result in cost savings in both purchasing and disposal. See SC-61 Safer Alternative Products for additional information.

- Be aware of new products that may do the same job with less environmental risk and for less or the equivalent cost. Total cost must be used here; this includes purchase price, transportation costs, storage costs, use related costs, clean up costs and disposal costs.

Suggested Protocols

General

- Keep work sites clean and orderly. Remove debris in a timely fashion. Sweep the area.

- Dispose of wash water, sweepings, and sediments, properly.

- Recycle or dispose of fluids properly.

- Establish a daily checklist of office, yard and plant areas to confirm cleanliness and adherence to proper storage and security. Specific employees should be assigned specific inspection responsibilities and given the authority to remedy any problems found.

- Post waste disposal charts in appropriate locations detailing for each waste its hazardous nature (poison, corrosive, flammable), prohibitions on its disposal (dumpster, drain, sewer) and the recommended disposal method (recycle, sewer, burn, storage, landfill).

- Summarize the chosen BMPs applicable to your operation and post them in appropriate conspicuous places.

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

- Require a signed checklist from every user of any hazardous material detailing amount taken, amount used, amount returned and disposal of spent material.

- Do a before audit of your site to establish baseline conditions and regular subsequent audits to note any changes and whether conditions are improving or deteriorating.

- Keep records of water, air and solid waste quantities and quality tests and their disposition.

- Maintain a mass balance of incoming, outgoing and on hand materials so you know when there are unknown losses that need to be tracked down and accounted for.

- Use and reward employee suggestions related to BMPs, hazards, pollution reduction, work place safety, cost reduction, alternative materials and procedures, recycling and disposal.

- Have, and review regularly, a contingency plan for spills, leaks, weather extremes etc. Make sure all employees know about it and what their role is so that it comes into force automatically.

Training

- Train all employees, management, office, yard, manufacturing, field and clerical in BMPs and pollution prevention and make them accountable.

- Train municipal employees who handle potentially harmful materials in good housekeeping practices.

- Train personnel who use pesticides in the proper use of the pesticides. The California Department of Pesticide Regulation license pesticide dealers, certify pesticide applicators and conduct onsite inspections.

- Train employees and contractors in proper techniques for spill containment and cleanup. The employee should have the tools and knowledge to immediately begin cleaning up a spill if one should occur.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup.

- Keep your Spill Prevention Control and Countermeasure (SPCC) plant up-to-date, and implement accordingly.

- Have spill cleanup materials readily available and in a known location.

- Cleanup spills immediately and use dry methods if possible.

- Properly dispose of spill cleanup material.

Other Considerations

- There are no major limitations to this best management practice.

- There are no regulatory requirements to this BMP. Existing regulations already require municipalities to properly store, use, and dispose of hazardous materials

Requirements

Costs

- Minimal cost associated with this BMP. Implementation of good housekeeping practices may result in cost savings as these procedures may reduce the need for more costly BMPs.

Maintenance

- Ongoing maintenance required to keep a clean site. Level of effort is a function of site size and type of activities.

Supplemental Information

Further Detail of the BMP

- The California Integrated Waste Management Board's Recycling Hotline, 1-800-553-2962, provides information on household hazardous waste collection programs and facilities.

Examples

There are a number of communities with effective programs. The most pro-active include Santa Clara County and the City of Palo Alto, the City and County of San Francisco, and the Municipality of Metropolitan Seattle (Metro).

References and Resources

British Columbia Lake Stewardship Society. Best Management Practices to Protect Water Quality from Non-Point Source Pollution. March 2000. http://www.nalms.org/bclss/bmphome.html#bmp

King County Stormwater Pollution Control Manual - http://dnr.metrokc.gov/wlr/dss/spcm.htm

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities, Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July, 1998, Revised by California Coastal Commission, February 2002.

Orange County Stormwater Program
http://www.ocwatersheds.com/stormwater/swp_introduction.asp

San Mateo STOPPP - (http://stoppp.tripod.com/bmp.html)

Plaza and Sidewalk Cleaning SC-71

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize
- Product Substitution

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	☑
Oil and Grease	☑
Organics	☑
Oxygen Demanding	☑

Description

Pollutants on sidewalks and other pedestrian traffic areas and plazas are typically due to littering and vehicle use. This fact sheet describes good housekeeping practices that can be incorporated into the municipality's existing cleaning and maintenance program.

Approach

Pollution Prevention

- Use dry cleaning methods whenever practical for surface cleaning activities.
- Use the least toxic materials available (e.g. water based paints, gels or sprays for graffiti removal).

Suggested Protocols

Surface Cleaning

- Regularly broom (dry) sweep sidewalk, plaza and parking lot areas to minimize cleaning with water.
- Dry cleanup first (sweep, collect, and dispose of debris and trash) when cleaning sidewalks or plazas, then wash with or without soap.
- Block the storm drain or contain runoff when cleaning with water. Discharge wash water to landscaping or collect water and pump to a tank or discharge to sanitary sewer if allowed. (Permission may be required from local sanitation district.)

- Block the storm drain or contain runoff when washing parking areas, driveways or drive-throughs. Use absorbents to pick up oil; then dry sweep. Clean with or without soap. Collect water and pump to a tank or discharge to sanitary sewer if allowed. Street Repair and Maintenance.

Graffiti Removal

- Avoid graffiti abatement activities during rain events.
- Implement the procedures under Painting and Paint Removal in SC-70 Roads, Streets, and Highway Operation and Maintenance fact sheet when graffiti is removed by painting over.
- Direct runoff from sand blasting and high pressure washing (with no cleaning agents) into a dirt or landscaped area after treating with an appropriate filtering device.
- Plug nearby storm drain inlets and vacuum/pump wash water to the sanitary sewer if authorized to do so if a graffiti abatement method generates wash water containing a cleaning compound (such as high pressure washing with a cleaning compound). Ensure that a non-hazardous cleaning compound is used or dispose as hazardous waste, as appropriate.

Surface Removal and Repair

- Schedule surface removal activities for dry weather if possible.
- Avoid creating excess dust when breaking asphalt or concrete.
- Take measures to protect nearby storm drain inlets prior to breaking up asphalt or concrete (e.g. place hay bales or sand bags around inlets). Clean afterwards by sweeping up as much material as possible.
- Designate an area for clean up and proper disposal of excess materials.
- Remove and recycle as much of the broken pavement as possible to avoid contact with rainfall and stormwater runoff.
- When making saw cuts in pavement, use as little water as possible. Cover each storm drain inlet completely with filter fabric during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and remove from site.
- Always dry sweep first to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquid in storm drains. Once dry sweeping is complete, the area may be hosed down if needed. Wash water should be directed to landscaping or collected and pumped to the sanitary sewer if allowed.

Concrete Installation and Repair

- Schedule asphalt and concrete activities for dry weather.

- Take measures to protect any nearby storm drain inlets and adjacent watercourses, prior to breaking up asphalt or concrete (e.g. place san bags around inlets or work areas).

- Limit the amount of fresh concrete or cement mortar mixed, mix only what is needed for the job.

- Store concrete materials under cover, away from drainage areas. Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.

- Return leftover materials to the transit mixer. Dispose of small amounts of hardened excess concrete, grout, and mortar in the trash.

- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.

- Protect applications of fresh concrete from rainfall and runoff until the material has dried.

- Do not allow excess concrete to be dumped onsite, except in designated areas.

- Wash concrete trucks off site or in designated areas on site designed to preclude discharge of wash water to drainage system.

Controlling Litter

- Post "No Littering" signs and enforce anti-litter laws.

- Provide litter receptacles in busy, high pedestrian traffic areas of the community, at recreational facilities, and at community events.

- Cover litter receptacles and clean out frequently to prevent leaking/spillage or overflow.

- Clean parking lots on a regular basis with a street sweeper.

Training

- Provide regular training to field employees and/or contractors regarding surface cleaning and proper operation of equipment.

- Train employee and contractors in proper techniques for spill containment and cleanup.

- Use a training log or similar method to document training.

Spill Response and Prevention

- Refer to SC-11, Spill Prevention, Control & Cleanup.

- Have spill cleanup materials readily available and in a known location.

- Cleanup spills immediately and use dry methods if possible.

- Properly dispose of spill cleanup material.

Other Considerations

- Limitations related to sweeping activities at large parking facilities may include current sweeper technology to remove oil and grease.
- Surface cleaning activities that require discharges to the local sewering agency will require coordination with the agency.
- Arrangements for disposal of the swept material collected must be made, as well as accurate tracking of the areas swept and the frequency of sweeping.

Requirements

Costs

- The largest expenditures for sweeping and cleaning of sidewalks, plazas, and parking lots are in staffing and equipment. Sweeping of these areas should be incorporated into street sweeping programs to reduce costs.

Maintenance

Not applicable

Supplemental Information

Further Detail of the BMP

Community education, such as informing residents about their options for recycling and waste disposal, as well as the consequences of littering, can instill a sense of citizen responsibility and potentially reduce the amount of maintenance required by the municipality.

Additional BMPs that should be considered for parking lot areas include:

- Allow sheet runoff to flow into biofilters (vegetated strip and swale) and infiltration devices.
- Utilize sand filters or oleophilic collectors for oily waste in low concentrations.
- Arrange rooftop drains to prevent drainage directly onto paved surfaces.
- Design lot to include semi-permeable hardscape.
- Structural BMPs such as storm drain inlet filters can be very effective in reducing the amount of pollutants discharged from parking facilities during periods of rain.

References and Resources

Bay Area Stormwater Management Agencies Association (BASMAA). 1996. Pollution From Surface Cleaning Folder http://www.basmaa.org

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

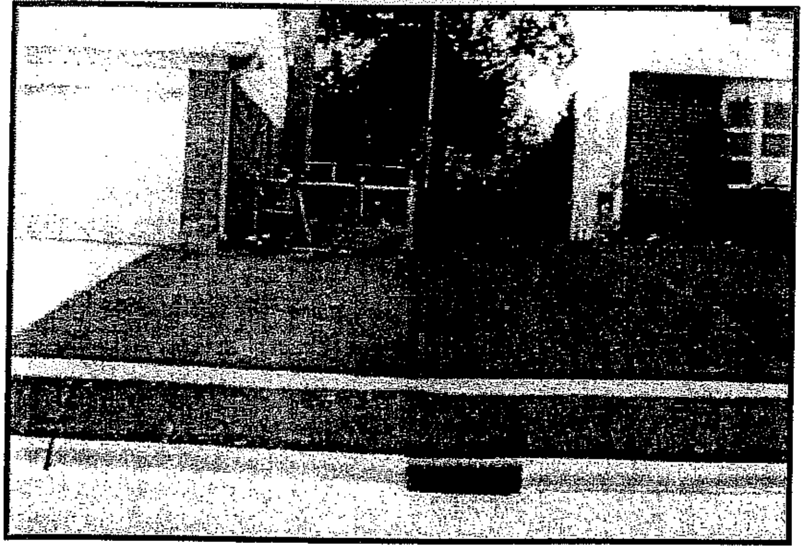
Orange County Stormwater Program
http://www.ocwatersheds.com/stormwater/swp_introduction.asp

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

San Diego Stormwater Co-permittees Jurisdictional Urban Runoff Management Plan. 2001. Municipal Activities Model Program Guidance. November.

Efficient Irrigation SD-12



Design Objectives

- ☑ Maximize Infiltration
- ☑ Provide Retention
- ☑ Slow Runoff
- Minimize Impervious Land Coverage
- Prohibit Dumping of Improper Materials
- Contain Pollutants
- Collect and Convey

Description

Irrigation water provided to landscaped areas may result in excess irrigation water being conveyed into stormwater drainage systems.

Approach

Project plan designs for development and redevelopment should include application methods of irrigation water that minimize runoff of excess irrigation water into the stormwater conveyance system.

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Designing New Installations

The following methods to reduce excessive irrigation runoff should be considered, and incorporated and implemented where determined applicable and feasible by the Permittee:

- Employ rain-triggered shutoff devices to prevent irrigation after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control water loss in the event of broken sprinkler heads or lines.
- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times (for short cycles), etc.

- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm water drainage system.

- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Choose plants with low irrigation requirements (for example, native or drought tolerant species). Consider design features such as:

  - Using mulches (such as wood chips or bar) in planter areas without ground cover to minimize sediment in runoff

  - Installing appropriate plant materials for the location, in accordance with amount of sunlight and climate, and use native plant materials where possible and/or as recommended by the landscape architect

  - Leaving a vegetative barrier along the property boundary and interior watercourses, to act as a pollutant filter, where appropriate and feasible

  - Choosing plants that minimize or eliminate the use of fertilizer or pesticides to sustain growth

- Employ other comparable, equally effective methods to reduce irrigation water runoff.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Other Resources

A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Trash Storage Areas SD-32

Description

Trash storage areas are areas where a trash receptacle (s) are located for use as a repository for solid wastes. Stormwater runoff from areas where trash is stored or disposed of can be polluted. In addition, loose trash and debris can be easily transported by water or wind into nearby storm drain inlets, channels, and/or creeks. Waste handling operations that may be sources of stormwater pollution include dumpsters, litter control, and waste piles.

Approach

This fact sheet contains details on the specific measures required to prevent or reduce pollutants in stormwater runoff associated with trash storage and handling. Preventative measures including enclosures, containment structures, and impervious pavements to mitigate spills, should be used to reduce the likelihood of contamination.

Design Objectives

Maximize Infiltration

Provide Retention

Slow Runoff

Minimize Impervious Land Coverage

Prohibit Dumping of Improper Materials

☑ Contain Pollutants

Collect and Convey

Suitable Applications

Appropriate applications include residential, commercial and industrial areas planned for development or redevelopment. (Detached residential single-family homes are typically excluded from this requirement.)

Design Considerations

Design requirements for waste handling areas are governed by Building and Fire Codes, and by current local agency ordinances and zoning requirements. The design criteria described in this fact sheet are meant to enhance and be consistent with these code and ordinance requirements. Hazardous waste should be handled in accordance with legal requirements established in Title 22, California Code of Regulation.

Wastes from commercial and industrial sites are typically hauled by either public or commercial carriers that may have design or access requirements for waste storage areas. The design criteria in this fact sheet are recommendations and are not intended to be in conflict with requirements established by the waste hauler. The waste hauler should be contacted prior to the design of your site trash collection areas. Conflicts or issues should be discussed with the local agency.

Designing New Installations

Trash storage areas should be designed to consider the following structural or treatment control BMPs:

- Design trash container areas so that drainage from adjoining roofs and pavement is diverted around the area(s) to avoid run-on. This might include berming or grading the waste handling area to prevent run-on of stormwater.

- Make sure trash container areas are screened or walled to prevent off-site transport of trash.

- Use lined bins or dumpsters to reduce leaking of liquid waste.
- Provide roofs, awnings, or attached lids on all trash containers to minimize direct precipitation and prevent rainfall from entering containers.
- Pave trash storage areas with an impervious surface to mitigate spills.
- Do not locate storm drains in immediate vicinity of the trash storage area.
- Post signs on all dumpsters informing users that hazardous materials are not to be disposed of therein.

Redeveloping Existing Installations

Various jurisdictional stormwater management and mitigation plans (SUSMP, WQMP, etc.) define "redevelopment" in terms of amounts of additional impervious area, increases in gross floor area and/or exterior construction, and land disturbing activities with structural or impervious surfaces. The definition of " redevelopment" must be consulted to determine whether or not the requirements for new development apply to areas intended for redevelopment. If the definition applies, the steps outlined under "designing new installations" above should be followed.

Additional Information

Maintenance Considerations

The integrity of structural elements that are subject to damage (i.e., screens, covers, and signs) must be maintained by the owner/operator. Maintenance agreements between the local agency and the owner/operator may be required. Some agencies will require maintenance deed restrictions to be recorded of the property title. If required by the local agency, maintenance agreements or deed restrictions must be executed by the owner/operator before improvement plans are approved.

Other Resources

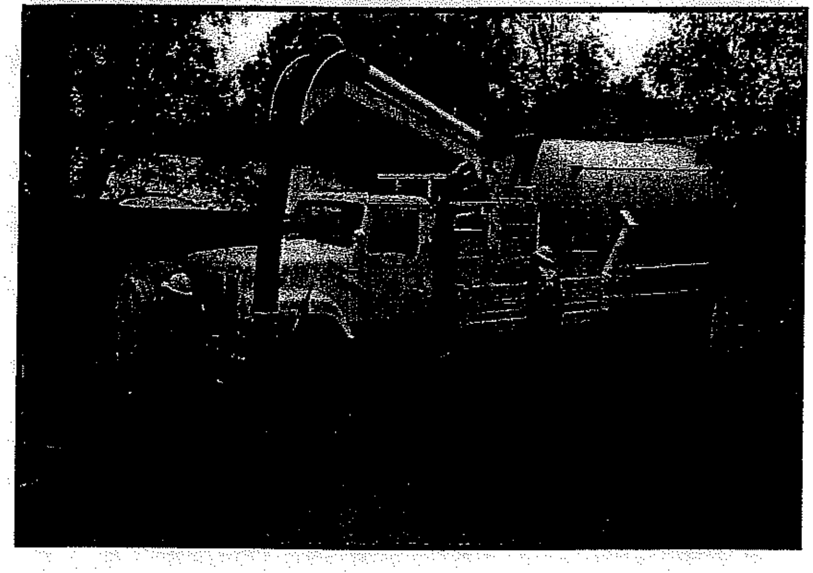
A Manual for the Standard Urban Stormwater Mitigation Plan (SUSMP), Los Angeles County Department of Public Works, May 2002.

Model Standard Urban Storm Water Mitigation Plan (SUSMP) for San Diego County, Port of San Diego, and Cities in San Diego County, February 14, 2002.

Model Water Quality Management Plan (WQMP) for County of Orange, Orange County Flood Control District, and the Incorporated Cities of Orange County, Draft February 2003.

Ventura Countywide Technical Guidance Manual for Stormwater Quality Control Measures, July 2002.

Drainage System Maintenance SC-44



Description

As a consequence of its function, the stormwater conveyance system collects and transports urban runoff and stormwater that may contain certain pollutants. The protocols in this fact sheet are intended to reduce pollutants reaching receiving waters through proper conveyance system operation and maintenance.

Approach

Pollution Prevention

Maintain catch basins, stormwater inlets, and other stormwater conveyance structures on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

Suggested Protocols

Catch Basins/Inlet Structures

- Staff should regularly inspect facilities to ensure compliance with the following:
  - Immediate repair of any deterioration threatening structural integrity.
  - Cleaning before the sump is 40% full. Catch basins should be cleaned as frequently as needed to meet this standard.
  - Stenciling of catch basins and inlets (see SC34 Waste Handling and Disposal).

Objectives

- Cover
- Contain
- Educate
- Reduce/Minimize

Targeted Constituents

Sediment	✓
Nutrients	
Trash	✓
Metals	
Bacteria	✓
Oil and Grease	
Organics	

CASQA
California Stormwater Quality Association

- Clean catch basins, storm drain inlets, and other conveyance structures before the wet season to remove sediments and debris accumulated during the summer.

- Conduct inspections more frequently during the wet season for problem areas where sediment or trash accumulates more often. Clean and repair as needed.

- Keep accurate logs of the number of catch basins cleaned.

- Store wastes collected from cleaning activities of the drainage system in appropriate containers or temporary storage sites in a manner that prevents discharge to the storm drain.

- Dewater the wastes if necessary with outflow into the sanitary sewer if permitted. Water should be treated with an appropriate filtering device prior to discharge to the sanitary sewer. If discharge to the sanitary sewer is not allowed, water should be pumped or vacuumed to a tank and properly disposed. Do not dewater near a storm drain or stream.

Storm Drain Conveyance System

- Locate reaches of storm drain with deposit problems and develop a flushing schedule that keeps the pipe clear of excessive buildup.

- Collect and pump flushed effluent to the sanitary sewer for treatment whenever possible.

Pump Stations

- Clean all storm drain pump stations prior to the wet season to remove silt and trash.

- Do not allow discharge to reach the storm drain system when cleaning a storm drain pump station or other facility.

- Conduct routine maintenance at each pump station.

- Inspect, clean, and repair as necessary all outlet structures prior to the wet season.

Open Channel

- Modify storm channel characteristics to improve channel hydraulics, increase pollutant removals, and enhance channel/creek aesthetic and habitat value.

- Conduct channel modification/improvement in accordance with existing laws. Any person, government agency, or public utility proposing an activity that will change the natural (emphasis added) state of any river, stream, or lake in California, must enter into a Steam or Lake Alteration Agreement with the Department of Fish and Game. The developer-applicant should also contact local governments (city, county, special districts), other state agencies (SWRCB, RWQCB, Department of Forestry, Department of Water Resources), and Federal Corps of Engineers and USFWS.

Illicit Connections and Discharges

- Look for evidence of illegal discharges or illicit connections during routine maintenance of conveyance system and drainage structures:

  - Is there evidence of spills such as paints, discoloring, etc?

  - Are there any odors associated with the drainage system?
  - Record locations of apparent illegal discharges/illicit connections?
  - Track flows back to potential dischargers and conduct aboveground inspections. This can be done through visual inspection of upgradient manholes or alternate techniques including zinc chloride smoke testing, fluorometric dye testing, physical inspection testing, or television camera inspection.
  - Eliminate the discharge once the origin of flow is established.
- Stencil or demarcate storm drains, where applicable, to prevent illegal disposal of pollutants. Storm drain inlets should have messages such as "Dump No Waste Drains to Stream" stenciled next to them to warn against ignorant or intentional dumping of pollutants into the storm drainage system.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Illegal Dumping

- Inspect and clean up hot spots and other storm drainage areas regularly where illegal dumping and disposal occurs.
- Establish a system for tracking incidents. The system should be designed to identify the following:
  - Illegal dumping hot spots
  - Types and quantities (in some cases) of wastes
  - Patterns in time of occurrence (time of day/night, month, or year)
  - Mode of dumping (abandoned containers, "midnight dumping" from moving vehicles, direct dumping of materials, accidents/spills)
  - Responsible parties
- Post "No Dumping" signs in problem areas with a phone number for reporting dumping and disposal. Signs should also indicate fines and penalties for illegal dumping.
- Refer to fact sheet SC-10 Non-Stormwater Discharges.

Training

- Train crews in proper maintenance activities, including record keeping and disposal.
- Allow only properly trained individuals to handle hazardous materials/wastes.
- Have staff involved in detection and removal of illicit connections trained in the following:
  - OSHA-required Health and Safety Training (29 CFR 1910.120) plus annual refresher training (as needed).

  - OSHA Confined Space Entry training (Cal-OSHA Confined Space, Title 8 and Federal OSHA 29 CFR 1910.146).
  - Procedural training (field screening, sampling, smoke/dye testing, TV inspection).

Spill Response and Prevention

- Investigate all reports of spills, leaks, and/or illegal dumping promptly.
- Clean up all spills and leaks using "dry" methods (with absorbent materials and/or rags) or dig up, remove, and properly dispose of contaminated soil.
- Refer to fact sheet SC-11 Spill Prevention, Control, and Cleanup.

Other Considerations (Limitations and Regulations)

- Clean-up activities may create a slight disturbance for local aquatic species. Access to items and material on private property may be limited. Trade-offs may exist between channel hydraulics and water quality/riparian habitat. If storm channels or basins are recognized as wetlands, many activities, including maintenance, may be subject to regulation and permitting.
- Storm drain flushing is most effective in small diameter pipes (36-inch diameter pipe or less, depending on water supply and sediment collection capacity). Other considerations associated with storm drain flushing may include the availability of a water source, finding a downstream area to collect sediments, liquid/sediment disposal, and prohibition against disposal of flushed effluent to sanitary sewer in some areas.
- Regulations may include adoption of substantial penalties for illegal dumping and disposal.
- Local municipal codes may include sections prohibiting discharge of soil, debris, refuse, hazardous wastes, and other pollutants into the storm drain system.

Requirements

Costs

- An aggressive catch basin cleaning program could require a significant capital and O&M budget.
- The elimination of illegal dumping is dependent on the availability, convenience, and cost of alternative means of disposal. The primary cost is for staff time. Cost depends on how aggressively a program is implemented. Other cost considerations for an illegal dumping program include:
  - Purchase and installation of signs.
  - Rental of vehicle(s) to haul illegally-disposed items and material to landfills.
  - Rental of heavy equipment to remove larger items (e.g., car bodies) from channels.
  - Purchase of landfill space to dispose of illegally-dumped items and material.

- Methods used for illicit connection detection (smoke testing, dye testing, visual inspection, and flow monitoring) can be costly and time-consuming. Site-specific factors, such as the level of impervious area, the density and ages of buildings, and type of land use will determine the level of investigation necessary.

Maintenance

- Two-person teams may be required to clean catch basins with vactor trucks.
- Teams of at least two people plus administrative personnel are required to identify illicit discharges, depending on the complexity of the storm sewer system.
- Arrangements must be made for proper disposal of collected wastes.
- Technical staff are required to detect and investigate illegal dumping violations.

Supplemental Information

Further Detail of the BMP

Storm Drain Flushing

Flushing is a common maintenance activity used to improve pipe hydraulics and to remove pollutants in storm drainage systems. Flushing may be designed to hydraulically convey accumulated material to strategic locations, such as an open channel, another point where flushing will be initiated, or the sanitary sewer and the treatment facilities, thus preventing resuspension and overflow of a portion of the solids during storm events. Flushing prevents "plug flow" discharges of concentrated pollutant loadings and sediments. Deposits can hinder the designed conveyance capacity of the storm drain system and potentially cause backwater conditions in severe cases of clogging.

Storm drain flushing usually takes place along segments of pipe with grades that are too flat to maintain adequate velocity to keep particles in suspension. An upstream manhole is selected to place an inflatable device that temporarily plugs the pipe. Further upstream, water is pumped into the line to create a flushing wave. When the upstream reach of pipe is sufficiently full to cause a flushing wave, the inflated device is rapidly deflated with the assistance of a vacuum pump, thereby releasing the backed up water and resulting in the cleaning of the storm drain segment.

To further reduce impacts of stormwater pollution, a second inflatable device placed well downstream may be used to recollect the water after the force of the flushing wave has dissipated. A pump may then be used to transfer the water and accumulated material to the sanitary sewer for treatment. In some cases, an interceptor structure may be more practical or required to recollect the flushed waters.

It has been found that cleansing efficiency of periodic flush waves is dependent upon flush volume, flush discharge rate, sewer slope, sewer length, sewer flow rate, sewer diameter, and population density. As a rule of thumb, the length of line to be flushed should not exceed 700 feet. At this maximum recommended length, the percent removal efficiency ranges between 65-75% for organics and 55-65% for dry weather grit/inorganic material. The percent removal efficiency drops rapidly beyond that. Water is commonly supplied by a water truck, but fire hydrants can also supply water. To make the best use of water, it is recommended that reclaimed water be used or that fire hydrant line flushing coincide with storm sewer flushing.

References and Resources

California's Nonpoint Source Program Plan http://www.swrcb.ca.gov/nps/index.html

Clark County Storm Water Pollution Control Manual http://www.co.clark.wa.us/pubworks/bmpman.pdf

Ferguson, B.K. 1991. Urban Stream Reclamation, p. 324-322, Journal of Soil and Water Conservation.

King County Storm Water Pollution Control Manual http://dnr.metrokc.gov/wlr/dss/spcm.htm

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program http://www.scvurppp.org

The Storm Water Managers Resource Center http://www.stormwatercenter.net

United States Environmental Protection Agency (USEPA). 2002. Pollution Prevention/Good Housekeeping for Municipal Operations Storm Drain System Cleaning. On line: http://www.epa.gov/npdes/menuofbmps/poll_16.htm

Attachment B

Calculations

Worksheet C: Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs

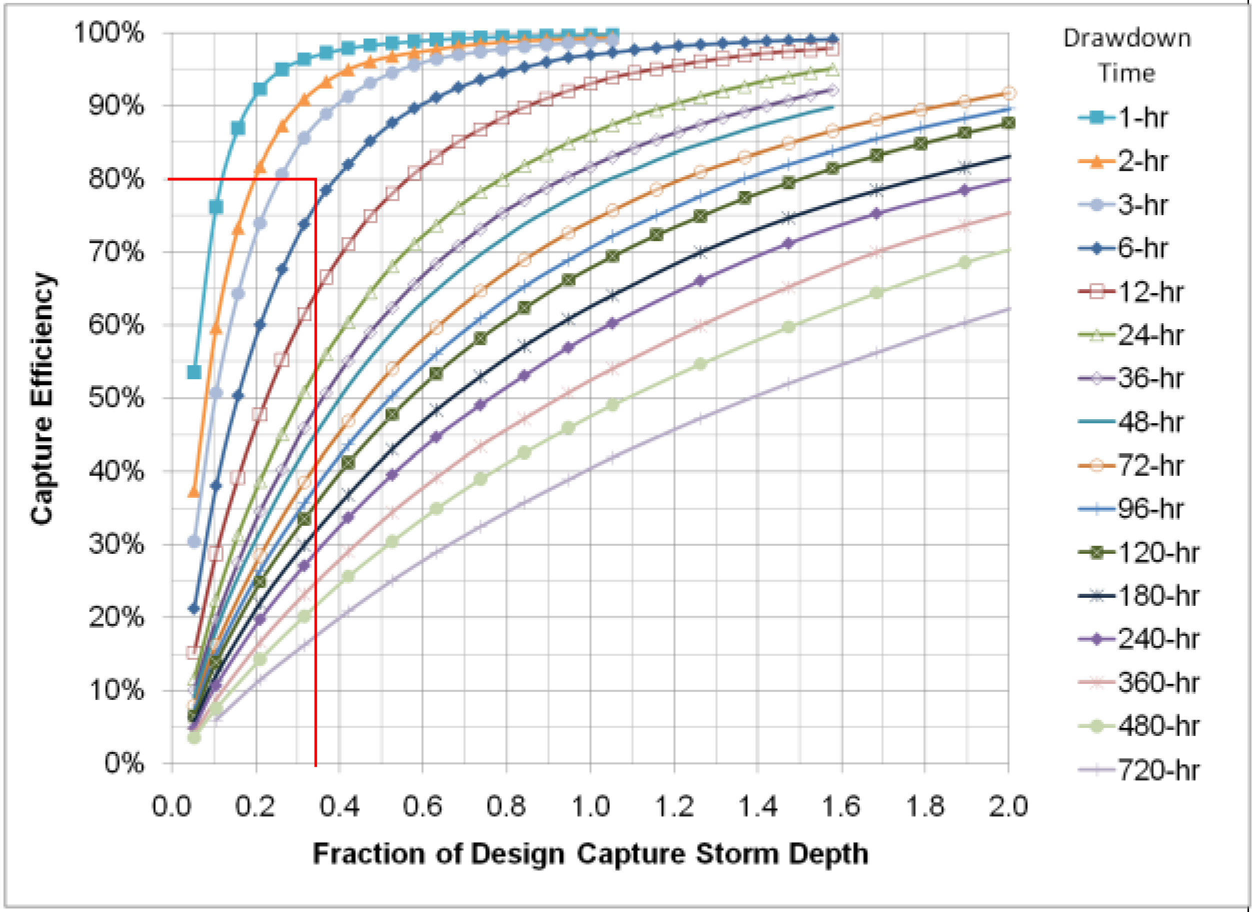
Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from **Figure III.1**, *d* (inches)	d=	1.75	inches
2	Enter calculated drawdown time of the proposed BMP based on equation provided in applicable BMP Fact Sheet, *T* (hours)	T=	4	hours
3	Using **Figure III.2**, determine the "fraction of design capture storm depth" at which the BMP drawdown time (T) line achieves 80% capture efficiency, X_1	X_1=	0.375	
4	Enter the effective depth of provided HSCs upstream, d_{HSC} (inches) (**Worksheet A**)	d_{HSC}=	N/A	inches
5	Enter capture efficiency corresponding to d_{HSC}, Y_2 (**Worksheet A**)	Y_2=	N/A	%
6	Using **Figure III.2**, determine the fraction of "design capture storm depth" at which the drawdown time (T) achieves the equivalent of the upstream capture efficiency(Y_2), X_2	X_2=	0	
7	Calculate the fraction of design volume that must be provided by BMP, *fraction* = $X_1 - X_2$	fraction=	0.375	
8	Calculate the resultant design capture storm depth (inches), $d_{fraction}$= *fraction* × *d*	$d_{fraction}$=	0.281	inches
9	SOC Only: When using this method for biofiltration sizing, check that the resulting volume in pre-filter detention volume plus pore spaces is at least 0.75 of the remaining DCV (See Section III.7 and Worksheet SOC-1).		Y / N / NA	
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	1.48	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.78	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.74	
4	Calculate runoff volume, $V_{design}= (C \times d_{rfraction} \times A \times 43560 \times (1/12))$	V_{design}=	1,113	cu-ft
Supporting Calculations				
Describe system:				

Worksheet C: Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs

Provide drawdown time calculations per applicable BMP Fact Sheet:

DD = (dP / KDesign) x 12
= (2.5 / 8) x 12
= 4 hours

Graphical Operations



Provide supporting graphical operations. See Example III.6.

Drainage Area B

Worksheet C: Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs

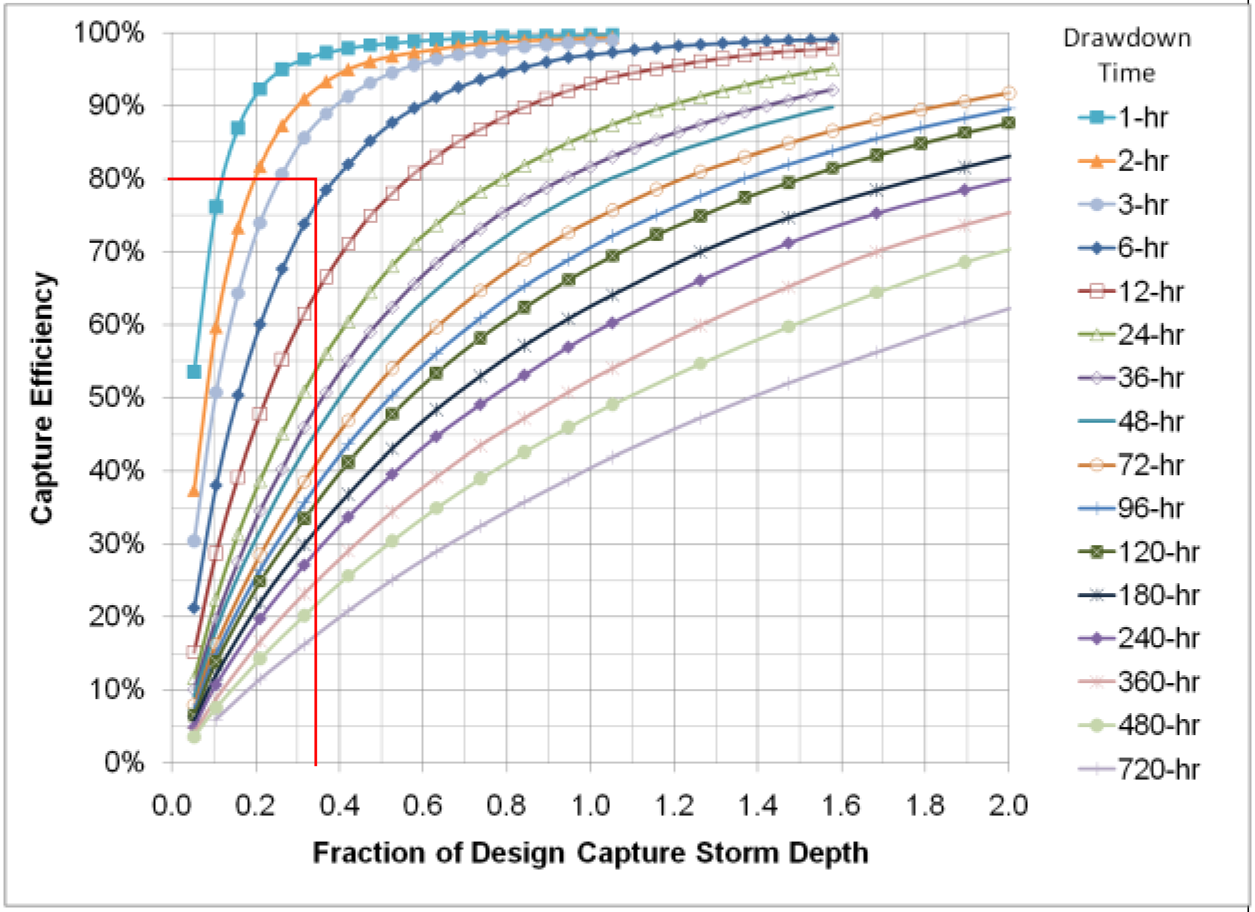
Step 1: Determine the design capture storm depth used for calculating volume				
1	Enter design capture storm depth from **Figure III.1**, *d* (inches)	d=	1.75	inches
2	Enter calculated drawdown time of the proposed BMP based on equation provided in applicable BMP Fact Sheet, *T* (hours)	T=	4	hours
3	Using **Figure III.2**, determine the "fraction of design capture storm depth" at which the BMP drawdown time (T) line achieves 80% capture efficiency, X_1	X_1=	0.375	
4	Enter the effective depth of provided HSCs upstream, d_{HSC} (inches) (**Worksheet A**)	d_{HSC}=	N/A	inches
5	Enter capture efficiency corresponding to d_{HSC}, Y_2 (**Worksheet A**)	Y_2=	N/A	%
6	Using **Figure III.2**, determine the fraction of "design capture storm depth" at which the drawdown time (T) achieves the equivalent of the upstream capture efficiency(Y_2), X_2	X_2=	0	
7	Calculate the fraction of design volume that must be provided by BMP, $fraction = X_1 – X_2$	fraction=	0.375	
8	Calculate the resultant design capture storm depth (inches), $d_{fraction} = fraction \times d$	$d_{fraction}$=	0.281	inches
9	SOC Only: When using this method for biofiltration sizing, check that the resulting volume in pre-filter detention volume plus pore spaces is at least 0.75 of the remaining DCV (See Section III.7 and Worksheet SOC-1).		Y / N / NA	
Step 2: Calculate the DCV				
1	Enter Project area tributary to BMP (s), *A* (acres)	A=	1.01	acres
2	Enter Project Imperviousness, *imp* (unitless)	imp=	0.81	
3	Calculate runoff coefficient, $C= (0.75 \times imp) + 0.15$	C=	0.75	
4	Calculate runoff volume, $V_{design}= (C \times d_{rfraction} \times A \times 43560 \times (1/12))$	V_{design}=	775	cu-ft
Supporting Calculations				
Describe system:				

Worksheet C: Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs

Provide drawdown time calculations per applicable BMP Fact Sheet:

DD = (dP / KDesign) x 12
= (2.5 / 8) x 12
= 4 hours

Graphical Operations



Provide supporting graphical operations. See Example III.6.

Project: **1600 Dove St**
Total Area(AC) **2.49**
Total DCV (required) cf **1,888**

Capture Efficiency Method

Drainage Area	Area (sf)	Area (AC)	Rainfall Depth (in)	Pervious Area (sf)	Pervious Area (ac)	Impervious Area (ac)	Impervious ratio	C (0.75ximp+0.15)	TC (MIN)	I1	Q_{DESIGN} (CFS)	DCV(cf) (CxdxA)	BMP USED
A	64,481	1.48	0.281	14000	0.32	1.16	0.78	0.74	-	-	-	1,113	Bioretention Planter
B	43,849	1.01	0.281	8500	0.20	0.81	0.81	0.75	-	-	-	775	Bioretention Planter
Total	108,330	2.49		22,500	0.52	1.97	0.79	0.74				1,888	

HCOC CALCULATIONS

Proposed

Drainage Area	*Area*	*Area*	*Rainfall Depth*	*Pervious Area*	*Impervious Area*	*Impervious Area*	*Impervious Ratio*	*C*	*V*
	(square feet)	(acres)	(ft)	(sf)	(sf)	(acres)		(0.75*imp+0.15)	(cf)
A	64,481	1.48	0.18	14000	50481	1.16	0.78	0.74	713
B	43,849	1.01	0.18	8500	35349	0.81	0.81	0.75	496
Total	108330	2.49		22500	85830	1.97	0.79		**1,209**

Existing

Drainage Area	*Area*	*Area*	*Rainfall Depth*	*Pervious Area*	*Impervious Area*	*Impervious Area*	*Impervious Ratio*	*C*	*V*
	(square feet)	(acres)	(ft)	(sf)	(sf)	(acres)		(0.75*imp+0.15)	(cf)
A	66976	1.54	0.18	7942	59034	1.36	0.88	0.81	815
B	41354	0.95	0.18	7180	34174	0.78	0.83	0.77	478
Total	108330	2.49		15122	93208	2.14	0.86	**Total**	**1,292**

-6.42% Decrease

Capture Efficiency Method for Bioretention with Underdrain

Bio-retention Basin 1		
DCV =	1113	cu-ft
d_p (ponding depth) =	0.5	ft
nm (bioretention media porosity) =	0.3	
dm (bioretention media depth, ft) =	2.5	ft
ng (bioretention gravel layer porosity) =	0.40	
dg (bioretention gravel depth, ft) =	1	ft
deff (dp+nm*dm+ng*dg, ft) =	1.65	ft
Required Facility Surface Area= A=(DCV/($d_{EFFECTIVE}$)	675	sq-ft
Provided Planter Bottom Surface Area=	**680**	**sq-ft**

*Equations per Page XIV-34 in the Technical Guidance Document Appendices

Capture Efficiency Method for Bioretention with Underdrain

Bio-retention Basin 2		
DCV =	535	cu-ft
d_p (ponding depth) =	0.5	ft
nm (bioretention media porosity) =	0.3	
dm (bioretention media depth, ft) =	2.0	ft
ng (bioretention gravel layer porosity) =	0.40	
dg (bioretention gravel depth, ft) =	1	ft
deff (dp+nm*dm+ng*dg, ft) =	1.5	ft
Required Facility Surface Area= A=(DCV/($d_{EFFECTIVE}$)	357	sq-ft
Provided Planter Bottom Surface Area=	**360**	**sq-ft**

*Equations per Page XIV-34 in the Technical Guidance Document Appendices

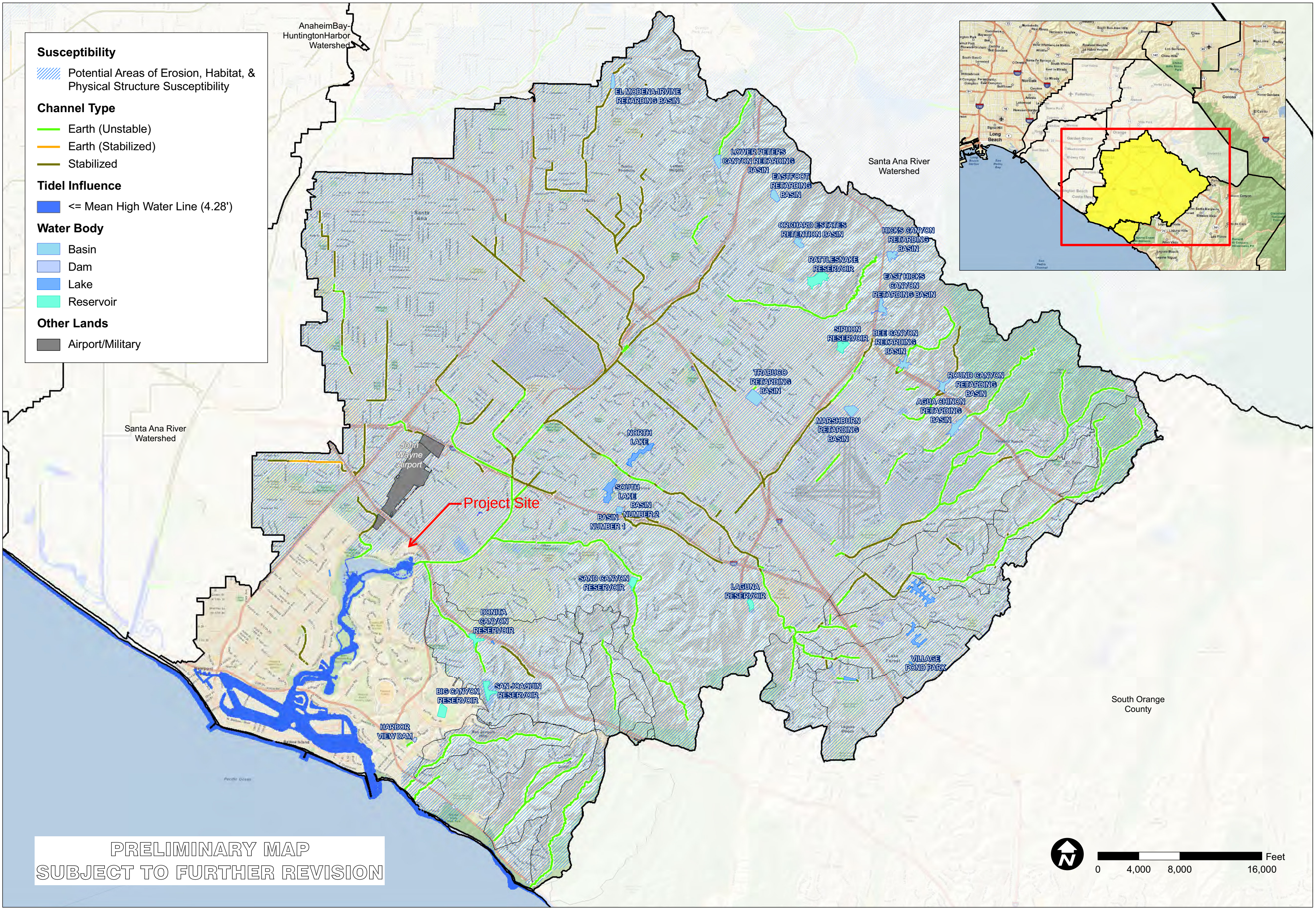
Capture Efficiency Method for Bioretention with Underdrain

Bio-retention Basin 3		
DCV =	240	cu-ft
d_p (ponding depth) =	0.5	ft
nm (bioretention media porosity) =	0.3	
dm (bioretention media depth, ft) =	2.0	ft
ng (bioretention gravel layer porosity) =	0.40	
dg (bioretention gravel depth, ft) =	1	ft
deff (dp+nm*dm+ng*dg, ft) =	1.5	ft
Required Facility Surface Area= A=(DCV/($d_{EFFECTIVE}$)	160	sq-ft
Provided Planter Bottom Surface Area=	**160**	**sq-ft**

*Equations per Page XIV-34 in the Technical Guidance Document Appendices

Attachment C

Orange County Technical Guidance Maps



PRELIMINARY MAP
SUBJECT TO FURTHER REVISION

P:\9526E\6-GIS\Mxds\Reports\InfiltrationFeasability_20110215\9526E_FigureXVI-3d_NewportBaySusceptibility_20100430.mxd

TITLE
SUSCEPTIBILITY ANALYIS
NEWPORT BAY-
NEWPORT COASTAL STREAMS

CA

JOB
ORANGE COUNTY
WATERSHED
MASTER PLANNING
ORANGE CO.

SCALE 1" = 4000'
DESIGNED TH
DRAWING TH
CHECKED BMP
DATE 04/30/10
JOB NO. 9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-3d

Hydrologic Soil Group—Orange County and Part of Riverside County, California

Map Scale: 1:682 if printed on A portrait (8.5" x 11") sheet.

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- ☐ Area of Interest (AOI)

Soils

Soil Rating Polygons

- ■ A
- ■ A/D
- ■ B
- ■ B/D
- ■ C
- ■ C/D
- ■ D
- ☐ Not rated or not available

Soil Rating Lines

- 〰 A
- 〰 A/D
- 〰 B
- 〰 B/D
- 〰 C
- 〰 C/D
- 〰 D
- 〰 Not rated or not available

Soil Rating Points

- ■ A
- ■ A/D
- ■ B
- ■ B/D
- ■ C
- ■ C/D
- ■ D
- ■ Not rated or not available

Water Features

- 〰 Streams and Canals

Transportation

- ┼┼┼ Rails
- 〰 Interstate Highways
- 〰 US Routes
- 〰 Major Roads
- 〰 Local Roads

Background

- ■ Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
Survey Area Data: Version 16, Sep 6, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 14, 2022—Mar 17, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
178	Myford sandy loam, thick surface, 0 to 2 percent slopes	D	1.5	100.0%
Totals for Area of Interest			**1.5**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

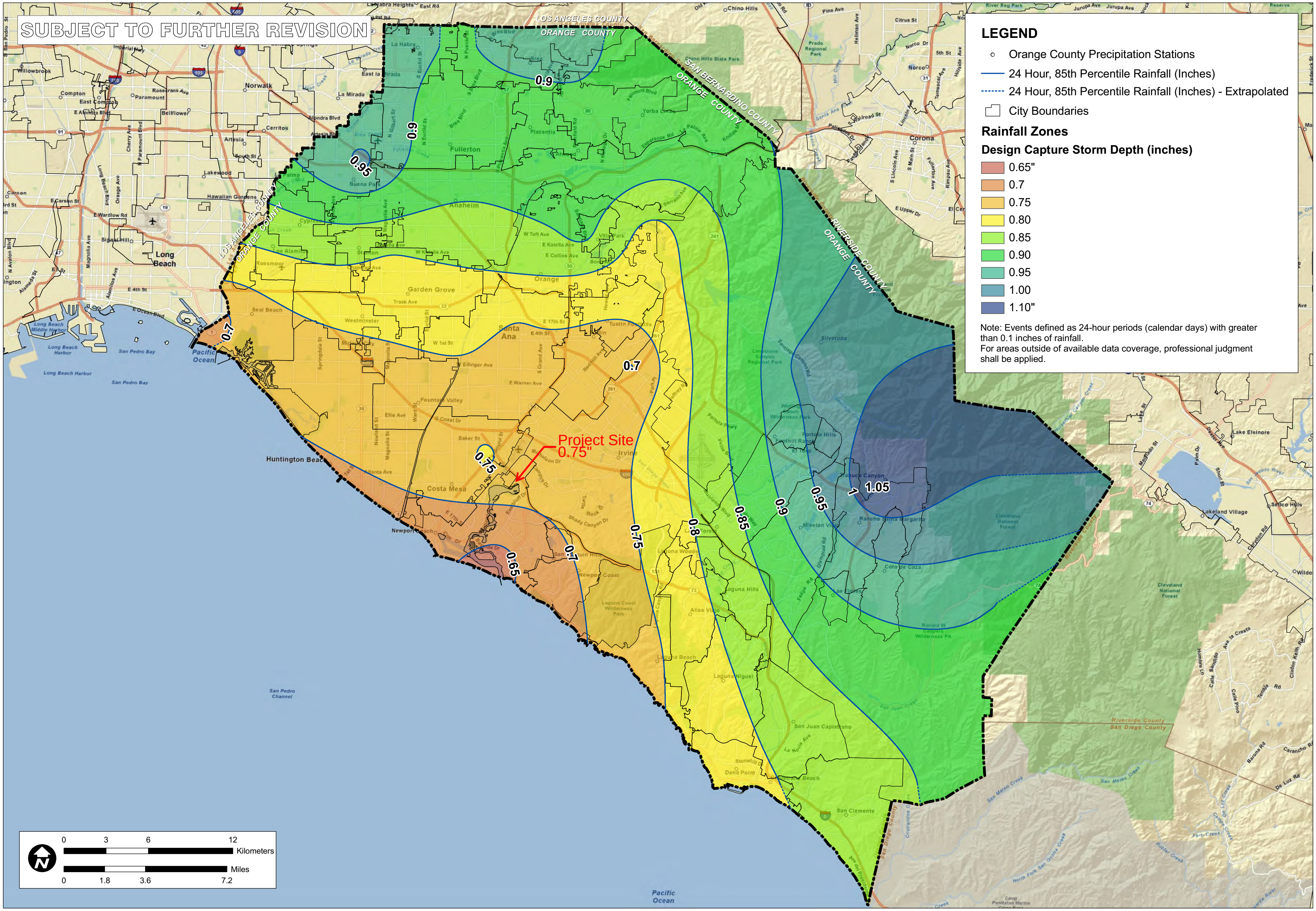
If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher



RAINFALL ZONES

TITLE

ORANGE COUNTY TECHNICAL GUIDANCE DOCUMENT

JOB

ORANGE CO.

CA

SCALE 1" = 1.8 miles
DESIGNED TH
DRAWING TH
CHECKED BMP
DATE 04/22/10
JOB NO. 9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-1

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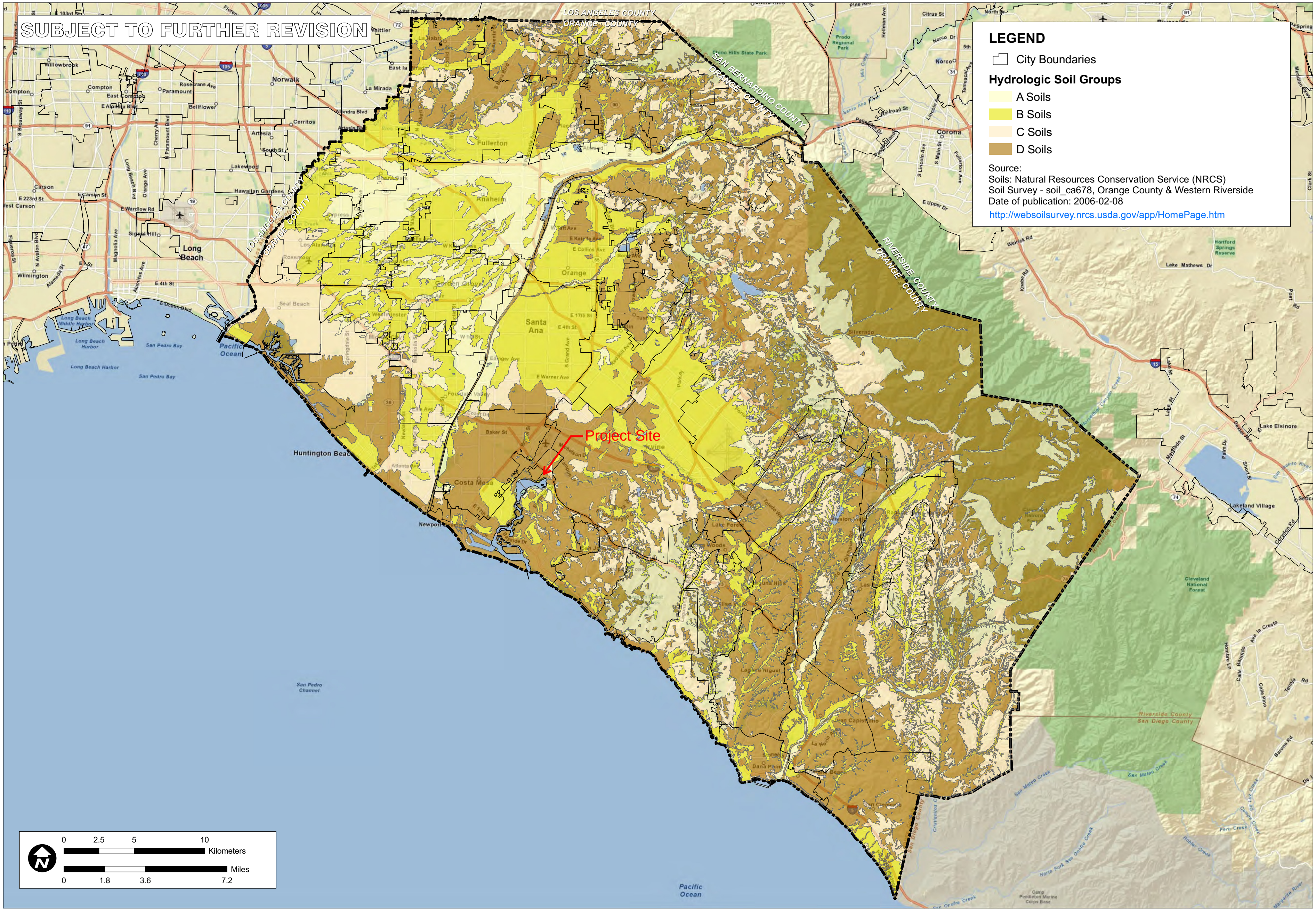
SUBJECT TO FURTHER REVISION



LEGEND

☐ City Boundaries

Hydrologic Soil Groups

- A Soils
- B Soils
- C Soils
- D Soils

Source:
Soils: Natural Resources Conservation Service (NRCS)
Soil Survey - soil_ca678, Orange County & Western Riverside
Date of publication: 2006-02-08
http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

TITLE

NRCS HYDROLOGIC SOILS GROUPS

JOB

ORANGE COUNTY
INFILTRATION STUDY

ORANGE CO.
CA

SCALE	1" = 1.8 miles
DESIGNED	TH
DRAWING	TH
CHECKED	BMP
DATE	02/09/11
JOB NO.	9526-E

PACE
Advanced Water Engineering

FIGURE
XVI-2a

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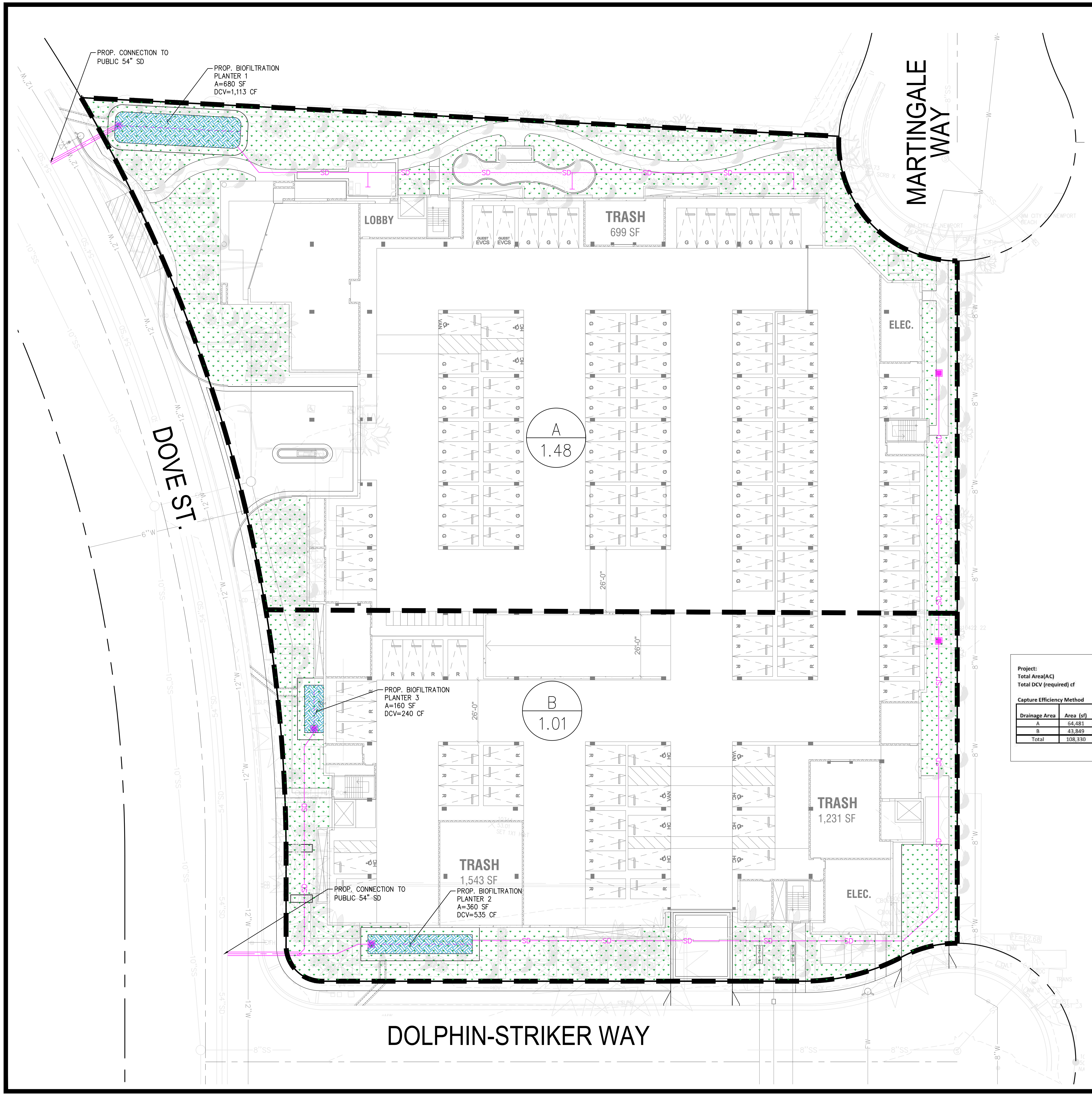
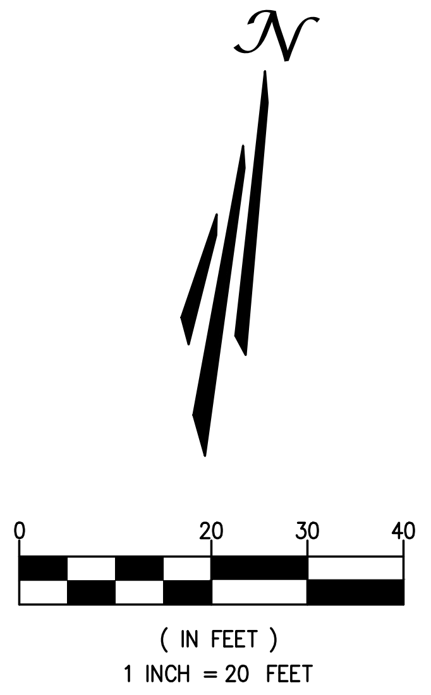
Attachment D

Drainage Maps & Hydrology Narrative

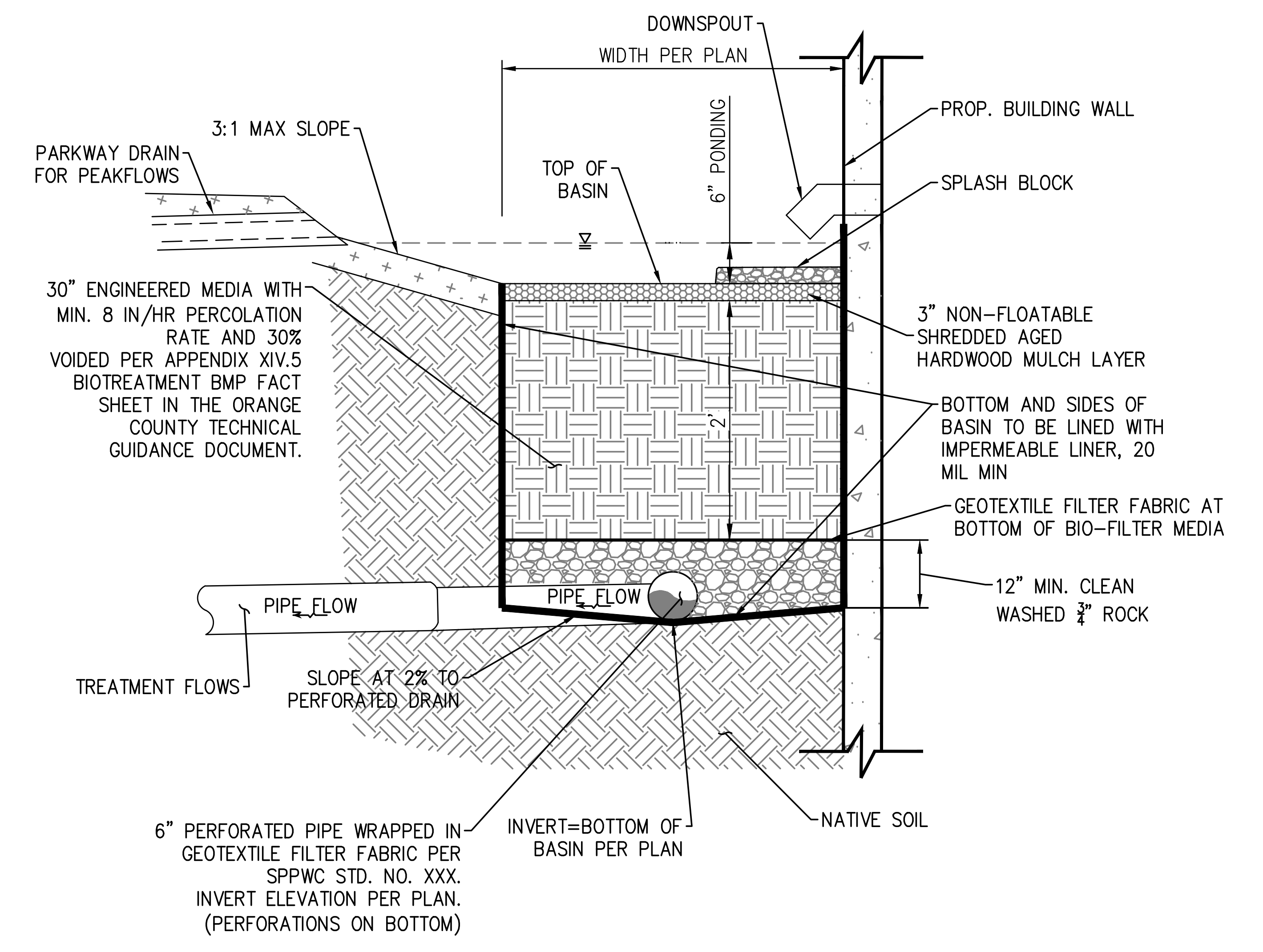




LEGEND

—SD—	PROPOSED STORM DRAIN
— — —	PROPERTY LINE
▨	PROPOSED BIOFILTRATION PLANTER
X / X.XX	DRAINAGE AREA ACREAGE
— — —	DRAINAGE AREAS
🟩	PROPOSED LANDSCAPE

STORM DRAIN SIGNAGE DETAIL



WATER QUALITY BASIN TYPE
NTS

Project: 1600 Dove St
Total Area(AC) 2.49
Total DCV (required) cf 1,888

Capture Efficiency Method

Drainage Area	Area (sf)	Area (AC)	Rainfall Depth (in)	Pervious Area (sf)	Pervious Area (ac)	Impervious Area (ac)	Impervious ratio	C (0.75ximp+0.15)	TC (MIN)	I1	Q_{DESIGN} (CFS)	DCV(cf) (CxdxA)	BMP USED
A	64,481	1.48	0.281	14000	0.32	1.16	0.78	0.74	-	-	-	1,113	Bioretention Planter
B	43,849	1.01	0.281	8500	0.20	0.81	0.81	0.75	-	-	-	775	Bioretention Planter
Total	108,330	2.49		22,500	0.52	1.97	0.79	0.74				1,888	

NO.	DESCRIPTION	BY	DATE	CHK

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CONCEPTUAL WQMP PLAN
1600 DOVE STREET
CITY OF NEWPORT BEACH
TPG (KCN) ACQUISITION, LLC
5000 BIRCH ST., SUITE 600
NEWPORT BEACH, CA 92660

DRAWN:
DATE:
CHECKED:
DATE:
REVISION #: 1
DATE:
JOB NO: SP8968

C5.01

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EXISTING HYDROLOGY MAP

1600 DOVE STREET
CITY OF NEWPORT BEACH
TPG (KCN) ACQUISITION, LLC
5000 BIRCH ST., SUITE 600
NEWPORT BEACH, CA 92660

DRAWN:
DATE:
CHECKED:
DATE:
REVISION #: 1
DATE:
JOB NO: SP8968

01

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Attachment E

Geotechnical Report

Attachment F

Water Quality Impairment List

8	San Diego Creek Reach 1	River & Stream	80111000 / 18070201	- Benthic Community Effects - Source Unknown	7.8 Miles	2014	5A	2027
				- DDT (Dichlorodiphenyltrichloroethane) - See TMDL documentation *The USEPA approved the Newport Bay Organochlorine compounds TMDL on November 12, 2013 which includes this pollutant (Total DDT-sum of 4,4'- and 2,4'- isomers of DDT, DDE, and DDD) for San Diego Creek. The data used for the TMDL assessment includes additional data and may use different assessment guidelines than those used in the integrated report. Nonetheless, it is important to note that this pollutant is being addressed by an USEPA approved TMDL.*	7.8 Miles	2014	5B	2013
				- Indicator Bacteria - Source Unknown *While this Decision was based on a sufficient number of exceedances the of E. coli Single Sample objective, it should be noted that Enterococcus, Fecal Coliform and Total Coliform objectives no longer apply to the REC 1 Beneficial Use for fresh waters in Region 8. As such the Enterococcus, Fecal Coliform and Total Coliform LOEs will be retired. Further, the Single Sample objective was only used because of the lack of representative 30-day, 5-sample Geomean values, as per the Region 8 Basin Plan (2016 update) on page 4-17, footnote 3. When representative 30-day, 5-sample Geomean values are collected the Single Sample E. coli LOE will be retired.*	7.8 Miles	2014	5A	2019
				- Malathion - Source Unknown	7.8 Miles	2014	5A	2027
				- Nutrients - Source Unknown	7.8 Miles	1996	5B	1999
				- Sedimentation/Siltation - Source Unknown	7.8 Miles	1996	5B	1999
				- Selenium - Source Unknown	7.8 Miles	2006	5A	2007
				- Toxaphene - See TMDL documentation	7.8 Miles	2006	5B	2013
				- Toxicity - Source Unknown	7.8 Miles	2014	5A	2025
8	Newport Bay, Upper (Ecological Reserve)	Estuary	80111000 / 18070201	- Chlordane - See TMDL documentation	653 Acres	2006	5B	2013
				- Copper - Marinas and Recreational Boating	653 Acres	2006	5A	2007
				- DDT (Dichlorodiphenyltrichloroethane) - See TMDL documentation	653 Acres	2006	5B	2013
				- Indicator Bacteria - Source Unknown *The following LOEs had been incorrectly linked to Upper Newport Bay during the 2010 cycle : 8075, 8076, 8077 and 8078. They have not been used in the Final Use Rating in the 2014 cycle and will be retired prior to the next cycle. They have been copied over to Lower Newport Bay (where the sampling points are located) and have new LOE #'s.*	653 Acres	2010	5B	2000
				- Malathion - Source Unknown	653 Acres	2014	5A	2027
				- Nutrients - Source Unknown	653 Acres	2006	5B	1999
				- PCBs (Polychlorinated biphenyls) - See TMDL documentation	653 Acres	2006	5B	2013

				- Sedimentation/Siltation
				  - Agriculture
				  - Channel Erosion
				  - Construction/Land Development
				  - Erosion/Siltation
					653 Acres	2006	5B	1999

				- Toxicity - Source Unknown	653 Acres	2014	5A	2027

8	Newport Bay, Lower (entire lower bay, including Rhine Channel, Turning Basin and South Lido Channel to east end of H-J Moorings)	Bay & Harbor	80114000 / 18070201	Chlordane See TMDL documentation	767 Acres	2006	5B	2013
				Copper Marinas and Recreational Boating	767 Acres	2006	5A	2019
				DDT (Dichlorodiphenyltrichloroethane) See TMDL documentation	767 Acres	1990	5B	2013
				Indicator Bacteria Source Unknown *The following LOEs had been incorrectly linked to Lower Newport Bay during the 2010 cycle : 8147, 8148, 8149, 8150, 8151, 8152, 8153, 8154, 8155, 8156, 8157, 8158, 8159, 8160, 8161, 8162, 28355, 28357, 28361, 28367, 28373, 28377, 28379, 28381, 28383. They have not been used in the Final Use Rating in the 2014 cycle and will be retired prior to the next cycle. They have been copied over to Upper Newport Bay (where the sampling points are located) and have new LOE #'s. LOE 26162 was created during the 2010 cycle and incorrectly combined sampling locations in both Upper and Lower Newport Bay. The data in LOE 26162 has been reanalyzed and 2 new LOEs have been created for those data in the proper waterbodies. LOE 26162 is not used in the Final Use Rating in the 2014 cycle and will be retired prior to the next cycle. In the 2010 cycle, the Shellfish Harvest Objective that was used in the LOEs was the Ocean Plan Total Coliform value, rather than the existing Region 8 Basin Plan Objective that was based on Fecal Coliform. While combining the LOEs written using the Ocean Plan Total Coliform objective results in a delisting for the Shellfish Harvest Beneficial Use, analysis of the 2008 -2010 Fecal Coliform data from the Beach Watch program resulted in 7 months of exceedance out of 23 months (where samples were collected) and based on weight of evidence, the decision was made to leave the Shellfish Harvest listing in place for Fecal Coliform.*	767 Acres	2010	5B	2000
				Nutrients Source Unknown	767 Acres	1992	5B	1999
				PCBs (Polychlorinated biphenyls) See TMDL documentation	767 Acres	1990	5B	2013
				Toxicity Source Unknown	767 Acres	2014	5A	2019

Attachment G

Infiltration BMP Feasibility Worksheet & Summary of Harvested

Table X.8: Minimum Irrigated Area for Potential Partial Capture Feasibility

General Landscape Type	**Conservation Design: K_L = 0.35**			**Active Turf Areas: K_L = 0.7**		
Closest ET Station	*Irvine*	*Santa Ana*	*Laguna*	*Irvine*	*Santa Ana*	*Laguna*
Design Capture Storm Depth, inches	**Minimum Required Irrigated Area per Tributary Impervious Acre for Potential Partial Capture, ac/ac**					
0.60	0.66	0.68	0.72	0.33	0.34	0.36
0.65	0.72	0.73	0.78	0.36	0.37	0.39
0.70	0.77	0.79	0.84	0.39	0.39	0.42
0.75	0.83	0.84	0.90	0.41	0.42	0.45
0.80	0.88	0.90	0.96	0.44	0.45	0.48
0.85	0.93	0.95	1.02	0.47	0.48	0.51
0.90	0.99	1.01	1.08	0.49	0.51	0.54
0.95	1.04	1.07	1.14	0.52	0.53	0.57
1.00	1.10	1.12	1.20	0.55	0.56	0.60

Worksheet J: Summary of Harvested Water Demand and Feasibility

1	What demands for harvested water exist in the tributary area (check all that apply):			
2	Toilet and urinal flushing		☐	
3	Landscape irrigation		☑	
4	Other:____		☐	
5	What is the design capture storm depth? (**Figure III.1**)	d	0.75	inches
6	What is the project size?	A	2.49	ac
7	What is the acreage of impervious area?	IA	1.97	ac
	For projects with multiple types of demand (toilet flushing, indoor demand, and/or other demand)			
8	What is the minimum use required for partial capture? (**Table X.6**)	N/A		gpd
9	What is the project estimated wet season total daily use?	N/A		gpd
10	Is partial capture potentially feasible? (Line 9 > Line 8?)	N/A		
	For projects with only toilet flushing demand			
11	What is the minimum TUTIA for partial capture? (**Table X.7**)	N/A		
12	What is the project estimated TUTIA?	N/A		

Worksheet J: Summary of Harvested Water Demand and Feasibility

13	Is partial capture potentially feasible? (Line 12 > Line 11?)		
	For projects with only irrigation demand		
14	What is the minimum irrigation area required based on conservation landscape design? (**Table X.8**)	X	ac
15	What is the proposed project irrigated area? (multiply conservation landscaping by 1; multiply active turf by 2)	X	ac
16	Is partial capture potentially feasible? (Line 15 > Line 14?)	No	

Provide supporting assumptions and citations for controlling demand calculation:

Line 14: KL x Line 7
Line 14: 1.97 x 0.84 = 1.65
Line 15: Landscape area = 0.52
Line 15 < Line 14 ; Therefore, re-use for irrigation is not feasible

Table 2.7: Infiltration BMP Feasibility Worksheet

	Infeasibility Criteria	***Yes***	***No***
1	**Would Infiltration BMPs pose significant risk for groundwater related concerns?** Refer to Appendix VIII (Worksheet I) for guidance on groundwater-related infiltration feasibility criteria.		X
Provide basis: Groundwater was encountered at 23 feet below surface per Geotechnical Report in Appendix J.			
2	Would Infiltration BMPs **pose significant risk of increasing risk of geotechnical hazards that cannot be mitigated to an acceptable level**? (Yes if the answer to any of the following questions is yes, as established by a geotechnical expert): • The BMP can only be located less than 50 feet away from slopes steeper than 15 percent • The BMP can only be located less than eight feet from building foundations or an alternative setback. • A study prepared by a geotechnical professional or an available watershed study substantiates that storm water infiltration would potentially result in significantly increased risks of geotechnical hazards that cannot be mitigated to an acceptable level.		X
Provide basis: Infiltration BMP would pose a significant risk because of insufficient setbacks from building structures.			
3	Would infiltration of the DCV from drainage area **violate downstream water rights**?		X
Provide basis: N/A			

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

<table>
<tr><th></th><th><i>Partial Infeasibility Criteria</i></th><th><i>Yes</i></th><th><i>No</i></th></tr>
<tr><td>4</td><td>Is proposed infiltration facility located on HSG D soils or the site geotechnical investigation identifies presence of soil characteristics which support categorization as D soils?</td><td>X</td><td></td></tr>
<tr><td colspan="4">Provide basis:

The predominant soil type is B. Refer to Attachment E for Hydrologic Soils Group.</td></tr>
<tr><td>5</td><td>Is measured infiltration rate below proposed facility less than 0.3 inches per hour? This calculation shall be based on the methods described in Appendix VII.</td><td></td><td>X</td></tr>
<tr><td colspan="4">Provide basis:

The measured infiltration rate is x inches per hour per Geotechnical Report in Appendix J.</td></tr>
<tr><td>6</td><td>Would reduction of over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?</td><td></td><td>X</td></tr>
<tr><td colspan="4">Provide citation to applicable study and summarize findings relative to the amount of infiltration that is permissible:</td></tr>
<tr><td>7</td><td>Would an increase in infiltration over predeveloped conditions cause impairments to downstream beneficial uses, such as change of seasonality of ephemeral washes or increased discharge of contaminated groundwater to surface waters?</td><td></td><td>X</td></tr>
<tr><td colspan="4"></td></tr>
</table>

Table 2.7: Infiltration BMP Feasibility Worksheet (continued)

Infiltration Screening Results (check box corresponding to result):		
8	Is there substantial evidence that infiltration from the project would result in a significant increase in I&I to the sanitary sewer that cannot be sufficiently mitigated? (See Appendix XVII) Provide narrative discussion and supporting evidence: Section VIII.3 of the TGD, infiltration is prohibited within 250 feet of contaminated sites. GeoTracker Cleanup Site Map in Attachment C locates a Leaky Underground Storage Tank (LUST) cleanup site located within 250 feet of the project area limit, concluding in infiltration infeasiability for this site.	**Infiltration is infeasible due to D type soils.**
9	If any answer from row 1-3 is yes: infiltration of any volume is **not feasible** within the DMA or equivalent. Provide basis: Section VIII.3 of the TGD, infiltration is prohibited within 250 feet of contaminated sites. GeoTracker Cleanup Site Map in Attachment C locates a Leaky Underground Storage Tank (LUST) cleanup site located within 250 feet of the project area limit, concluding in infiltration infeasiability for this site.	**Infiltration is infeasible due to D type soils.**
10	If any answer from row 4-7 is yes, infiltration is **permissible but is not presumed to be feasible for the entire DCV.** Criteria for designing biotreatment BMPs to achieve the maximum feasible infiltration and ET shall apply. Provide basis: Although groundwater was not encountered until 15 feet, the design infiltration rate is below the minimum of 0.3 in/hr.	**Infiltration is infeasible due to D type soils.**
11	If all answers to rows 1 through 11 are no, infiltration of the full DCV is potentially feasible, BMPs must be designed to infiltrate the full DCV to the maximum extent practicable.	**Infiltration is infeasible due to D type soils.**

Attachment H

BMP's info & Details

INF-3: Bioretention with no Underdrain

Also known as:

- *Rain gardens*
- *Infiltration planter*

Bioretention
Source: Geosyntec Consultants

Bioretention stormwater treatment facilities are landscaped shallow depressions that capture and filter stormwater runoff. These facilities function as a soil and plant-based filtration device that removes pollutants through a variety of physical, biological, and chemical treatment processes. The facilities normally consist of a ponding area, mulch layer, planting soils, and plants. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, and biodegraded by the soil and plants. For areas with low permeability native soils or steep slopes, bioretention areas can be designed with an underdrain system that routes the treated runoff to the storm drain system rather than depending entirely on infiltration.

Feasibility Screening Considerations

- Bioretention with no underdrains shall pass infiltration infeasibility screening criteria to be considered for use.

Opportunity Criteria

- Land use may include commercial, residential, mixed use, institutional, and subdivisions. Bioretention may also be applied in parking lot islands, cul-de-sacs, traffic circles, road shoulders, and road medians.
- Drainage area is ≤ 5 acres, preferrably ≤ 1 acre.
- Area available for infiltration.
- Soils are adequate for infiltration or can be amended to improve infiltration capacity. Site slope is less than 15 percent.

OC-Specific Design Criteria and Considerations

☐ Placement of BMPs should observe geotechnical recommendations with respect to geological hazards (e.g. landslides, liquefaction zones, erosion, etc.) and set-backs (e.g., foundations, utilities, roadways, etc.)

☐ Depth to mounded seasonally high groundwater shall not be less than 5 feet.

☐ If sheet flow is conveyed to the treatment area over stabilized grassed areas, the site must be graded in such a way that minimizes erosive conditions; sheet flow velocities should not exceed 1 foot per second.

☐ Ponding depth should not exceed 18 inches; fencing may be required if ponding depth exceeds 6 inches to mitigate the risk of drowning.

☐ Planting/storage media shall be based on the recommendations contained in MISC-1: Planting/Storage Media

☐ The minimum amended soil depth is 1.5 feet (3 feet is preferred).

☐ The maximum drawdown time of the planting soil is 48 hours.

☐ Infiltration pathways may need to be restricted due to the close proximity of roads, foundations, or other infrastructure. A geomembrane liner, or other equivalent water proofing, may be placed along the vertical walls to reduce lateral flows. This liner should have a minimum thickness of 30 mils.

☐ Plant materials should be tolerant of summer drought, ponding fluctuations, and saturated soil conditions for 48 hours; native plant species and/or hardy cultivars that are not invasive and do not require chemical fertilizers or pesticides should be used to the maximum extent feasible.

☐ The bioretention area should be covered with 2-4 inches (average 3 inches) of mulch at startup and an additional placement of 1-2 inches of mulch should be added annually.

☐ An optional gravel drainage layer may be installed below planting media to augment storage volume.

☐ An overflow device is required at the top of the ponding depth.

☐ Dispersed flow or energy dissipation (i.e. splash rocks) for piped inlets should be provided at basin inlet to prevent erosion.

Simple Sizing Method for Bioretention with no Underdrain

If the Simple Design Capture Volume Sizing Method described in **Appendix III.3.1** is used to size a bioretention area with underdrains, the user calculates the DCV and designs the system with geometry required to draw down the DCV in 48 hours. The sizing steps are as follows:

Step 1: Determine the Bioretention Design Capture Volume

Calculate the DCV using the Simple Design Capture Volume Sizing Method described in **Appendix III.3.1**.

Step 2: Determine the 48-hour Ponding Depth

The depth of effective storage depth that can be drawn down in 48 hours can be calculated using the following equation:

$$d_{48} = K_{DESIGN} \times 4$$

Where:

d_{48} = bioretention 48-hour effective depth, ft

K_{DESIGN} = bioretention design infiltration rate, in/hr (See **Appendix VII**)

This is the maximum effective depth of the basin below the overflow device to achieve drawdown in 48 hours. Effective depth includes ponding water and media/aggregate pore space.

Step 3: Design System Geometry to Provide d_{48}

Design system geometry such that

$$d_{48} \geq d_{EFFECTIVE} = (d_P + n_M d_M + n_G d_G)$$

Where:

d_{48} = depth of water that can drain in 48 hours

$d_{EFFECTIVE}$ = total effective depth of water stored in bioretention area, ft

d_P = bioretention ponding depth, ft (should be less than or equal to 1.5 ft)

n_M = bioretention media porosity

d_M = bioretention media depth, ft

n_G = bioretention gravel layer porosity; 0.35 may be assumed where other information is not available

d_G = bioretention gravel layer depth, ft

Step 4: Calculate the Required Infiltrating Area

The required infiltrating area (i.e. measured at the media surface) can be calculated using the following equation:

$A = DCV / d_{EFFECTIVE}$

Where:

A = required infiltrating area, sq-ft (measured as the media surface area)

DCV = design capture volume, cu-ft (see Step 1)

$d_{EFFECTIVE}$ = total effective depth of water stored in bioretention area, ft (from Step 3)

This does not include the side slopes, access roads, etc. which would increase bioretention footprint.

Capture Efficiency Method for Bioretention with no Underdrain

If BMP geometry has already been defined and deviates from the 48 hour drawdown time, the designer can use the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs (See **Appendix** III.3.2) to determine the fraction of the DCV that must be provided to manage 80 percent of average annual runoff volume. This method accounts for drawdown time different than 48 hours.

Step 1: Determine the drawdown time associated with the selected basin geometry

$DD = (d_{EFFECTIVE} / K_{DESIGN}) \times 12$ in/ft

Where:

DD = time to completely drain infiltration basin ponding depth, hours

$d_{EFFECTIVE} \leq (d_P + n_M d_M + n_G d_G)$

d_P = bioretention ponding depth, ft (should be less than or equal to 1.5 ft)

n_M = bioretention media porosity

d_M = bioretention media depth, ft

n_G = bioretention gravel layer porosity; 0.35 may be assumed where other information is not available

d_G = bioretention gravel layer depth, ft

K_{DESIGN} = basin design infiltration rate, in/hr (See Appendix VII)

Step 2: Determine the Required Adjusted DCV for this Drawdown Time

Use the Capture Efficiency Method for Volume-Based, Constant Drawdown BMPs (See **Appendix** III.3.2) to calculate the fraction of the DCV the basin must hold to achieve 80 percent capture of average annual stormwater runoff volume based on the basin drawdown time calculated above.

Step 4: Check that the Bioretention Effective Depth Drains in no Greater than 96 Hours

$DD = (d_{EFFECTIVE} / K_{DESIGN}) \times 12$

Where:

DD = time to completely drain bioretention facility, hours

$d_{EFFECTIVE}$ = total effective depth of water stored in bioretention area, ft (from Step 3)

K_{DESIGN} = basin design infiltration rate, in/hr (See Appendix VII)

If DD_{ALL} is greater than 96 hours, adjust bioretention media depth and/or gravel layer depth until DD is less than 96 hours. This duration is based on preventing extended periods of saturation from causing plant mortality.

Step 5: Determine the Basin Infiltrating Area Needed

The required infiltrating area (i.e. the surface area of the top of the media layer) can be calculated using the following equation:

$$A = DCV / d_{EFFECTIVE}$$

Where:

A = required infiltrating area, sq-ft (measured at the media surface)

DCV = design capture volume, adjusted for drawdown time, cu-ft (see Step 1)

$d_{EFFECTIVE}$ = total effective depth of water stored in bioretention area, ft (from Step 3)

This does not include the side slopes, access roads, etc. which would increase bioretention footprint. If the area required is greater than the selected basin area, adjust surface area or adjust ponding depth and recalculate required area until the required area is achieved.

Configuration for Use in a Treatment Train

- Bioretention areas may be preceeded in a treatment train by HSCs in the drainage area, which would reduce the required volume of the bioretention cell.
- Bioretention areas can be incorporated in a treatment train to provide enhanced water quality treatment and reductions in runoff volume and rate. For example, runoff can be collected from a roadway in a vegetated swale that then flows to a bioretention area. Similarly, bioretention could be used to manage overflow from a cistern.

Additional References for Design Guidance

- CASQA BMP Handbook for New and Redevelopment: http://www.cabmphandbooks.com/Documents/Development/TC-32.pdf
- SMC LID Manual (pp 68): http://www.lowimpactdevelopment.org/guest75/pub/All_Projects/SoCal_LID_Manual/SoCalLID_Manual_FINAL_040910.pdf
- Los Angeles County Stormwater BMP Design and Maintenance Manual, Chapter 5: http://dpw.lacounty.gov/DES/design_manuals/StormwaterBMPDesignandMaintenance.pdf
- San Diego County LID Handbook Appendix 4 (Factsheet 7): http://www.sdcounty.ca.gov/dplu/docs/LID-Appendices.pdf
- Los Angeles Unified School District (LAUSD) Stormwater Technical Manual, Chapter 4. http://www.laschools.org/employee/design/fs-studies-and-reports/download/white_paper_report_material/Storm_Water_Technical_Manual_2009-opt-red.pdf?version_id=76975850

  County of Los Angeles Low Impact Development Standards Manual, Chapter 5: http://dpw.lacounty.gov/wmd/LA_County_LID_Manual.pdf

Attachment I

Master Covenant and Agreement and Maintenance & Operation Plan

Operations and Maintenance (O&M) Plan

Water Quality Management Plan
for

1600 Dove St.

1600 Dove St.

Newport Beach, CA 92660

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Non-Structural Source Control BMPs			
Yes	**N1. Education for Property Owners, Tenants and Occupants** The owner shall prepare a training manual along with the Operations and Maintenance Manual for all existing and future employees. The manual shall include information regarding proper practices that contribute to the protection of the stormwater quality. Training shall be provided upon hire of new associates. A copy of the training manual shall remain in the building at all times for employees to use as needed. The manual shall include all Educational Materials. Additional education material may be found in the following website : http://www.ocwatershed.com/PublicEd/resources/business-brochures.html	Ongoing	Owner
Yes	**N2. Activity Restrictions** The property owner shall ensure that the rules and guidelines as determined on the project conditions of approval or other policies are followed at all times once the project is operations. Prohibited activities for the project that promoted water quality includes: Prohibit discharges of fertilizer, pesticides, or animal wastes to streets or storm drains. Prohibit blowing or sweeping of debris (leaf litter, grass clippings, litter, etc.) into streets or storm drains. Requirement to keep dumpster lids closed at all times. Prohibit vehicle washing, maintenance, or repair on the premises or restrict those activities to designated areas.	Ongoing	Owner
Yes	**N3. Common Area Landscape Management** Ongoing maintenance is conducted to minimize erosion and over-irrigation, conserve water and reduce pesticide and fertilizer applications.	Weekly	Owner
Yes	**N4. BMP Maintenance** All proposed BMP’s shall be regularly maintained.	Ongoing	Owner
No	**N5. Title 22 CCR Compliance**	Every time	Owner

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
No	**N6. Local Water Quality Permit Compliance**		
No	**N7. Spill Contingency Plan**		
No	**N8. Underground Storage Tank Compliance**		
No	**N9. Hazardous Materials Disclosure Compliance**		
No	**N10. Uniform Fire Code Implementation**	Procedures shall be established prior to building occupancy.	Owner
Yes	**N11. Common Area Litter Control** The Owner will be required to implement trash management and litter control procedures in the common areas aimed at reducing pllution of drainage water. The Owner may contract with their landscape maintenace firm to provide this service with regularly scheduled maintenance, which should consist of litter patrol, emptying of trash receptacles in common areas, and noting trash disposal violations and reporting the violations to the Owner for investigation	Ongoing	Owner

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Yes	**N12. Employee Training** The owner shall prepare a training manual for all existing and future employees. The manual shall include information regarding proper practices that contribute to the protection of the stormwater quality. Training shall be provided upon hire of new associates. A copy of the training manual shall remain in the building at all times for employees to use as needed. The manual shall include all Educational Materials. Additional education material may be found in the following website : http://www.ocwatershed.com/PublicEd/resources/business-brochures.html	Quarterly. Training shall be provided upon hire and regular intervals thereafter.	Owner
No	**N13. Housekeeping of Loading Docks**		
Yes	**N14. Common Area Catch Basin Inspection** The owner must ensure that the on-site inlet and drain pipe will be periodically inspected visually. Cleaning should take place in the late summer/early fall prior to the start of the rainy season. If necessary, clean, repair, or replace any drainage facility prior to the start of each rainy season (no later than October 15 of each year).	Monthly -Before and after predicted storm events	Owner
Yes	**N15. Street Sweeping Private Streets and Parking Lots** The Owner must sweep outdoor lots regularyly (minimum monthly), or as needed to maintain parking lot surface without trash, debris, or other removable solids, and prior to the storm season (no later than October 15 each year). Sweeping shall be done with a vacuum-type sweeper. Under no circumstances are outdoor areas/lots to be rinsed or washed with water unless said rinse/wash water is collected and disposed of properly (i.e. into the sewer).	Monthly	Owner
Structural Source Control BMPs			

Exhibit B, Operations and Maintenance Plan

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
Yes	**S1. Provide Storm Drain System Stenciling and Signage** All catch basins/inlets/outlets/parkway drains on site must be marked using the City's "No Dumping – Drains to Ocean" curb marker or stenciled using an approved stencil to paint this message on the top of curb directly above the inlet, and on one side of the curb face. Labeling for catch basins & parkway drains is to be inspected regularly and maintained so as to be reasonably legible at all times. The inspection and maintenance is to be performed by the Owner. This stencil is to alert the public/employees to the destination of pollutants discharged into the storm water.	Annually	Owner
No	**S2. Design Outdoor Hazardous Material Storage Areas to Reduce Pollutant Introduction**		
Yes	**S3. Design Trash Enclosures to Reduce Pollutant Introduction** The owner shall post signs on trash enclosure gates that state "Keep Dumpster Lids Closed." The Owner will monitor dumpster usage such that dumpsters are not overfilled and the dumpster lids can close completely. The Owner shall increase the trash pickup schedule as necessary to prevent dumpsters from overfilling. The Owner will observe and damage to the trash enclosure wall and any discharge from the trash storage area.	Ongoing	Owner
Yes	**S4. Use Efficient Irrigation Systems and Landscape Design** All irrigation systems will be inspected to ensure that the systems are functioning properly and that the programmable timers are set correctly. See CASQA Stormwater Handbook BMP Fact Sheet SD-12 for additional information S4. Use Efficient Irrigation Systems and Landscape Design implementation/maintenance activities.	Monthly	Owner
No	**S5. Protect Slopes and Channels**		

Exhibit B, Operations and Maintenance Plan

BMP Applicable? Yes/No	BMP Name and BMP Implementation, Maintenance and Inspection Procedures	Implementation, Maintenance, and Inspection Frequency and Schedule	Person or Entity with Operation & Maintenance Responsibility
No	**S6. Loading Dock Areas**		
No	**S7. Maintenance Bays and Docks**		
Yes	**S8. Vehicle Wash Areas** Visual Inspection for trash, debris, and pet waste accumulation and proper dispose of any trash, debris, and pet waste. Vehicle wash out of pet fecal matter, urine or animal fluids shall only be undertaken in areas with sewer drain. Washout of pet fecal material, urine and animal fluids shall not be made where water flows to public storm drain line. Contaminated accumulated water must be disposed of in accordance with applicable laws and cannot be discharged directly to the storm drain or sanitary sewer system without the appropriate permit.		
No	**S9. Outdoor Processing Areas**		
No	**S10. Equipment Wash Areas**		
No	**S11. Fueling Areas**		
No	**S12. Site Design and Landscape Planning**		
No	**S13. Wash Water Controls for Food Preparation Areas**		
No	**S14. Community Car Wash Racks**		
Yes	**Bioretention Planter** Visual Inspection for trash and debris accumulation and dispose of any trash and debris accumulation. Inspect for standing water, and vegetation condition per the specifications included in the manual. In addition to the items listed above, refer to the following pages for Bioretention Operations and Maintenance General Requirements.	Per maintenance manual provided.	Owner

Required Permits

This section must list any permits required for the implementation, operation, and maintenance of the BMPs. Possible examples are:

- Permits for connection to sanitary sewer
- Permits from California Department of Fish and Game
- Encroachment permits

If no permits are required, a statement to that effect should be made.

Forms to Record BMP Implementation, Maintenance, and Inspection

The form that will be used to record implementation, maintenance, and inspection of BMPs is attached.

Recordkeeping

All records must be maintained for at least five (5) years and must be made available for review upon request.

RECORD OF BMP IMPLEMENTATION, MAINTENANCE, AND INSPECTION

Today's Date: ______________________

Name of Person Performing Activity (Printed): ______________________

Signature: ______________________

BMP Name (As Shown in O&M Plan)	Brief Description of Implementation, Maintenance, and Inspection Activity Performed

Appendix F

Noise Data

1600 Dove Street

		Speed	24-hour Traffic Volume			Distance to CNEL from Roadway Centerline								Noise Level (CNEL or Ldn) at Distance from Roadway Centerline					
				Future Without Project	Future With Project	Existing				Future No Project				Future With Project				Change From Existing	Change due to Project
Roadway Segment			Existing			50.0 Feet	60 CNEL	65 CNEL	70 CNEL	50.0 Feet	60 CNEL	65 CNEL	70 CNEL	50.0 Feet	60 CNEL	65 CNEL	70 CNEL		
Irvine Ave	s/o Mesa Dr	50	24,500	28,700	28,700	76	585	272	126	77	650	302	140	77	650	302	140	0.7	0.0
	s/o Bristol St South	50	21,300	25,200	25,200	75	533	247	115	76	596	277	128	76	596	277	128	0.7	0.0
Campus Dr	n/o Bristol St North	45	21,000	27,600	27,600	74	462	214	100	76	554	257	119	76	554	257	119	1.2	0.0
	e/o Von Karman Ave	45	8,900	12,300	12,300	71	261	121	56	72	323	150	70	72	323	150	70	1.4	0.0
MacArthur Blvd	s/o Campus Dr	55	16,100	23,200	23,300	75	502	233	108	77	641	297	138	77	642	298	138	1.6	0.0
Jamboree Rd	n/o Eastbluff/University D	55	50,700	62,500	62,500	80	1079	501	232	81	1240	576	267	81	1240	576	267	0.9	0.0
University Dr	e/o Jamboree Rd	50	13,700	14,800	14,800	74	397	184	86	74	418	194	90	74	418	194	90	0.3	0.0
Birch St	s/o Orchard	45	6,500	6,900	6,900	69	211	98	46	70	220	102	47	70	220	102	47	0.3	0.0
MacArthur Blvd	s/o Jamboree Rd	55	20,600	30,400	30,500	76	592	275	127	78	767	356	165	78	769	357	166	1.7	0.0
Bristol St N	e/o Birch St	45	20,200	21,200	21,200	74	450	209	97	75	465	216	100	75	465	216	100	0.2	0.0

Assumptions:

Simplified to 2 lanes	6.1 meters=	20.0
future	6.1 meters=	20.0

Noise path decay parameter for hard site

Calculations using methods of Federal Highway Administration *Highway Traffic Noise Prediction Model* , December, 1978. Baseline California vehicle noise levels from Caltrans, TAN 95-03, 1995

Source of standard assumptions:

24-hour distribution of traffic volumes:
70% day (7-7), 15% evening (7-10), 15% night (10-7)
Analysis of L.A. County 24-hour traffic counts for selected arterial streets
conducted by Pat Mann for Inglewood Noise Element, 1974
Truck Mix

ARB standard fleet mix for air quality analysis
Heavy trucks for noise model includes heavy diesel tractor-trailers only
Medium trucks for noise model includes buses and bobtail trucks
Autos includes cars, vans, pickups and light trucks

Construction Generated Noise

Building Type	Domestic Housing	**Distance (ft)**
Construction Noise at 50 Feet (dBA Leq)		50
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	83	
Excavation	88	
Foundation Construction	81	
Building Construction	81	
Finishing and Site Cleanup	88	

North - Commercial Uses		
Maximum Construction Noise (dBA Leq)		20
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	91	
Excavation (Site Preparation)	96	
Foundation Construction	89	
Building Construction	89	
Paving	96	
Average Construction Noise (dBA Leq)		180
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	72	
Excavation (Site Preparation)	77	
Foundation Construction	70	
Building Construction	70	
Paving	77	

West - Office Uses		
Maximum Construction Noise (dBA Leq)		60
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	81	
Excavation (Site Preparation)	86	
Foundation Construction	79	
Building Construction	79	
Paving	86	
Average Construction Noise (dBA Leq)		190
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	71	
Excavation (Site Preparation)	76	
Foundation Construction	69	
Building Construction	69	
Paving	76	

South - Industrial/Parking Lot Uses		
Maximum Construction Noise (dBA Leq)		60
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	81	
Excavation (Site Preparation)	86	
Foundation Construction	79	
Building Construction	79	
Paving	86	
Average Construction Noise (dBA Leq)		245
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	69	
Excavation (Site Preparation)	74	
Foundation Construction	67	
Building Construction	67	
Paving	74	

East - Commercial Uses		
Maximum Construction Noise (dBA Leq)		20
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	91	
Excavation (Site Preparation)	96	
Foundation Construction	89	
Building Construction	89	
Paving	96	
Average Construction Noise (dBA Leq)		165
Construction Phase	**All Applicable Equipment in Use[1]**	
Ground Clearing/Demolition	73	
Excavation (Site Preparation)	78	
Foundation Construction	71	
Building Construction	71	
Paving	78	

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the USEPA, December 31, 1971. Based on analysis for Office Building, Hotel, Hospital, School, and Public Works.

Construction Generated Vibration

Vibration Annoyance Criteria

North - Commercial Uses

Maximum Vibration Levels
Closest Distance (feet): **70**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Pile Driver (impact)	112	99
Pile Driver (sonic)	105	92
Vibratory Roller	94	81
Hoe Ram	87	74
Large Bulldozer	87	74
Caisson drilling	87	74
Loaded Trucks	86	73
Jackhammer	79	66
Small Bulldozer	58	45
	Criteria	72

West - Office Uses

Maximum Vibration Levels
Closest Distance (feet): **100**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Pile Driver (impact)	112	94
Pile Driver (sonic)	105	87
Vibratory Roller	94	76
Hoe Ram	87	69
Large Bulldozer	87	69
Caisson drilling	87	69
Loaded Trucks	86	68
Jackhammer	79	61
Small Bulldozer	58	40
	Criteria	72

South - Industrial/Parking Lot Uses

Maximum Vibration Levels
Closest Distance (feet): **85**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Pile Driver (impact)	112	96
Pile Driver (sonic)	105	89
Vibratory Roller	94	78
Hoe Ram	87	71
Large Bulldozer	87	71
Caisson drilling	87	71
Loaded Trucks	86	70
Jackhammer	79	63
Small Bulldozer	58	42
	Criteria	72

East - Commercial Uses

Maximum Vibration Levels
Closest Distance (feet): **5**

Equipment	Approximate Velocity Level at 25 ft, VdB	Approximate Velocity Level, VdB
Pile Driver (impact)	112	133
Pile Driver (sonic)	105	126
Vibratory Roller	94	115
Hoe Ram	87	108
Large Bulldozer	87	108
Caisson drilling	87	108
Loaded Trucks	86	107
Jackhammer	79	100
Small Bulldozer	58	79
	Criteria	72

Source: Based on methodology from the United States Department of Transportation Federal Transit Administration, *Transit Noise and Vibration Impact Assessment* (2006).

1600 Dove Street

		Speed	24-hour Traffic Volume			Distance to CNEL from Roadway Centerline								Noise Level (CNEL or Ldn) at Distance from Roadway Centerline					
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	e/o Von Karman Ave	45	8,900	12,300	12,300	71	261	121	56	72	323	150	70	72	323	150	70	1.4	0.0
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University Dr	e/o Jamboree Rd	50	13,700	14,800	14,800	74	397	184	86	74	418	194	90	74	418	194	90	0.3	0.0
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Bristol St N	e/o Birch St	45	20,200	21,200	21,200	74	450	209	97	75	465	216	100	75	465	216	100	0.2	0.0

Assumptions:

Simplified to 2 lanes	6.1	meters=	20.0
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Source of standard assumptions:

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Analysis of L.A. County 24-hour traffic counts for selected arterial streets
conducted by Pat Mann for Inglewood Noise Element, 1974
Truck Mix

ARB standard fleet mix for air quality analysis
Heavy trucks for noise model includes heavy diesel tractor-trailers only
Medium trucks for noise model includes buses and bobtail trucks
Autos includes cars, vans, pickups and light trucks

Appendix G

Traffic Impact Analysis

1600 DOVE STREET RESIDENCES REVISED TRAFFIC IMPACT ANALYSIS

City of Newport Beach

August 14, 2023

ganddini

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

1600 DOVE STREET RESIDENCES REVISED TRAFFIC IMPACT ANALYSIS

City of Newport Beach

August 14, 2023

prepared by

Bryan Crawford
Giancarlo Ganddini, PE, PTP

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Project No. 19615

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EXECUTIVE SUMMARY

The purpose of this study is to evaluate the potential for transportation impacts resulting from development of the proposed project both in the context of the City of Newport Beach's discretionary authority for conformance with locally established operational standards and the California Environmental Quality Act (CEQA). Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

This study was prepared in consultation with City of Newport Beach staff and in accordance with the procedures and methodologies for assessing transportation impacts established by the City of Newport Beach. To assess the project's conformance with local operational standards, this study evaluates the project's effect on traffic operations in accordance with the City's Traffic Phasing Ordinance (TPO) and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project. In addition to existing (2022) conditions, this report analyzes forecast traffic conditions for year 2029 (one year after project opening).

For CEQA purposes, this study also evaluates the significance of project-related transportation impacts using cumulative methodology as well as vehicle miles traveled (VMT) analysis relative to criteria established by the City of Newport Beach as the lead agency and, if necessary, identifies any feasible mitigation measures to mitigate any significant impacts. Additionally, analysis was also prepared for Year 2029 cumulative and Post 2030 General Plan Buildout conditions in support of the project's proposed addendum to the 2006 General Plan Environmental Impact Report (EIR).

Project Description

The 2.49-acre project site is addressed at 1600 Dove Street, located at the northeast corner of Dove Street and Dolphin Striker Way, in the City of Newport Beach, California. The project site is currently developed with an existing 60,675 square foot four-story office building and surface level parking lot.

The proposed project involves demolition of the existing office building and construction of a new seven-story apartment building comprised of 282 residential units, podium level amenity space, a leasing office, roof-top common space, and approximately 530 parking spaces within an on-grade parking garage with two and a half subterranean levels. Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The proposed project is anticipated to be fully operational by year 2028.

Existing Conditions

The study intersections currently operate at Levels of Service D or better during the peak hours for Existing (2022) conditions.

Project Trip Generation

The existing project site land use is estimated to generate approximately 658 daily trips, including 92 trips during the AM peak hour and 88 trips during the PM peak hour. The proposed project site land use is forecast to generate approximately 1,280 daily trips, including 104 trips during the AM peak hour and 110 trips during the PM peak hour. Therefore, the proposed project is forecast to result in a net increase of approximately 622 net new daily trips, including 12 net new trips during the AM peak hour and 22 net new trips during the PM peak hour.

TPO Impact Analysis

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in <u>no</u> Level of Service impacts at the study intersections for TPO Year 2029 With Project conditions and no improvements are required.

CEQA Impact Analysis

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in <u>no</u> significant Level of Service impacts at the study intersections for CEQA Year 2029 With Project conditions and no new mitigation measures are required.

CEQA General Plan Comparison Impact Analysis

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in <u>no</u> significant Level of Service impacts at the study intersections for Post 2030 General Plan Buildout With Project conditions and no new mitigation measures are required.

VMT Screening (Informational Purposes Only)

The proposed project is located in an area with VMT per capita lower than the Orange County regional average for residential use. Per the City VMT Guidelines, the project is therefore presumed to have a less than significant impact on VMT.

Congestion Management Program (CMP)

Since the proposed project has indirect access to a CMP facility (e.g., MacArthur Boulevard or Jamboree Road) and is forecast to generate less than 2,400 daily trips, the proposed project does not satisfy the criteria for preparation of a separate CMP impact analysis.

Site Access and Circulation

Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The project driveways at Dove Street and Dolphin Striker Way will continue to provide full access. Based on review of the adjacent development and lane configurations along Dove Street and Dolphin Striker Way, the existing lane configurations are anticipated to provide adequate circulation. The final parking and circulation will be reviewed and approved by the City of Newport Beach.

1. INTRODUCTION

This section describes the project location, project description, study area, and analysis scenarios.

PROJECT DESCRIPTION

The 2.49-acre project site is addressed at 1600 Dove Street, located at the northeast corner of Dove Street and Dolphin Striker Way, in the City of Newport Beach, California. The project site is currently developed with an existing 60,675 square foot four-story office building and surface level parking lot. Figure 1 shows the project location map.

The proposed project involves demolition of the existing office building and construction of a new seven-story apartment building comprised of 282 residential units, podium level amenity space, a leasing office, roof-top common space, and approximately 530 parking spaces within an on-grade parking garage with two and a half subterranean levels. Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The proposed project is anticipated to be fully operational by year 2028. Figure 2 illustrates the project site plan.

STUDY AREA

Based on scoping discussions with City of Newport Beach staff, the study area consists of the following study intersections within the City of Newport Beach, three of which share jurisdiction with the City of Irvine:

Study Intersections[1]	Jurisdiction
1. Campus Drive (NS) at Bristol Street North (EW)	Newport Beach
2. Irvine Avenue/Campus Drive (NS) at Bristol Street South (EW)	Newport Beach
3. Birch Street (NS) at Bristol Street North (EW)	Newport Beach
4. Birch Street (NS) at Bristol Street South (EW)	Newport Beach
5. MacArthur Boulevard (NS) at Campus Drive (EW)	Newport Beach/Irvine
6. MacArthur Boulevard (NS) at Birch Street (EW)	Newport Beach
7. MacArthur Boulevard (NS) at Newport Place Dr/Von Karman Avenue (EW)	Newport Beach
8. MacArthur Boulevard (NS) at Jamboree Road (EW)	Newport Beach/Irvine
9. MacArthur Boulevard (NS) at Bison Avenue (EW)	Newport Beach
10. Jamboree Road (NS) at Campus Drive (EW)	Newport Beach/Irvine
11. Jamboree Road (NS) at Bristol Street North (EW)	Newport Beach
12. Jamboree Road (NS) at Bristol Street South (EW)	Newport Beach
13. Jamboree Road (NS) at Eastbluff Drive/University Drive (EW)	Newport Beach
14. Von Karman Avenue (NS) at Campus Drive (EW)	Newport Beach/Irvine

ANALYSIS SCENARIOS

In accordance with the City of Newport Beach Traffic Phasing Ordinance (TPO), this traffic report evaluates the following analysis scenarios based on one year after the anticipated project opening year:

a) Existing (2022) Conditions;
b) TPO Year 2029 Without Project; and
c) TPO Year 2029 With Project

---

[1] (NS) = North-South roadway; (EW) = East-West roadway

Additionally, this study also evaluates the following analysis scenarios in support of the project's proposed cumulative CEQA analysis:

d) CEQA Year 2029 Without Project;
e) CEQA Year 2029 With Project;

Lastly, this study evaluates the following analysis scenarios in support of the project's proposed addendum to the 2006 General Plan Environmental Impact Report (EIR):

f) General Plan Comparison: Post 2030 General Plan Buildout Without Project; and
g) General Plan Comparison: Post 2030 General Plan Buildout With Project.

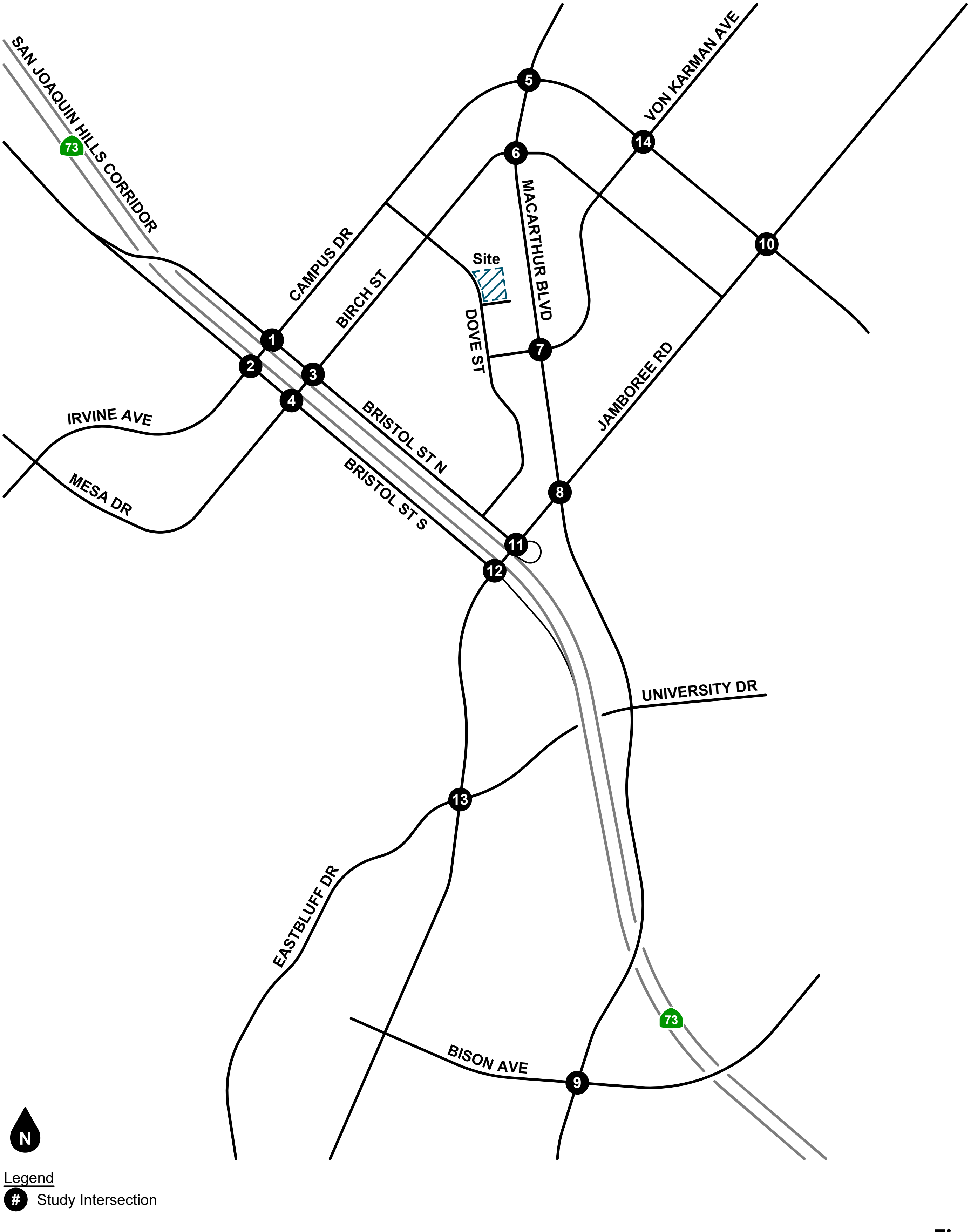


Figure 1
Project Location Map

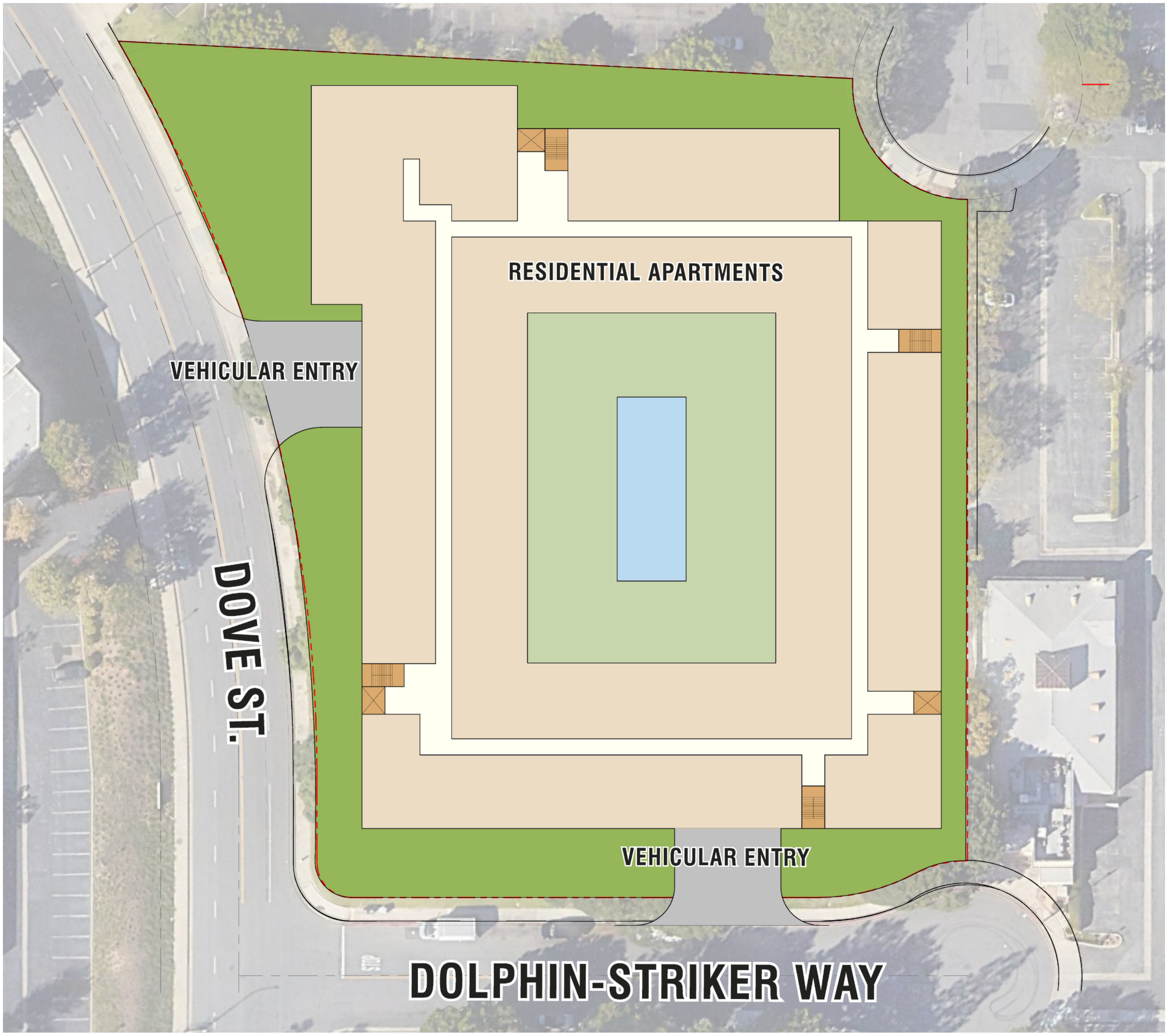


Figure 2
Site Plan

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

TRAFFIC PHASING ORDINANCE ANALYTICAL METHODOLOGY (NON-CEQA)

To establish consistency with the City of Newport Beach General Plan and other City requirements, all proposed land use projects generating 300 or more daily trips are required to prepare a Level of Service analysis for transportation impacts consistent with Chapter 15.40 (Traffic Phasing Ordinance) of the City of Newport Beach Municipal Code. The TPO requires assessment of development project impacts on the City's arterial circulation system based on the Intersection Capacity Utilization (ICU) methodology. While operational ICU analysis is required for conformance with the City's TPO requirements, it is noted that a project's effect on automobile delay (as measured by Level of Service) shall not constitute a significant environmental impact in accordance with current CEQA provisions.

Intersection Capacity Utilization Methodology

In accordance with City of Newport Beach requirements, level of service analysis of signalized intersections is based on the ICU methodology. The ICU methodology compares the volume of traffic using the intersection to the capacity of the intersection. The resulting volume-to-capacity (V/C) ratio represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The volume-to-capacity ratio is then correlated to a performance measure known as level of service based on the following thresholds:

Level of Service	Volume/Capacity Ratio
A	≤ 0.60
B	> 0.60 to ≤ 0.70
C	> 0.70 to ≤ 0.80
D	> 0.80 to ≤ 0.90
E	> 0.90 to ≤ 1.00
F	> 1.00

Source: Transportation Research Board, Interim Materials on Highway Capacity, Transportation Research Circular No. 212, January 1980.

Level of service is used to qualitatively describe the performance of a roadway facility, ranging from Level of service A (free-flow conditions) to Level of Service F (extreme congestion and system failure).

The ICU and Level of Service calculations for this study were performed using the Traffix software. In accordance with City of Newport Beach TPO requirements, the ICU calculations assume a lane capacity of 1,600 vehicles per hour per lane and no factor for yellow time. The project-related increase in ICU is rounded to three decimal places and then rounded to two decimal places.

Performance Standards

The City of Newport Beach has established Level of Service D as the minimum acceptable Level of Service for its arterial roadway system, except at the following locations where Level of Service E or better is acceptable:

- Any intersection in the Airport Area shared with City of Irvine; and
- Any intersections in the City of Corona Del Mar.

Substantial Operational Deficiency Criteria

In accordance with the City's TPO, the following criteria are used to determine if a proposed project will result in a substantial Level of Service impact and is required to provide improvements/corrective measures:

- A substantial project impact is defined to occur if the addition of project-generated trips is forecast to cause/worsen a deficient intersection operation (generally Level of Service E or F) and increase the intersection capacity utilization by one percent or more of capacity (i.e., V/C increases by 0.010 or more).

If a project is forecast to cause or worsen a substantial Level of Service impact, the project must construct or provide funding for improvements, to the extent feasible, such that the project-related increase in capacity utilization does not exceed the City-established criteria.

CUMULATIVE AND GENERAL PLAN ANALYTICAL METHODOLOGY (CEQA)

Although Level of Service impacts no longer constitute a significant environmental impact based on current CEQA provisions, a Level of Service analysis and significant impact evaluation were also prepared for Year 2029 cumulative and Post 2030 General Plan Buildout conditions, which did include evaluation of Level of Service impacts based on relevant thresholds of significance at the time of preparation. The purpose of the General Plan Comparison analysis is to document whether any new traffic-related impacts would occur compared to the 2006 General Plan EIR based on the proposed project.

Thresholds of Significance for General Plan EIR Addendum

Year 2029 cumulative and Post 2030 General Plan Buildout conditions are analyzed based on the same ICU methodology used for the TPO analysis. Based on the 2006 General Plan EIR, the following criteria are used to determine if the proposed project would result in a significant Level of Service impact requiring new mitigation measures.

- A significant transportation impact is defined to occur if the addition of project-generated trips is forecast to cause/worsen a deficient intersection operation (generally Level of Service E or F) and increase the intersection capacity utilization by one percent or more of capacity (i.e., V/C increases by 0.010 or more).

VEHICLE MILES TRAVELED ANALYTICAL METHODOLOGY (CEQA)

The metric used to evaluate the transportation impact of land use and transportation projects under CEQA is known as vehicle miles traveled (VMT). In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Additional information and a detailed project assessment is provided in the Vehicle Miles Traveled section presented later in this report.

3. EXISTING CONDITIONS

This section describes the existing transportation setting in the project vicinity.

EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for existing conditions based on a field survey of the study area. Regional access to the project area is provided by the San Joaquin Hills Corridor (State Route 73) freeway south of the project site running between Bristol Street North and Bristol Street South. The key north-south roadways providing local circulation are Irvine Avenue, Campus Drive, Birch Street, MacArthur Boulevard, and Jamboree Road. The key east-west roadways providing local circulation are Bristol Street North, Bristol Street South, Newport Place Drive, Von Karman Avenue, Bison Avenue, Eastbluff Drive, and University Avenue.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 4.

BICYCLE ROUTES

On-street bicycle facilities are not provided in the project area along Dove Street or Dolphin Striker Way. Dove Street adjacent to the project site does not have bikeway classification. Roadways that provide on-street bicycle facilities near the project site include Bristol Street North, Bristol Street South, Birch Street, and intermittent areas of Jamboree Road and Campus Drive.

TRANSIT FACILITIES

Figure 5 shows the existing transit routes available in the project vicinity. As shown on Figure 5, no Orange County Transportation Authority Routes service Dove Street adjacent to the project site.

GENERAL PLAN CONTEXT

Figure 6 shows the City of Newport Beach General Plan Master Plan of Streets and Highways roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Newport Beach General Plan roadway cross-sections are depicted on Figure 7.

EXISTING TRAFFIC VOLUMES

Existing peak hour intersection volumes were developed from intersection turning movement counts collected in March/April 2022 during typical weekday AM and PM peak periods of commuter traffic. The AM peak period was counted between 7:00 AM and 9:00 AM and the PM peak period was counted between 4:30 PM and 6:30 PM. The actual peak hour within the peak period is the four consecutive 15-minute periods with the highest total volume of all approaches. Thus, the PM peak hour at one intersection may occur at 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume. Count worksheets are provided in Appendix B.

Based on the project's application date, existing volume and Level of Service conditions were established for year 2022.

Figure 8 and Figure 9 show the Existing AM peak hour and PM peak hour intersection turning movement volumes.

EXISTING INTERSECTION LEVEL OF SERVICE

Existing intersection Levels of Service are summarized in Table 1. Detailed Level of Service worksheets are provided in Appendix C.

As shown in Table 1, the study intersections currently operate at Levels of Service D or better during the peak hours for Existing (2022) conditions.

Table 1
Existing (2022) Intersection Levels of Service

ID	Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
			V/C[2]	LOS[3]	V/C[2]	LOS[3]
1.	Campus Dr (NS) at Bristol St North (EW)	TS	0.36	A	0.61	B
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	TS	0.49	A	0.44	A
3.	Birch St (NS) at Bristol St North (EW)	TS	0.47	A	0.51	A
4.	Birch St (NS) at Bristol St South (EW)	TS	0.34	A	0.35	A
5.	MacArthur Blvd (NS) at Campus Dr (EW)[4]	TS	0.33	A	0.53	A
6.	MacArthur Blvd (NS) at Birch St (EW)	TS	0.28	A	0.37	A
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	TS	0.31	A	0.35	A
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)[4]	TS	0.37	A	0.45	A
9.	MacArthur Blvd (NS) at Bison Ave (EW)	TS	0.38	A	0.41	A
10.	Jamboree Rd (NS) at Campus Dr (EW)[4]	TS	0.48	A	0.49	A
11.	Jamboree Rd (NS) at Bristol St North (EW)	TS	0.34	A	0.35	A
12.	Jamboree Rd (NS) at Bristol St South (EW)	TS	0.58	A	0.60	A
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	TS	0.54	A	0.57	A
14.	Von Karman Ave (NS) at Campus Dr (EW)[4]	TS	0.28	A	0.45	A

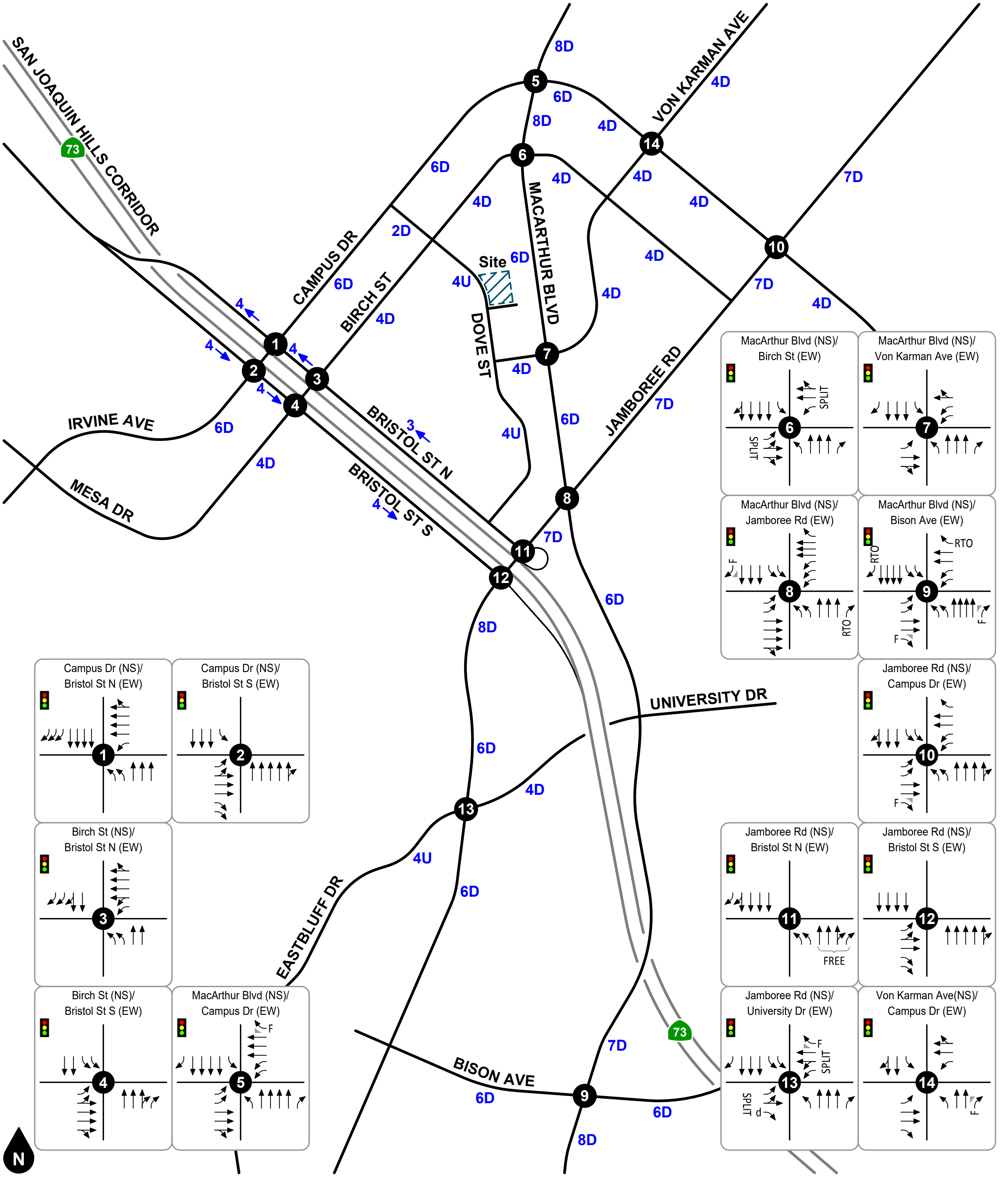
Notes:

(1) TS = Traffic Signal

(2) V/C = Volume/Capacity

(3) LOS = Level of Service

(4) Level of Service E is acceptable; shared jurisdiction with City of Irvine.

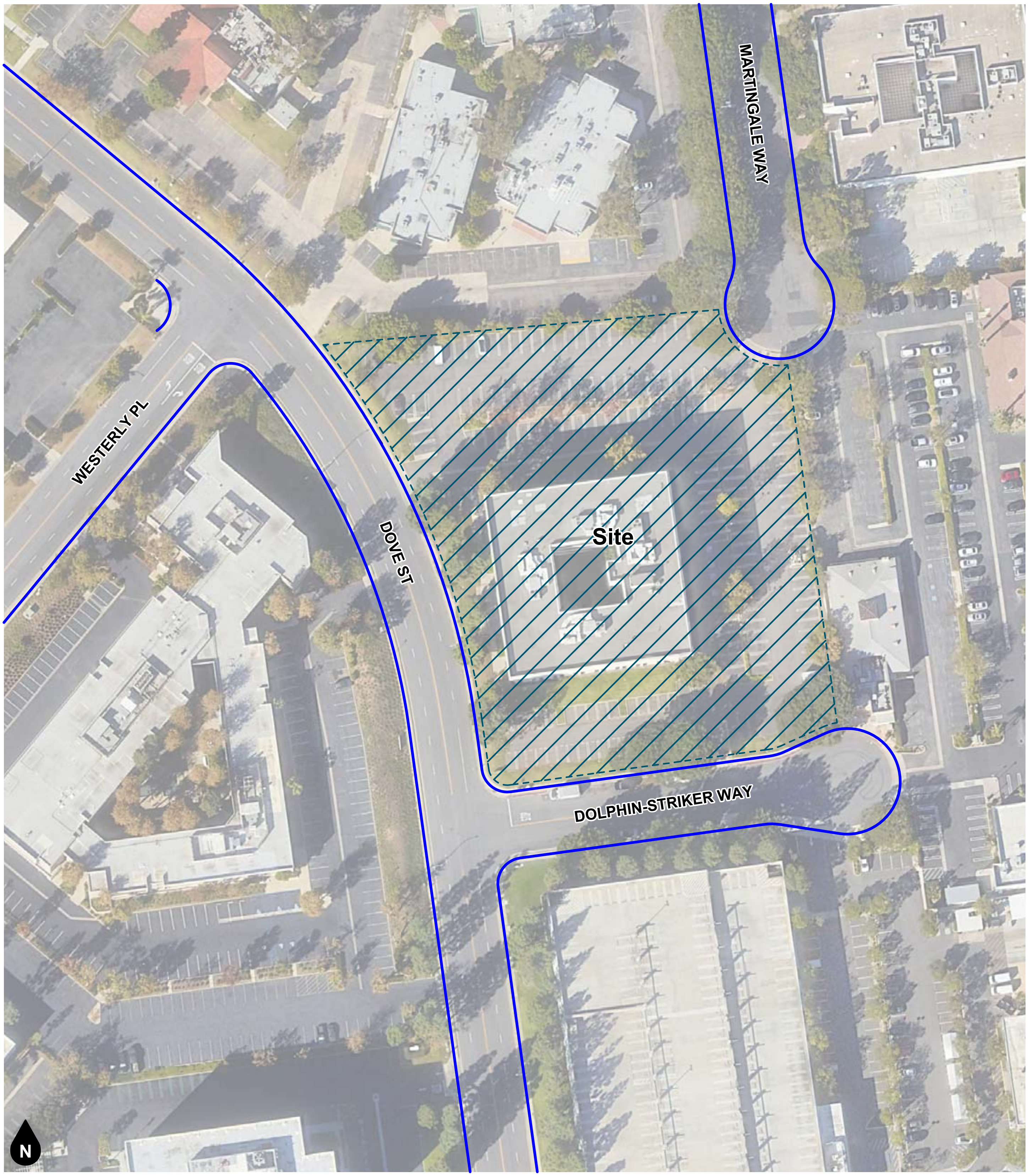


Legend

🚦 Traffic Signal
#D #-Lane Divided Roadway
#U #-Lane Undivided Roadway
#← #-Lanes (One-Way)
✣ Existing Lane

RTO Right Turn Overlap
F Free Right Turn Lane
SPLIT Split Signal Phasing
d De Facto Turn Lane

Figure 3
Existing Lane Geometry and Intersection Traffic Controls



Legend

— Sidewalk

Figure 4
Existing Pedestrian Facilities

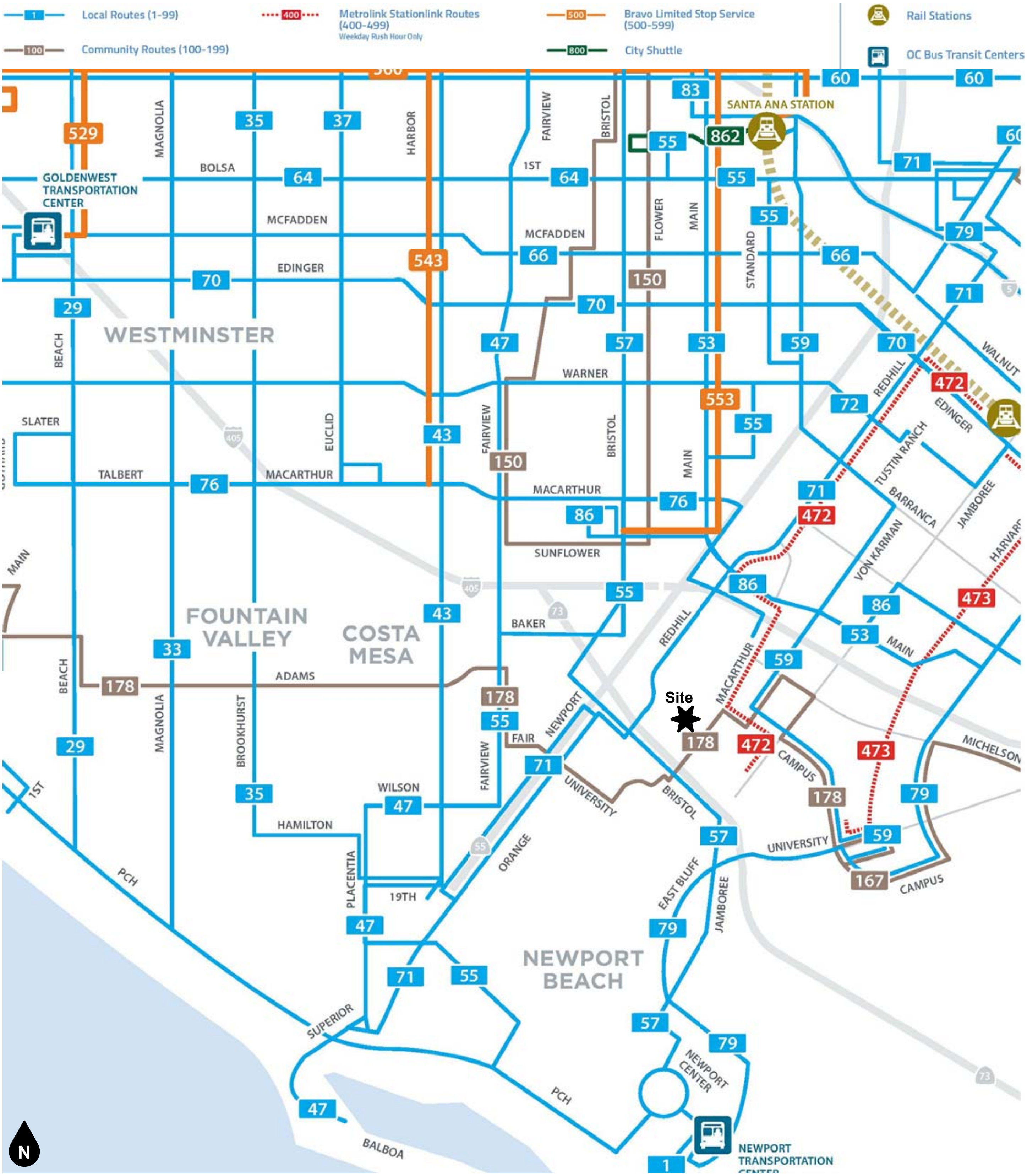
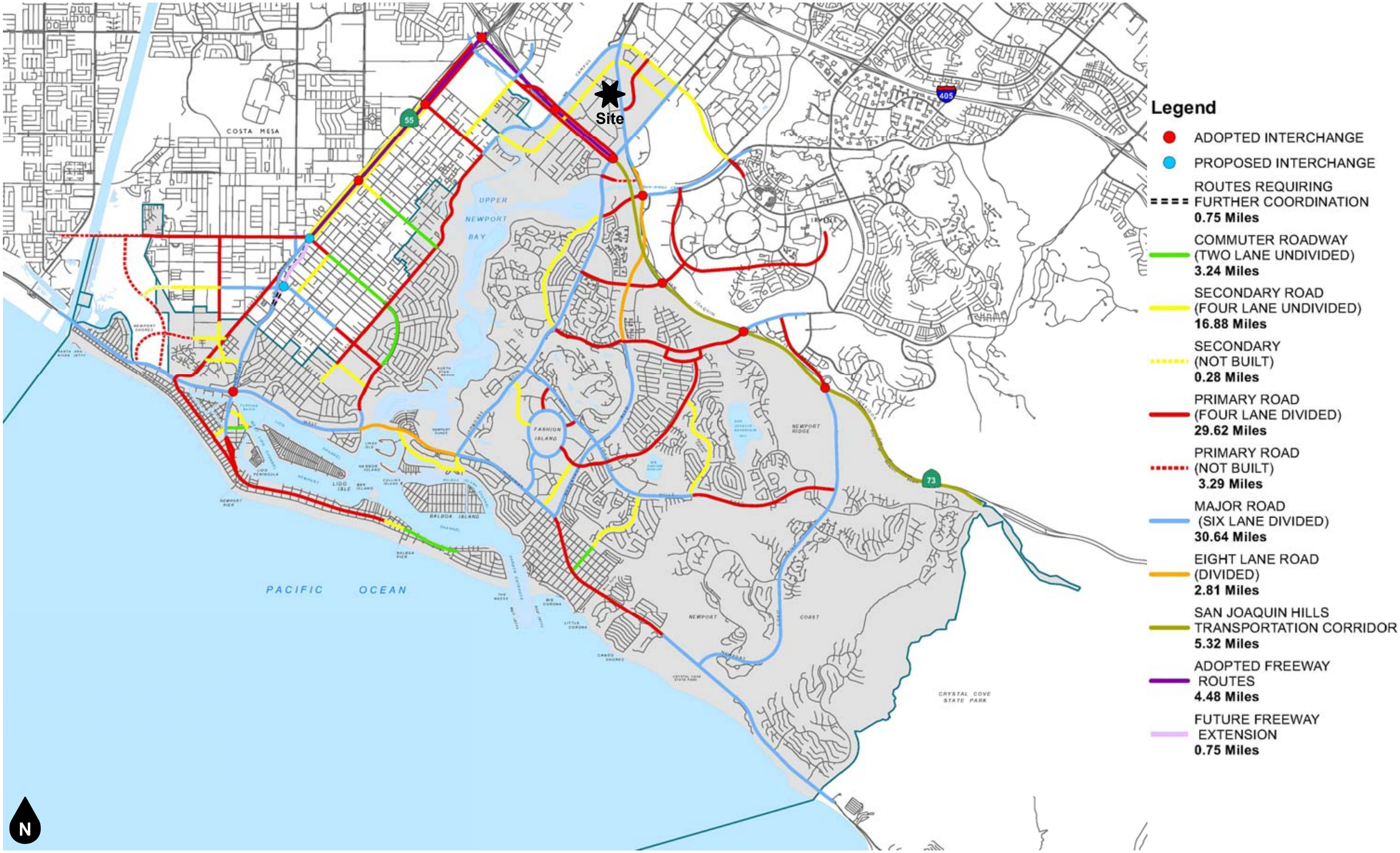


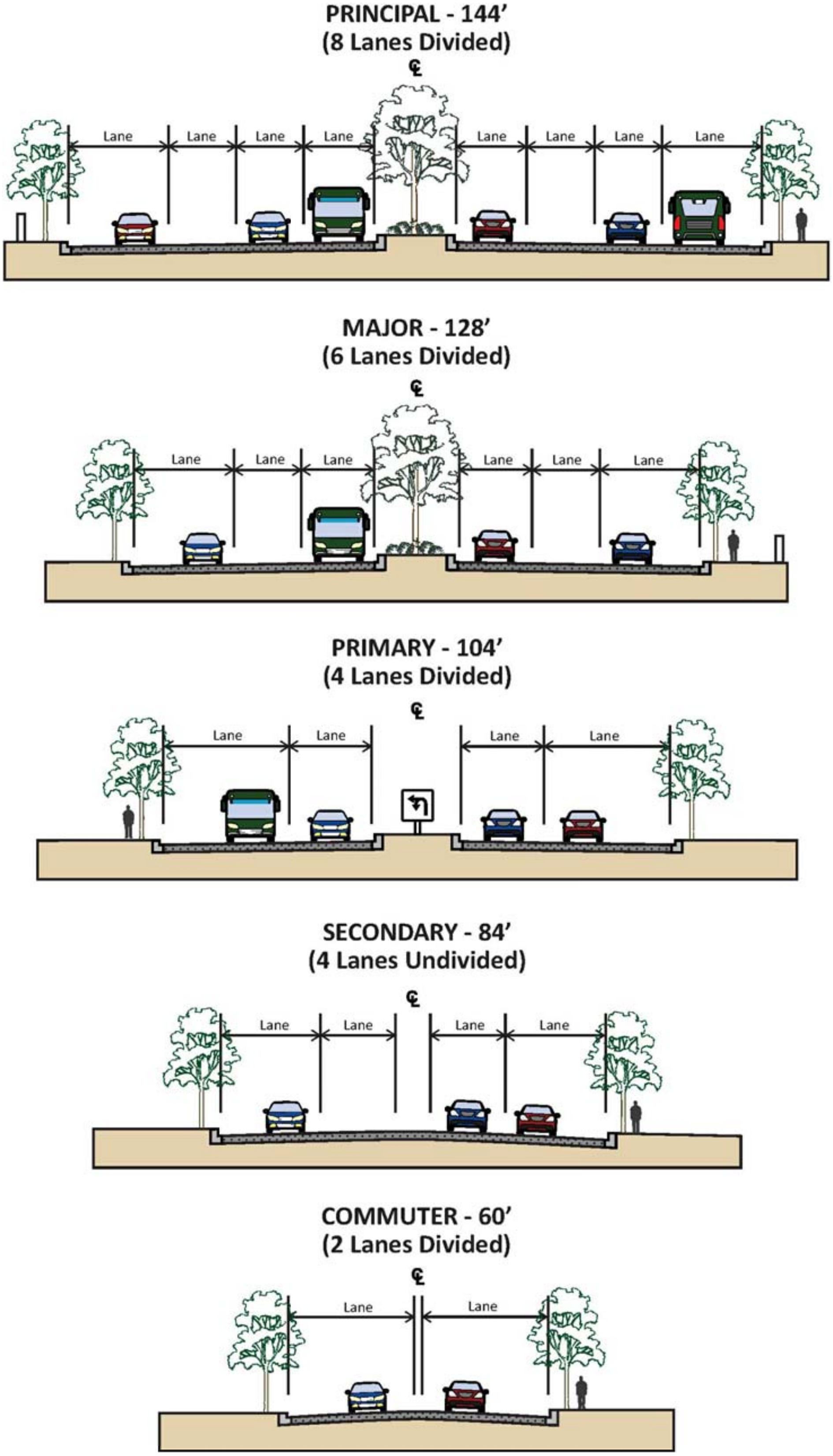
Figure 5
Orange County Transportation Authority System Map

Source: Orange County Transportation Authority



Source: City of Newport Beach

Figure 6
City of Newport Beach General Plan Master Plan of Streets and Highways



PRINCIPAL - 144’
(8 Lanes Divided)

MAJOR - 128’
(6 Lanes Divided)

PRIMARY - 104’
(4 Lanes Divided)

SECONDARY - 84’
(4 Lanes Undivided)

COMMUTER - 60’
(2 Lanes Divided)

Source: City of Newport Beach

Figure 7
City of Newport beach General Plan Roadway Cross-Sections

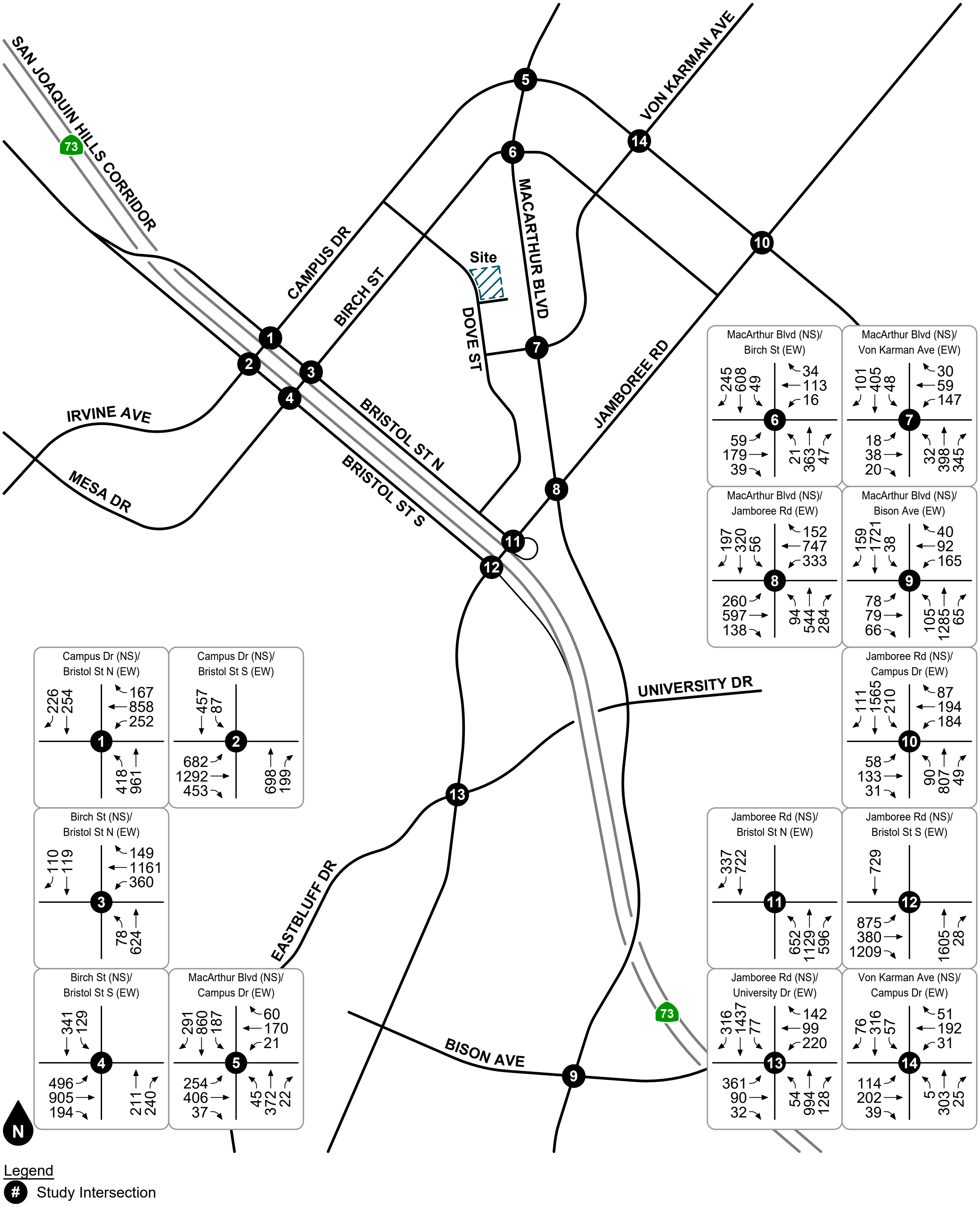


Figure 8
Existing AM Peak Hour Intersection Turning Movement Volumes

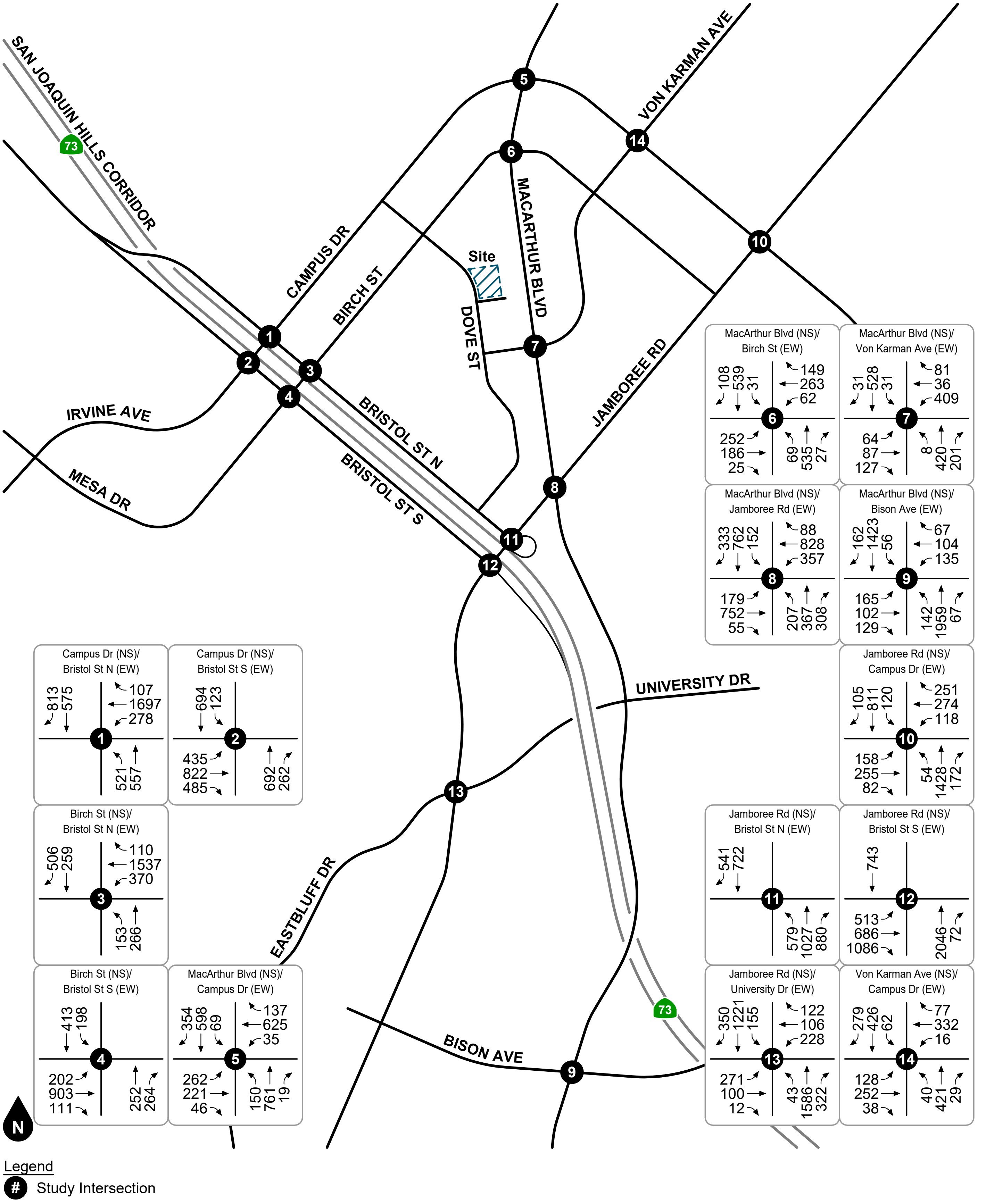


Figure 9
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the project trip generation based upon trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for general office building (Land Use Code 710) and multifamily housing (mid-rise) not close to transit (Land Use Code 221) were determined to adequately represent the existing and proposed land uses and were selected for use in this analysis. The project trip generation forecast is determined by multiplying the trip generation rates by the land use quantities.

As shown in Table 2, the existing project site land use is estimated to generate approximately 658 daily trips, including 92 trips during the AM peak hour and 88 trips during the PM peak hour. The proposed project site land use is forecast to generate approximately 1,280 daily trips, including 104 trips during the AM peak hour and 110 trips during the PM peak hour. Therefore, the proposed project is forecast to result in a net increase of approximately 622 net new daily trips, including 12 net new trips during the AM peak hour and 22 net new trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 10 thru Figure 13 show the forecast directional distribution patterns for the project generated trips. The project trip distribution patterns were developed in consultation with City of Newport Beach staff based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

The project-generated AM and PM peak hour intersection turning movement volumes are shown on Figure 14 and Figure 15.

Table 2
Project Trip Generation

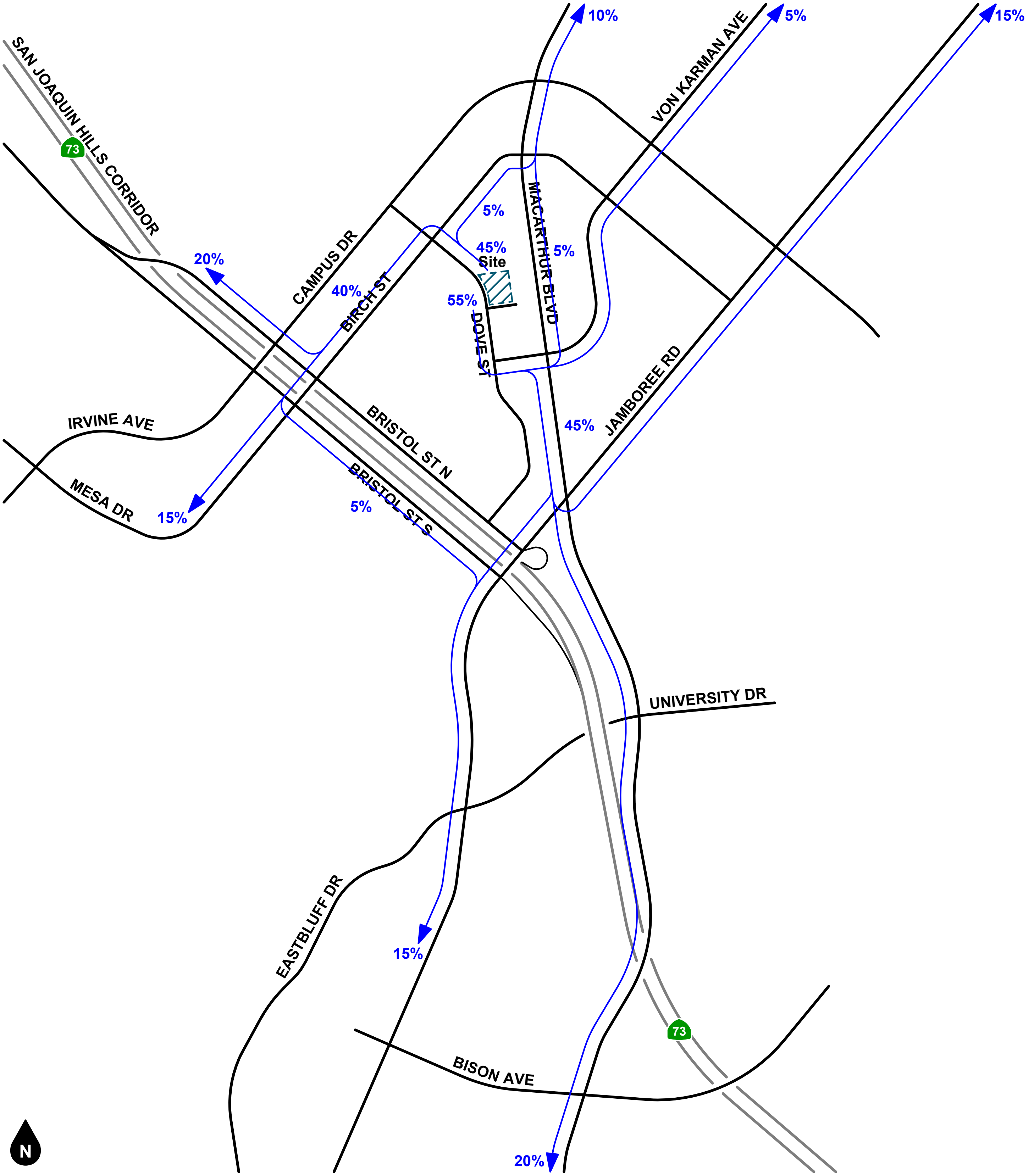
Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Unit[2]	% In	% Out	Rate	% In	% Out	Rate	Daily
General Office Building	ITE 710	TSF	88%	12%	1.52	17%	83%	1.44	10.84
Multifamily Housing (Mid-Rise)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.54

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Unit[2]	In	Out	Total	In	Out	Total	Daily
<u>Existing</u> General Office Building	60.675	TSF	81	11	92	15	73	88	658
<u>Proposed</u> Multifamily Housing (Mid-Rise)	282	DU	25	79	104	68	42	110	1,280
NET PROJECT TRIPS GENERATED			**-56**	**+68**	**+12**	**+53**	**-31**	**+22**	**+622**

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code

(2) TSF = Thousand Square Feet (Gross Floor Area); DU = Dwelling Units



Legend
10% Percent From Project

Figure 10
Project Outbound Trip Distribution - Existing General Office Building

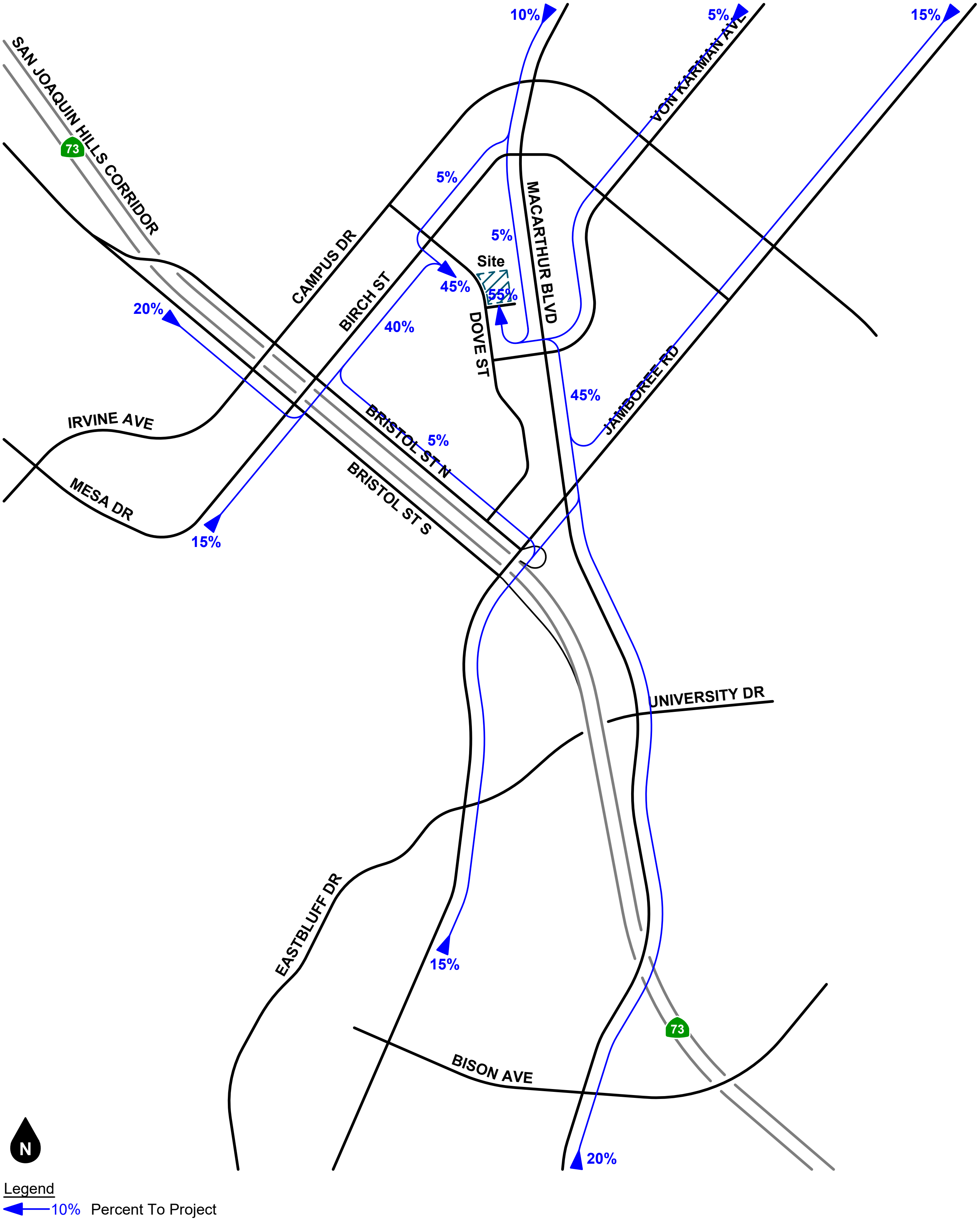


Figure 11
Project Inbound Trip Distribution - Existing General Office Building

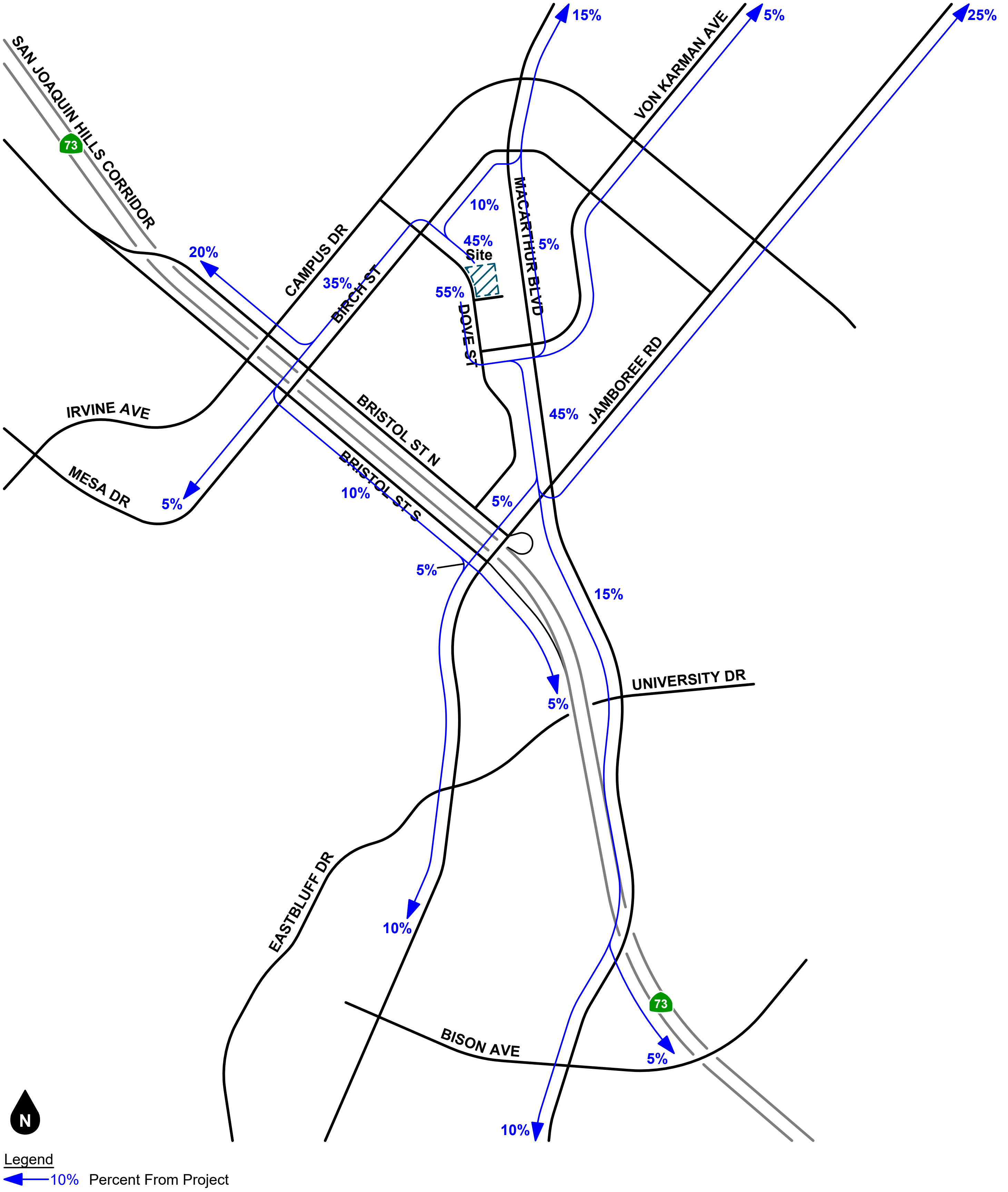


Figure 12
Project Outbound Trip Distribution - Proposed Residential

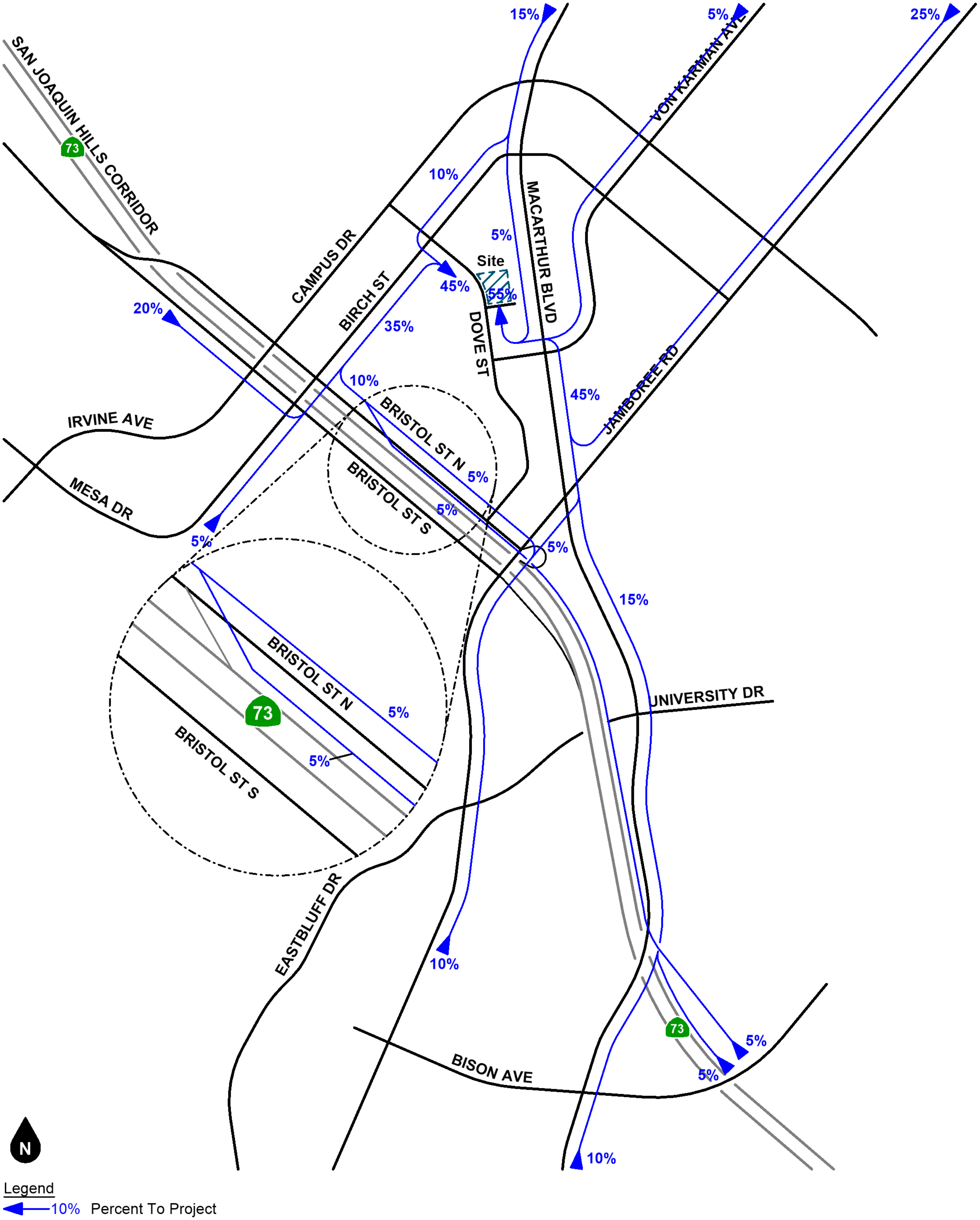


Figure 13
Project Inbound Trip Distribution - Proposed Residential

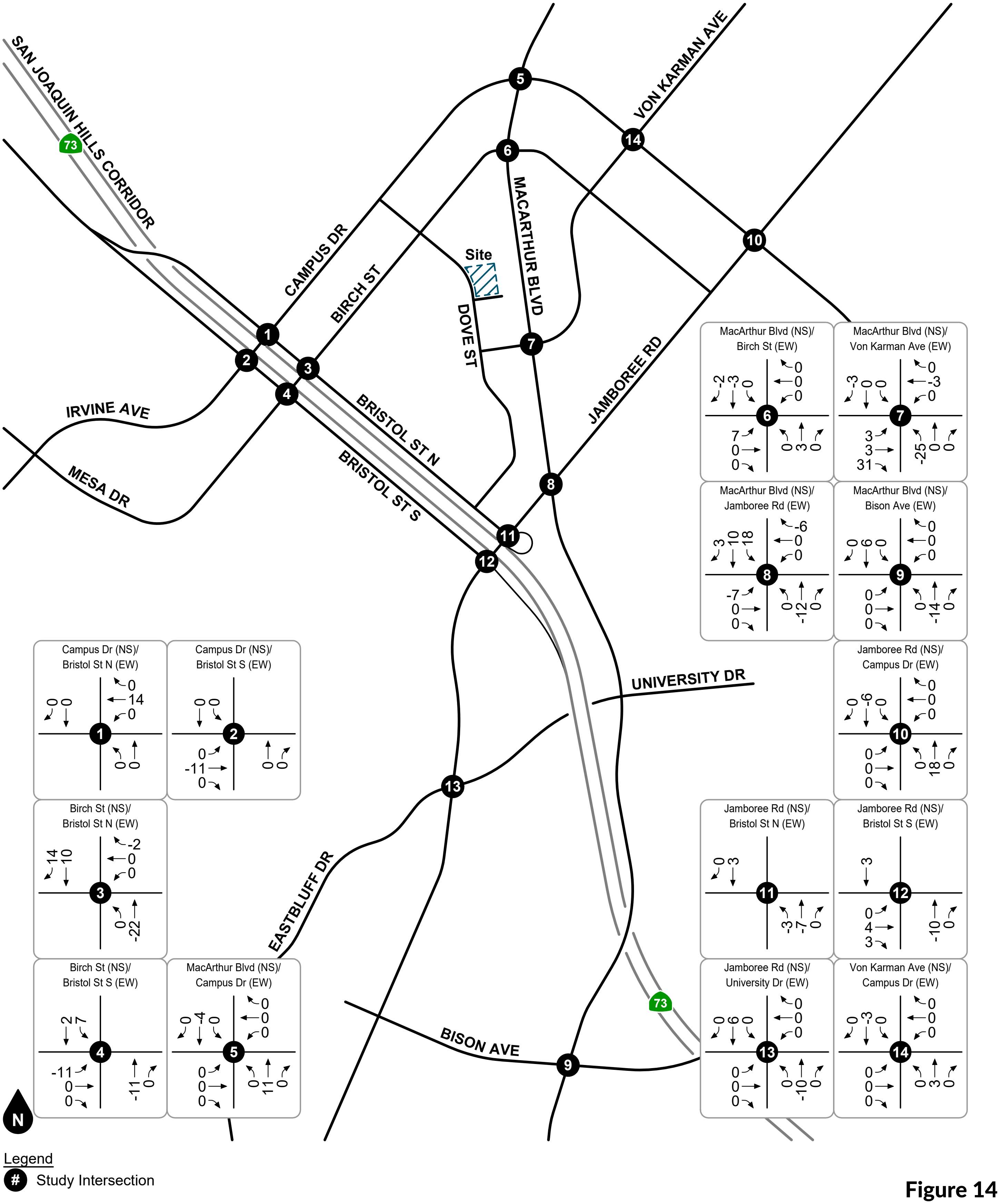


Figure 14
Project (Net)
AM Peak Hour Intersection Turning Movement Volumes

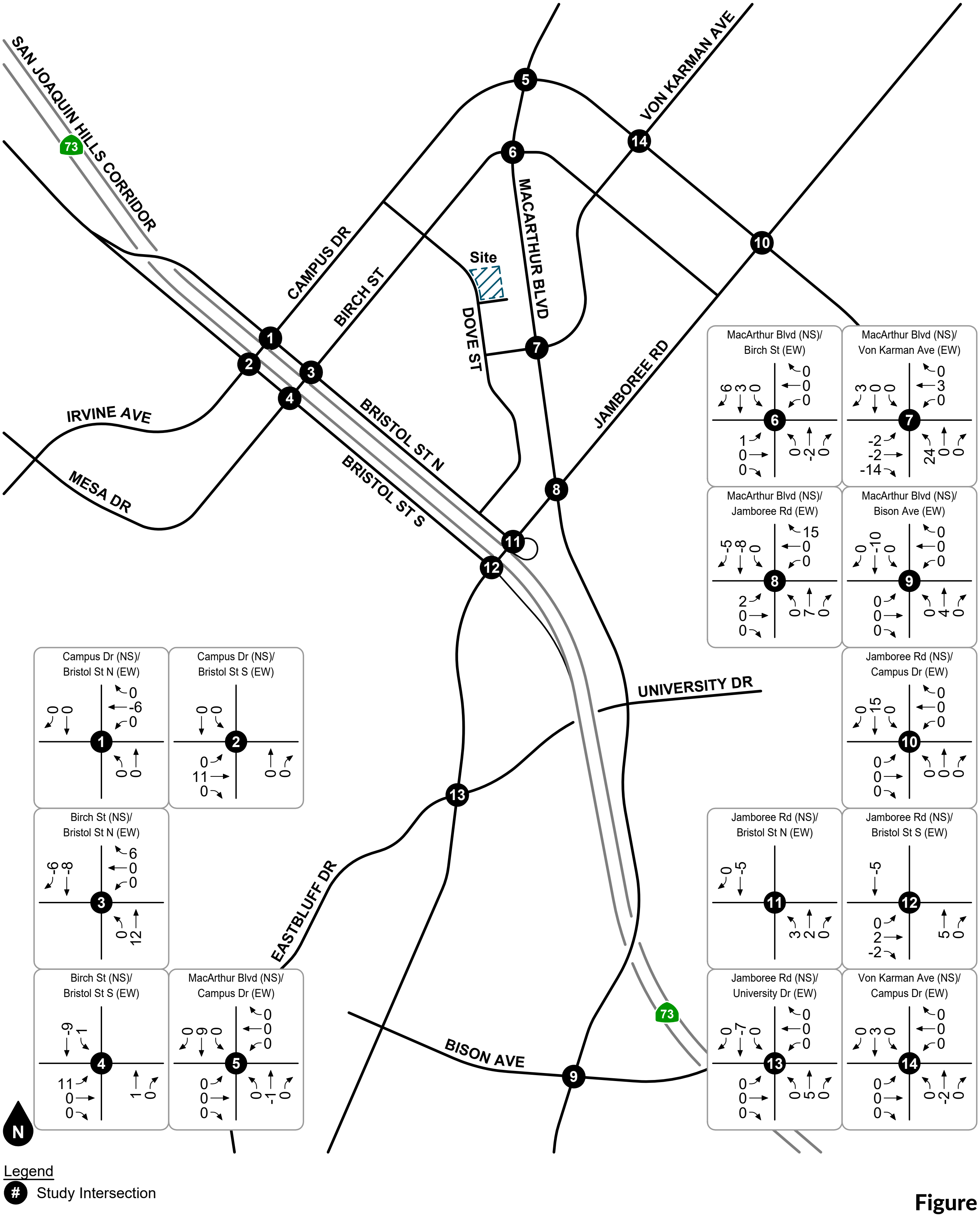


Figure 15
Project (Net)
PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for the TPO scenarios were developed. Forecast study area volumes are illustrated on figures contained in this section.

CITY OF NEWPORT BEACH APPROVED PROJECTS

The City of Newport Beach staff provided a list of approved projects within the study area for use in the TPO analysis. The approved project list consists of future developments that have been approved, but have not been fully constructed and occupied. The approved project data is contained in Appendix D.

Trips associated with the following 17 projects are included in the TPO analysis:

- Fashion Island Expansion
- Temple Bat Yahm Expansion
- Hoag Hospital Phase III
- St. Mark Presbyterian Church
- 2300 Newport Blvd (Vue)
- Hoag Health Center 500-540 Superior
- North Newport Center
- 328 Old Newport Medical Office GPA
- Mariner's Pointe 23,105 SQ FT Commercial Center
- Back Bay Landing 300 ECH
- Balboa Marina West
- Newport Crossings
- Museum House – Vivante Senior Center
- Uptown Newport: Phase 1 – Trans Devel Rights (TDR)
- Uptown Newport: Phase 2 only
- Residences at 4400 VK
- Picerne Residential (1300 Bristol St N)

AMBIENT GROWTH

To account for ambient growth on roadways, existing volumes were increased by a growth rate of one percent (1.0%) per year through year 2029 along applicable arterial highways (Irvine Avenue, Jamboree Road, and MacArthur Boulevard) in accordance with the City of Newport Beach Regional Traffic Annual Growth Rate. This equates to a growth factor of 1.07 along arterials with counts conducted in 2022.

TPO YEAR 2029 VOLUME FORECASTS

TPO Year 2029 Without Project volume forecasts were developed by adding ambient growth and approved projects trips to existing volumes. TPO Year 2029 Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 16 and Figure 17.

TPO Year 2029 With Project volume forecasts were developed by adding project-generated trips to TPO Year 2029 Without Project volumes. TPO Year 2029 With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 18 and Figure 19.

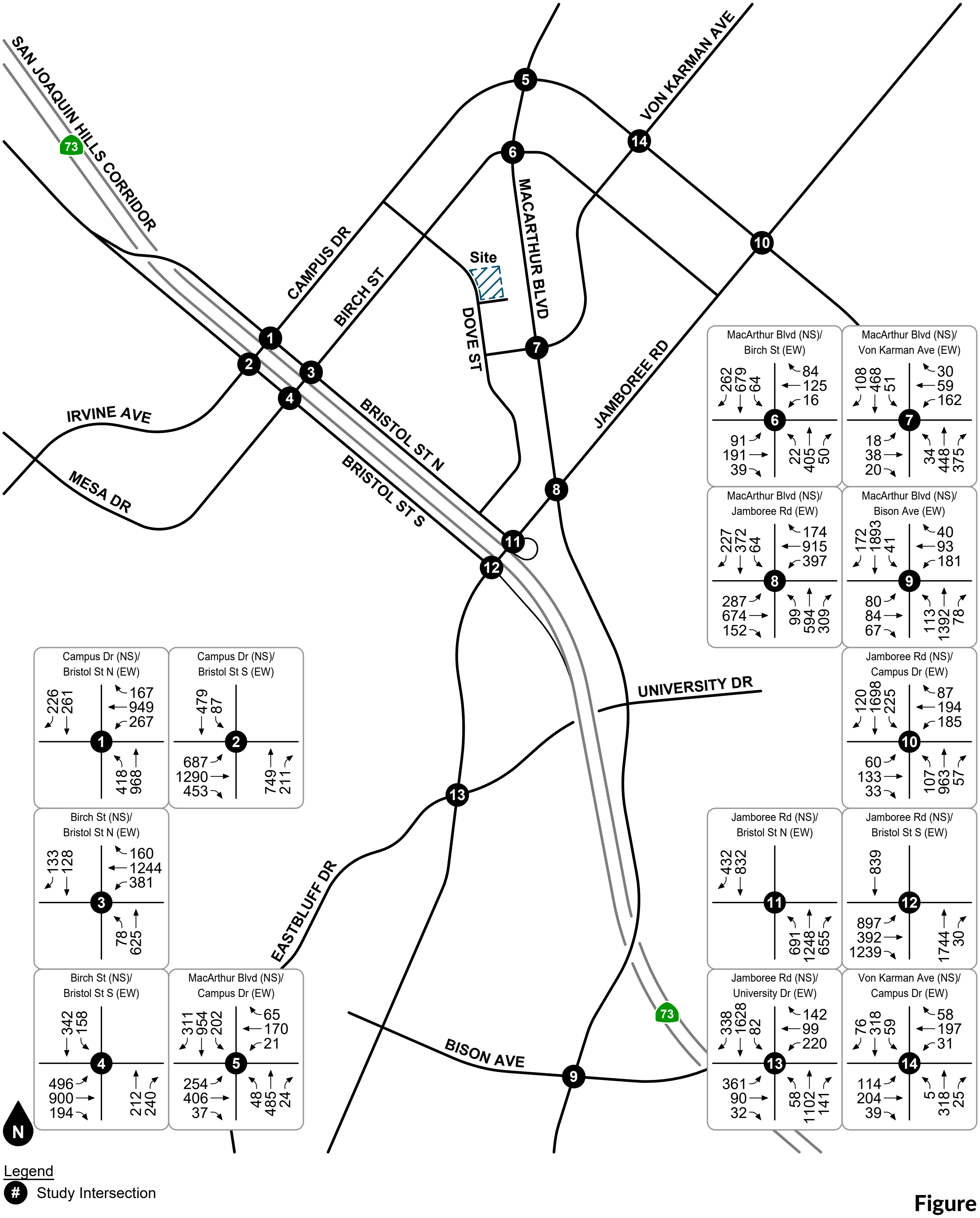
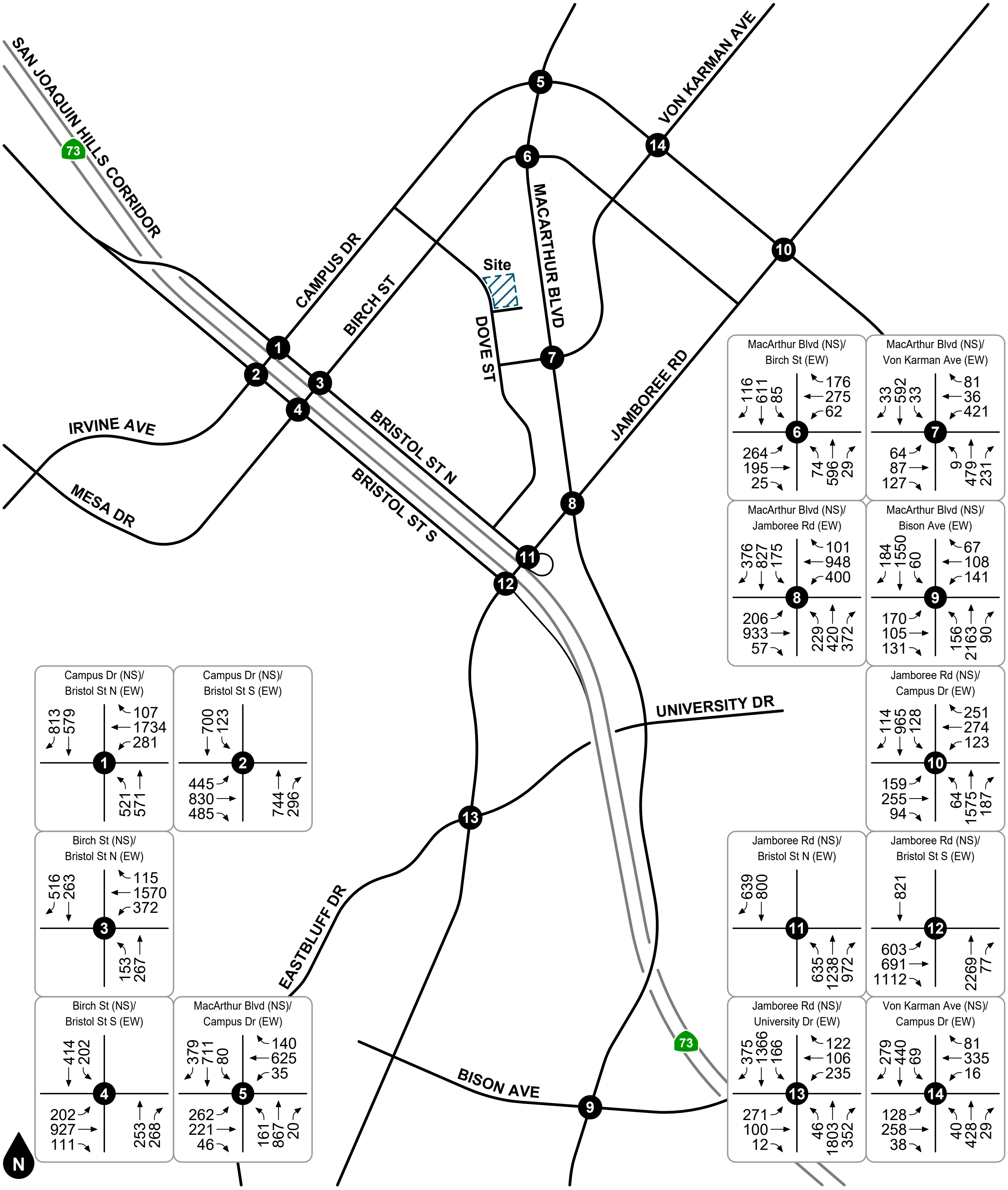


Figure 16
TPO Year 2029 Without Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

● # Study Intersection

Figure 17
TPO Year 2029 Without Project
PM Peak Hour Intersection Turning Movement Volumes

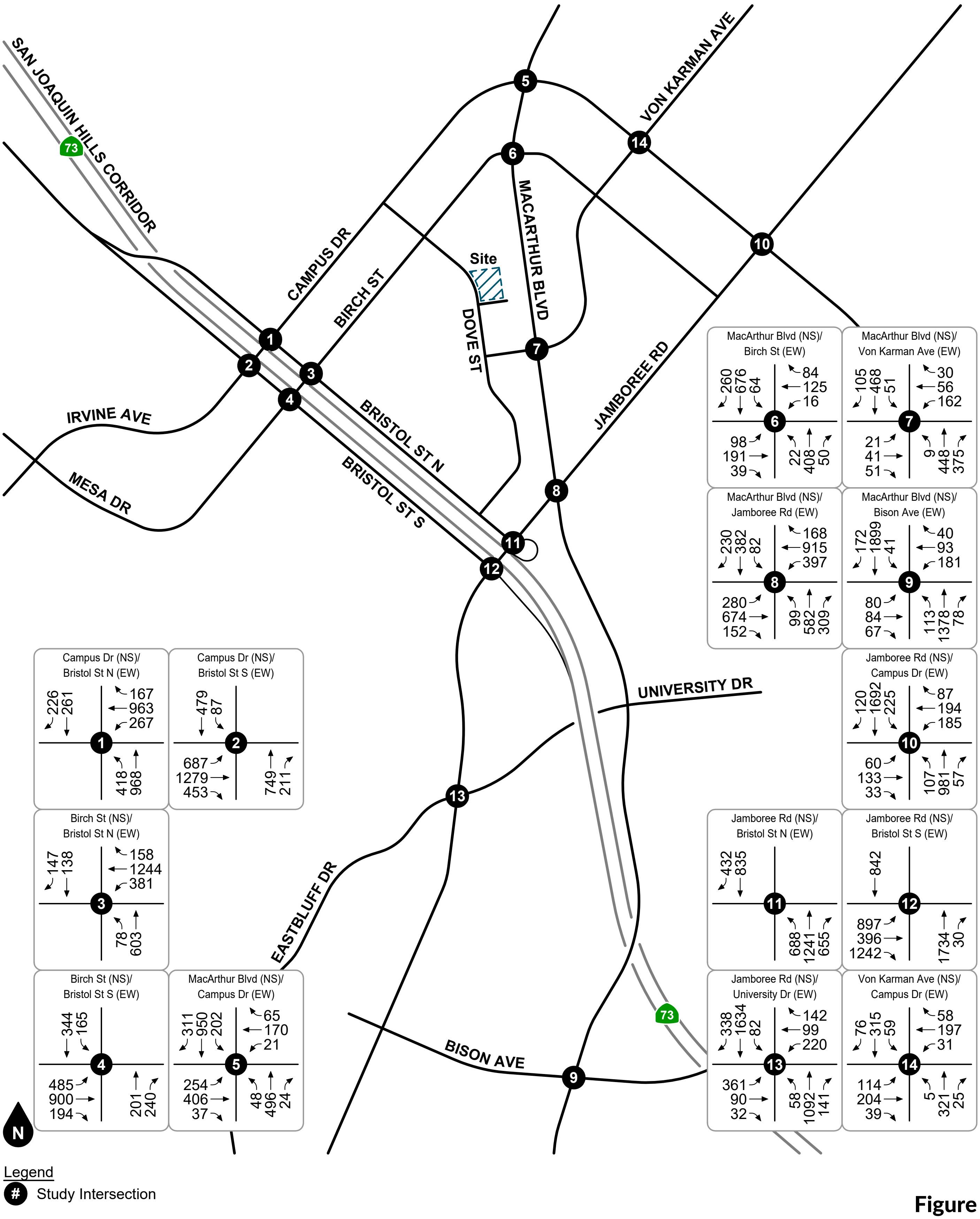


Figure 18
TPO Year 2029 With Project
AM Peak Hour Intersection Turning Movement Volumes

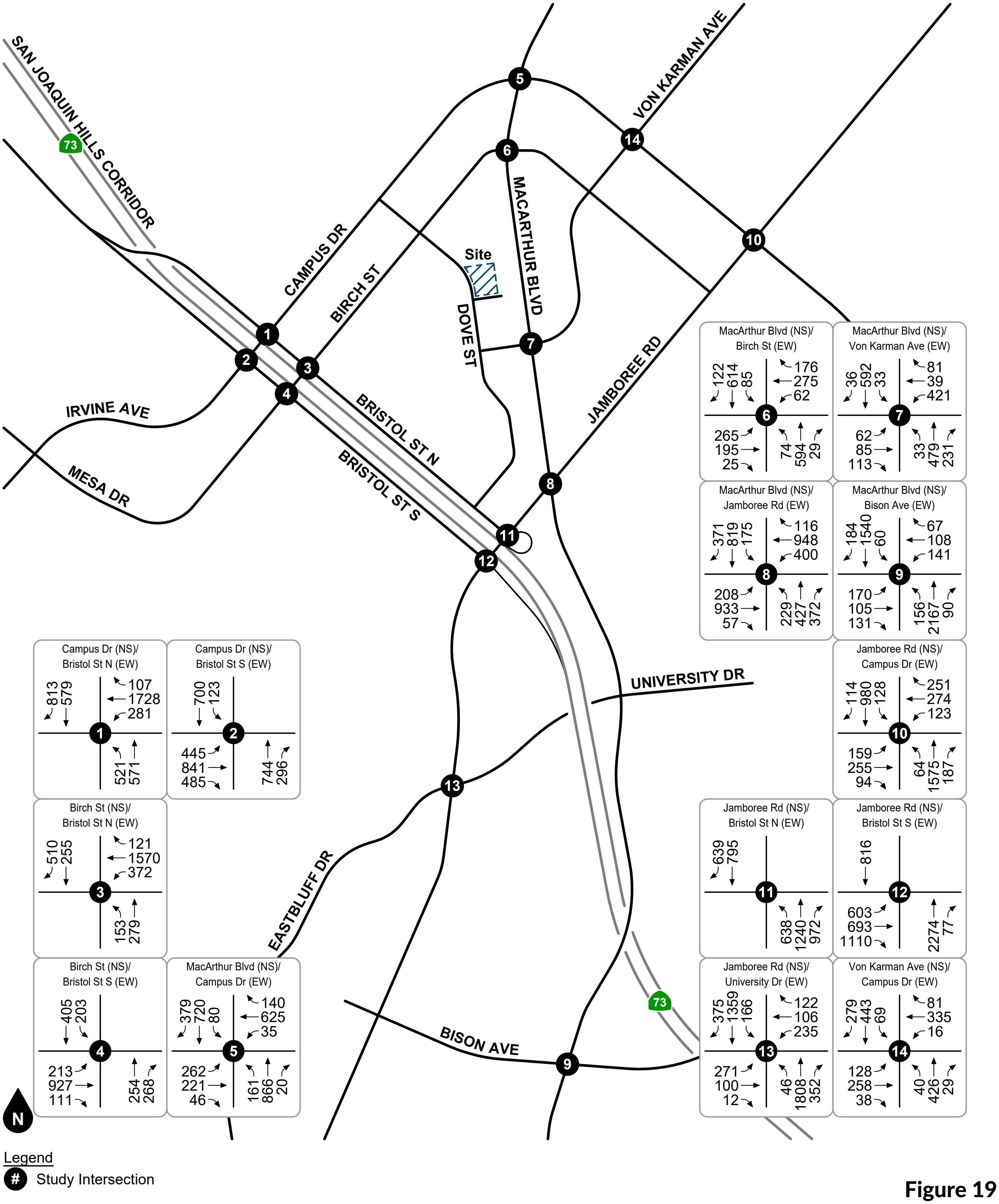


Figure 19
TPO Year 2029 With Project
PM Peak Hour Intersection Turning Movement Volumes

6. TPO ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix C.

TPO YEAR 2029 ONE-PERCENT THRESHOLD ANALYSIS

Table 3 summarizes the City of Newport Beach TPO one-percent threshold analysis. In accordance with the City of Newport Beach TPO requirements, if project-generated peak hour approach volumes are greater than or equal to one percent of the forecast peak hour volumes on any approach of an intersection, then a detailed ICU analysis is required to assess the project-related change in ICU. The TPO one-percent analysis calculation worksheets are contained in Appendix E.

The following eight study intersections are forecast to exceed the TPO one-percent threshold and require ICU analysis:

1. Campus Drive (NS) at Bristol Street North (EW)
3. Birch Street (NS) at Bristol Street North (EW)
4. Birch Street (NS) at Bristol Street South (EW)
5. MacArthur Boulevard (NS) at Campus Drive (EW)
6. MacArthur Boulevard (NS) at Birch Street (EW)
7. MacArthur Boulevard (NS) at Newport Place Drive/Von Karman Avenue (EW)
8. MacArthur Boulevard (NS) at Jamboree Road (EW)
10. Jamboree Road (NS) at Campus Drive (EW)

TPO IMPACT ASSESSMENT

ICU and Levels of Service at the applicable study intersections for TPO Year 2029 Without and With Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate at Levels of Service D or better during the peak hours for TPO Year 2029 Without and With Project conditions.

Table 4 also calculates the net change in ICU at the applicable study intersections for TPO Year 2029 With Project conditions. As shown in Table 4, the addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no Level of Service impacts at the study intersections for TPO Year 2029 With Project conditions and no improvements are required.

Table 3
TPO One-Percent Threshold Analysis Summary

ID	Study Intersection	Peak Hour	Project Trips Exceed One Percent?[1]			
			Northbound	Southbound	Eastbound	Westbound
1.	Campus Dr (NS) at Bristol St North (EW)	AM	No	No	No	Yes
		PM	No	No	No	No
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	AM	No	No	No	No
		PM	No	No	No	No
3.	Birch St (NS) at Bristol St North (EW)	AM	No	Yes	No	No
		PM	Yes	No	No	No
4.	Birch St (NS) at Bristol St South (EW)	AM	No	Yes	No	No
		PM	No	No	No	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)	AM	Yes	No	No	No
		PM	No	No	No	No
6.	MacArthur Blvd (NS) at Birch St (EW)	AM	No	No	Yes	No
		PM	No	Yes	No	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	AM	No	No	Yes	No
		PM	Yes	No	No	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)	AM	No	Yes	No	No
		PM	No	No	No	Yes
9.	MacArthur Blvd (NS) at Bison Ave (EW)	AM	No	No	No	No
		PM	No	No	No	No
10.	Jamboree Rd (NS) at Campus Dr (EW)	AM	Yes	No	No	No
		PM	No	Yes	No	No
11.	Jamboree Rd (NS) at Bristol St North (EW)	AM	No	No	No	No
		PM	No	No	No	No
12.	Jamboree Rd (NS) at Bristol St South (EW)	AM	No	No	No	No
		PM	No	No	No	No
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	AM	No	No	No	No
		PM	No	No	No	No
14.	Von Karman Ave (NS) at Campus Dr (EW)	AM	No	No	No	No
		PM	No	No	No	No

Notes:

(1) If the project is forecast to contribute 1% or more of the projected TPO analysis year peak hour volume, then detailed Intersection Capacity Utilization analysis is required in accordance with the City of Newport Beach Traffic Phasing Ordinance.

Table 4
TPO Year 2029 Intersection Levels of Service and Impact Assessment

ID	Study Intersection	Traffic Control[1]	TPO Without Project				TPO With Project				V/C Increase		Significant Impact?
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
			V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	AM	PM	
1.	Campus Dr (NS) at Bristol St North (EW)	TS	0.37	A	0.62	B	0.38	A	0.62	B	+0.01	0.00	No
3.	Birch St (NS) at Bristol St North (EW)	TS	0.49	A	0.52	A	0.48	A	0.52	A	-0.01	0.00	No
4.	Birch St (NS) at Bristol St South (EW)	TS	0.35	A	0.36	A	0.35	A	0.36	A	0.00	0.00	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)[4]	TS	0.34	A	0.55	A	0.34	A	0.55	A	0.00	0.00	No
6.	MacArthur Blvd (NS) at Birch St (EW)	TS	0.32	A	0.42	A	0.32	A	0.42	A	0.00	0.00	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	TS	0.34	A	0.38	A	0.34	A	0.37	A	0.00	-0.01	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)[4]	TS	0.42	A	0.51	A	0.43	A	0.51	A	+0.01	0.00	No
10.	Jamboree Rd (NS) at Campus Dr (EW)[4]	TS	0.51	A	0.52	A	0.51	A	0.52	A	0.00	0.00	No

Notes:

(1) TS = Traffic Signal

(2) V/C = Volume/Capacity

(3) LOS = Level of Service

(4) Level of Service E is acceptable; shared jurisdiction with City of Irvine.

7. CEQA ANALYSIS

This section presents analysis of Year 2029 cumulative conditions. Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix C.

CUMULATIVE PROJECTS

In addition to the approved projects in the City of Newport Beach (addressed in the TPO analysis), CEQA requires analysis of cumulative conditions. This CEQA analysis also includes traffic from pending projects in the Cities of Newport Beach and Irvine, in addition to the approved projects. Pending projects consist of projects that are in various stages of the application and approval process but are not yet approved. These projects are considered to be reasonably foreseeable projects in the vicinity of the project and must be included in the Cumulative conditions analysis for CEQA purposes. The Cities of Newport Beach and Irvine were consulted and provided the list of cumulative projects to be included in this analysis.

Table 5 includes the trip generation for cumulative projects as provided by the City of Newport Beach, University of California, Irvine, and City of Irvine. Figure 20 shows the cumulative projects location map. Cumulative Projects AM and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

CEQA YEAR 2029 WITHOUT PROJECT VOLUME FORECASTS

CEQA Year 2029 Without Project volume forecasts were developed by adding cumulative projects trips to TPO Year 2029 Without Project volumes. CEQA Year 2029 Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 23 and Figure 24.

CEQA YEAR 2029 WITH PROJECT VOLUME FORECASTS

CEQA Year 2029 With Project volume forecasts were developed by adding project trips to CEQA Year 2029 Without Project volumes. CEQA Year 2029 With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 25 and Figure 26.

CEQA YEAR 2029 IMPACT ASSESSMENT

ICU and Levels of Service at the applicable study intersections for CEQA Year 2029 Without and With Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate at Levels of Service D or better during the peak hours for CEQA Year 2029 Without and With Project conditions.

Table 6 also calculates the net change in ICU at the applicable study intersections for CEQA Year 2029 With Project conditions. As shown in Table 6, the addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no significant Level of Service impacts at the study intersections for CEQA Year 2029 With Project conditions and no new mitigation measures are required.

Table 5 (1 of 2)
Cumulative Projects Trip Generation

Project ID	Project Name	Land Use	Quantity[1]	Net Trips Generated						
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	Daily
City of Newport Beach										
NB1	1400 Bristol Street North Residences	Existing Use		-31	57	26	46	-13	33	620
		General Office	38.764 TSF							
		Proposed Use								
		Multifamily Housing (Mid-Rise)	229 DU							
NB2	Sage Hill School Expansion	Private School (K-8)	150 ST	86	66	152	18	21	39	617
NB3	Mother's Market	Existing Use		11	17	28	29	24	53	690
		Boat Sales	4.487 TSF							
		Proposed Uses								
		Multifamily Housing	36 DU							
		Supermarket	5.096 TSF							
NB4	Newport Beach Porsche	Auto Dealership	143.494 TSF	195	72	267	139	208	347	3,995
NB5	The Garden Restaurant	Quality Restaurant	10.240 TSF	6	2	8	55	29	84	971
		Commercial Retail	0.747 TSF							
NB6	Newport Village	Existing Uses		108	55	163	77	105	182	2,238
		John Siple/Johnson Yacht Sales	0.500 TSF							
		Sun Country Marine	1.000 TSF							
		Powerhouse Vehicle Sales	17.000 TSF							
		WCH-Duffield Marine	2.000 TSF							
		General Office Building	7.185 TSF							
		WCH-A'Maree's	8.100 TSF							
		Marina	68 Berths							
		Proposed Uses								
		Multifamily Housing (Mid-Rise)	108 DU							
		General Office	55.280 TSF							
		Car Show Room	7.900 TSF							
		Single-Family Detached Residential	14 DU							
		General Office	36.620 TSF							
		Duffield Marine Sales/Office	2.000 TSF							
		Boat Show Room	10 EMP							
		High-Turnover Sit-Down Restaurant	3.815 TSF							
		Quality Restaurant	9.100 TSF							
		Marina	63 Berths							
NB7	Newport Coast	Multifamily Housing	564 DU	413	932	1,345	926	557	1,483	14,778
		Single-Family Detached Residential	954 DU							

Table 5 (2 of 2)
Cumulative Projects Trip Generation

Project ID	Project Name	Land Use	Quantity[1]	Net Trips Generated						
				AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
University of California, Irvine										
UCI	UCI North Campus Hospital Project	Hospital	144 Beds	526	163	689	202	520	722	8,550
		Ambulatory Care	225.000 TSF							
	UCI North Campus Child Health/Medical Office	Medical Office Building	168.000 TSF	331	79	410	162	414	576	5,531
City of Irvine										
IR1	Volar Apartments	Multifamily Housing (Mid-Rise)	930 DU	79	265	344	221	141	362	4,222
IR2	Futures Academy	Private School	5.621 TSF	8	1	9	1	7	8	61
IR3	Elements Phase 3	Multifamily Housing (Mid-Rise)	593 DU	50	169	219	141	90	231	2,692
		General Office Building	2.730 TSF	4	0	4	1	3	4	30
		Strip Retail Plaza (<40k)	5.000 TSF	7	5	12	16	16	32	272
		Coffee Donut Shop w/o Drive-Thru Window	2.730 TSF	130	125	255	44	44	88	1,393
		Health Fitness Club	6.900 TSF	5	4	9	14	10	24	205
IR4	Landmark	Hotel	386 RM	138	78	216	116	112	228	3,084
		General Office	448.000 TSF	599	82	681	110	535	645	4,856
IR5	Milani Apartments	Multifamily Housing (Mid-Rise)	287 DU	24	82	106	68	44	112	1,303
IR6	Elements	Multifamily Housing (Mid-Rise)	700 DU	60	199	259	167	106	273	3,178
IR7	Von Karman Quartz Office	General Office	16.538 TSF	22	3	25	4	20	24	179
Total				2,771	2,456	5,227	2,557	2,993	5,550	59,465

Sources:
Data provided by City of Newport Beach, City of Irvine, and UCI traffic studies.
ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code

Notes:
(1) TSF = Thousand Square Feet; DU = Dwelling Units; ST = Students; EMP = Employees; RM = Rooms

Table 6
CEQA Year 2029 Intersection Levels of Service and Impact Assessment

			CEQA Without Project				CEQA With Project						
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		V/C Increase		
ID	Study Intersection	Traffic Control[1]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	AM	PM	Significant Impact?
1.	Campus Dr (NS) at Bristol St North (EW)	TS	0.458	A	0.676	B	0.460	A	0.675	B	+0.002	-0.001	No
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	TS	0.545	A	0.496	A	0.544	A	0.498	A	-0.001	+0.002	No
3.	Birch St (NS) at Bristol St North (EW)	TS	0.514	A	0.536	A	0.506	A	0.535	A	-0.008	-0.001	No
4.	Birch St (NS) at Bristol St South (EW)	TS	0.361	A	0.364	A	0.362	A	0.365	A	+0.001	+0.001	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)[4]	TS	0.445	A	0.676	B	0.447	A	0.676	B	+0.002	0.000	No
6.	MacArthur Blvd (NS) at Birch St (EW)	TS	0.357	A	0.472	A	0.357	A	0.474	A	0.000	+0.002	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	TS	0.401	A	0.436	A	0.408	A	0.429	A	+0.007	-0.007	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)[4]	TS	0.561	A	0.636	B	0.565	A	0.635	B	+0.004	-0.001	No
9.	MacArthur Blvd (NS) at Bison Ave (EW)	TS	0.453	A	0.483	A	0.454	A	0.484	A	+0.001	+0.001	No
10.	Jamboree Rd (NS) at Campus Dr (EW)[4]	TS	0.582	A	0.628	B	0.581	A	0.628	B	-0.001	0.000	No
11.	Jamboree Rd (NS) at Bristol St North (EW)	TS	0.394	A	0.439	A	0.393	A	0.439	A	-0.001	0.000	No
12.	Jamboree Rd (NS) at Bristol St South (EW)	TS	0.656	B	0.669	B	0.656	B	0.598	A	0.000	-0.071	No
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	TS	0.643	B	0.686	B	0.644	B	0.687	B	+0.001	+0.001	No
14.	Von Karman Ave (NS) at Campus Dr (EW)[4]	TS	0.375	A	0.526	A	0.374	A	0.527	A	-0.001	+0.001	No

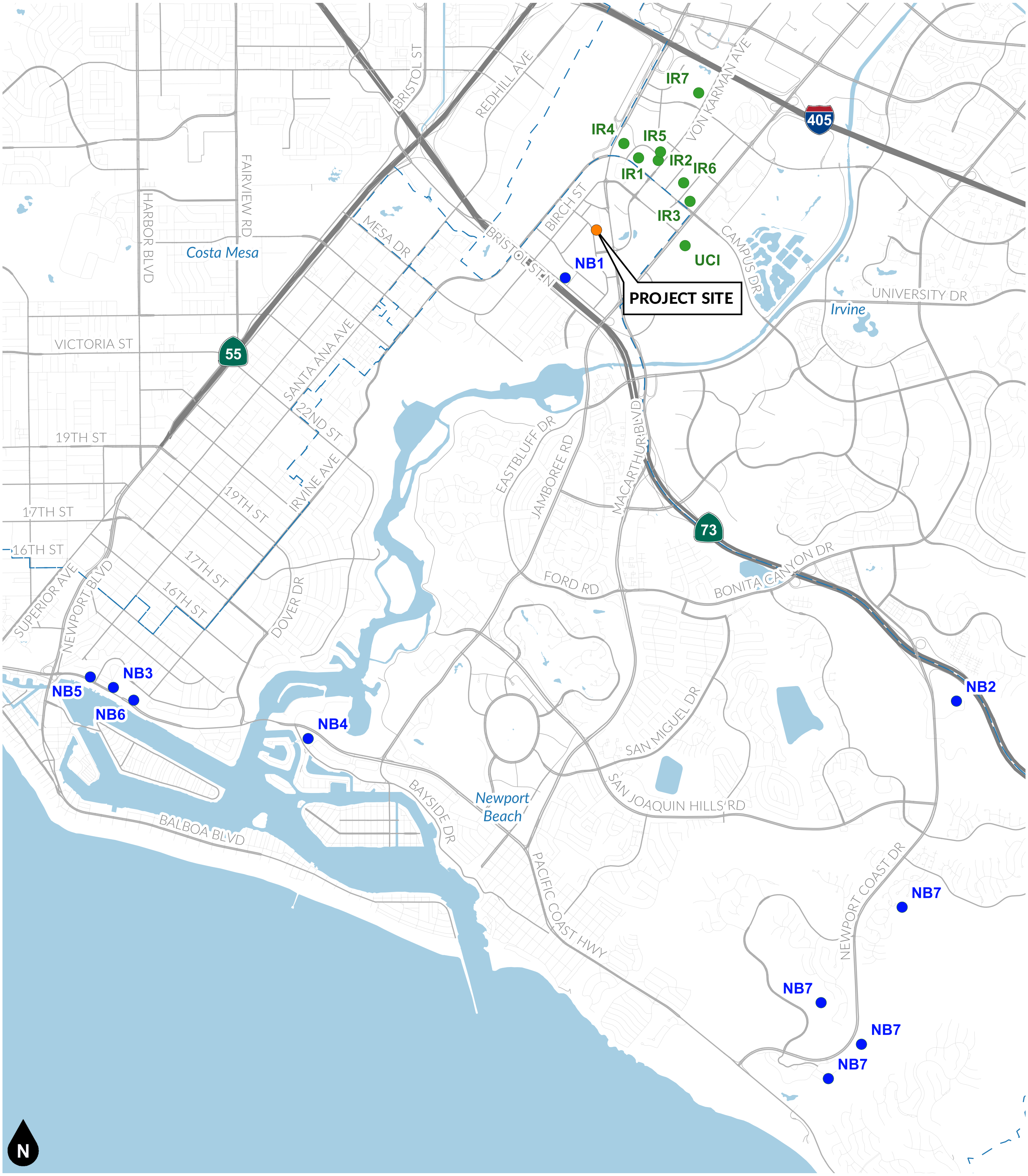
Notes:

(1) TS = Traffic Signal

(2) V/C = Volume/Capacity

(3) LOS = Level of Service

(4) Level of Service E is acceptable; shared jurisdiction with City of Irvine.



Legend

Other Development (see Table 5):

- ● City of Irvine
- ● City of Newport Beach

Figure 20
Cumulative Projects Location Map

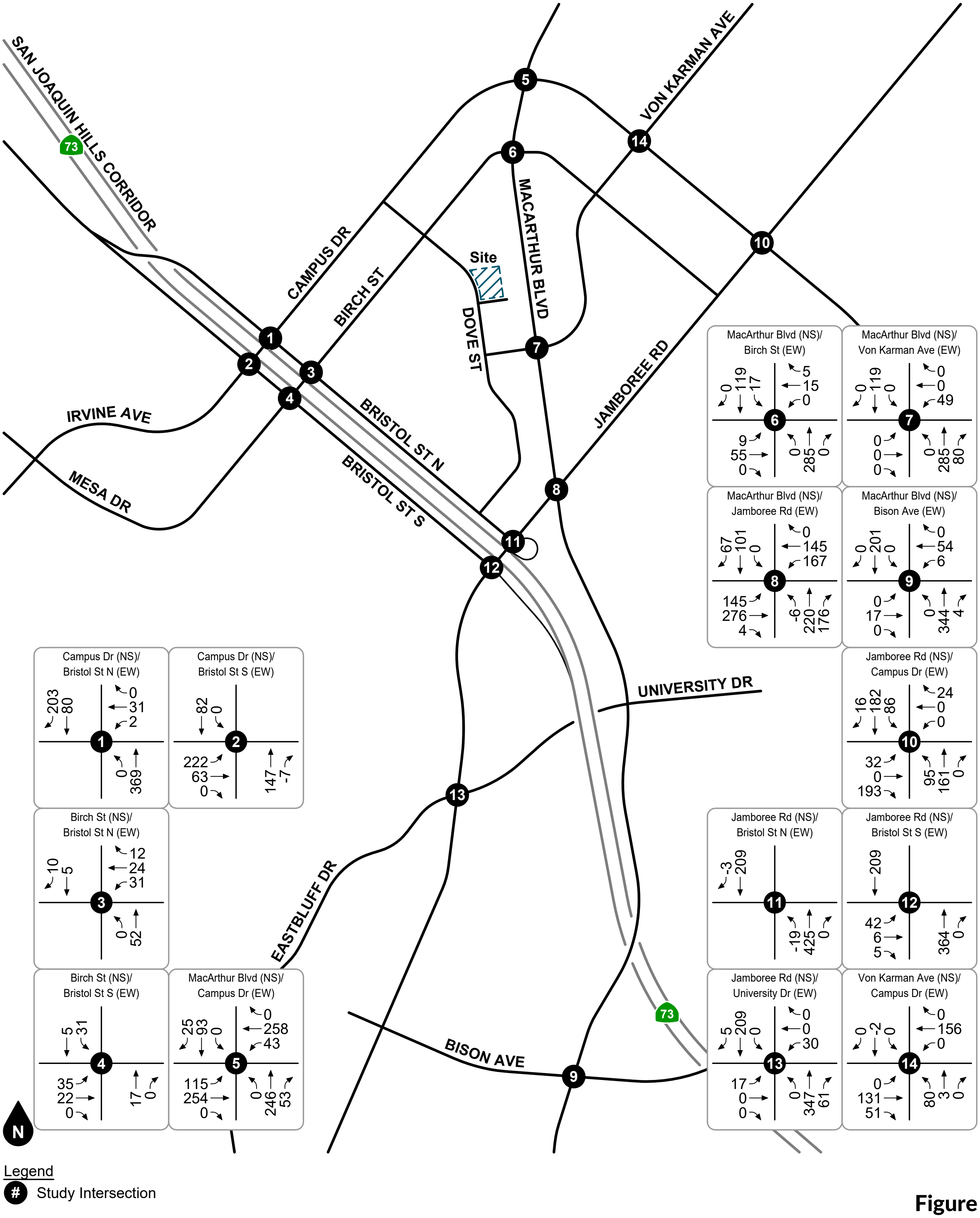


Figure 21
Cumulative Projects
AM Peak Hour Intersection Turning Movement Volumes

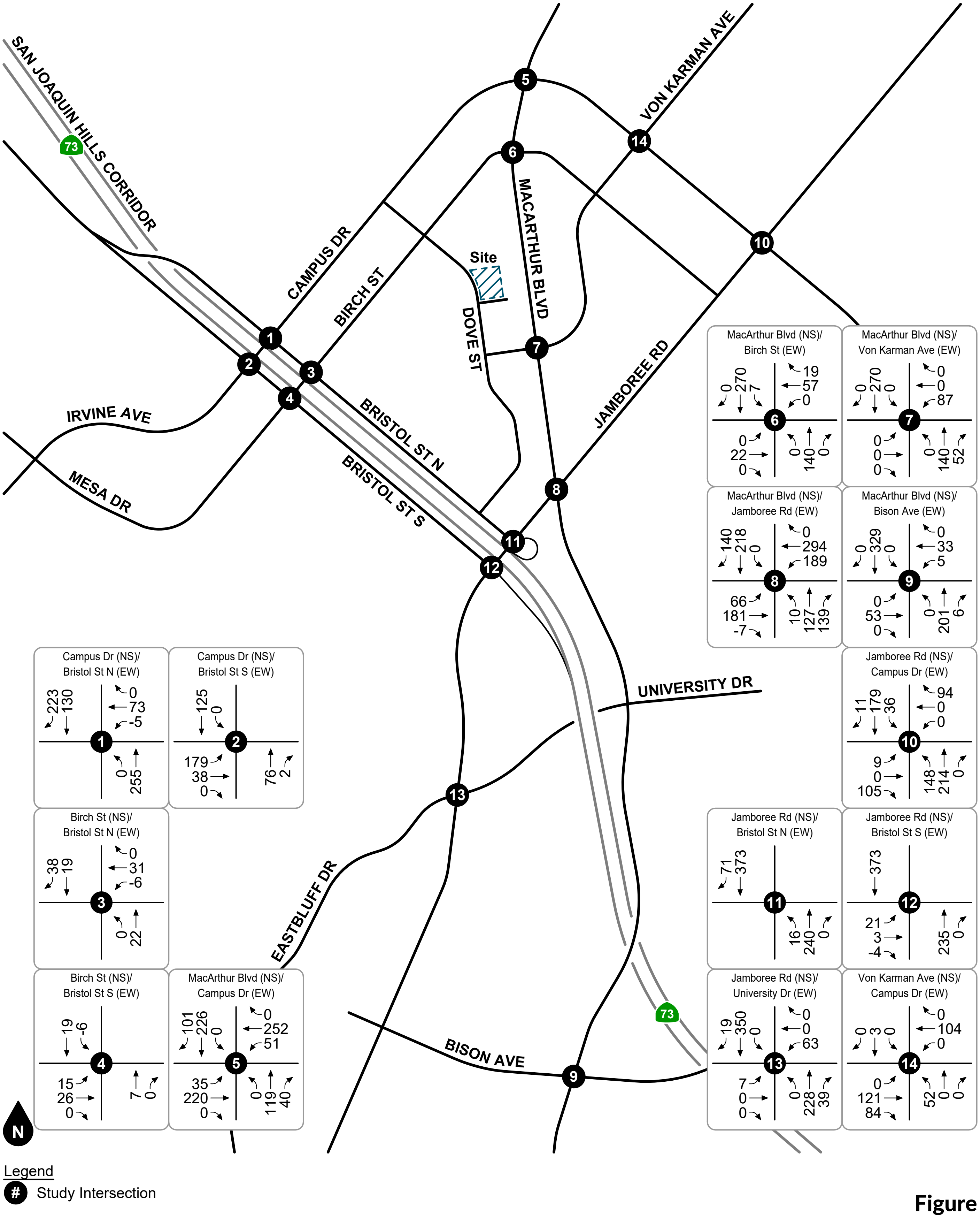


Figure 22
Cumulative Projects
PM Peak Hour Intersection Turning Movement Volumes

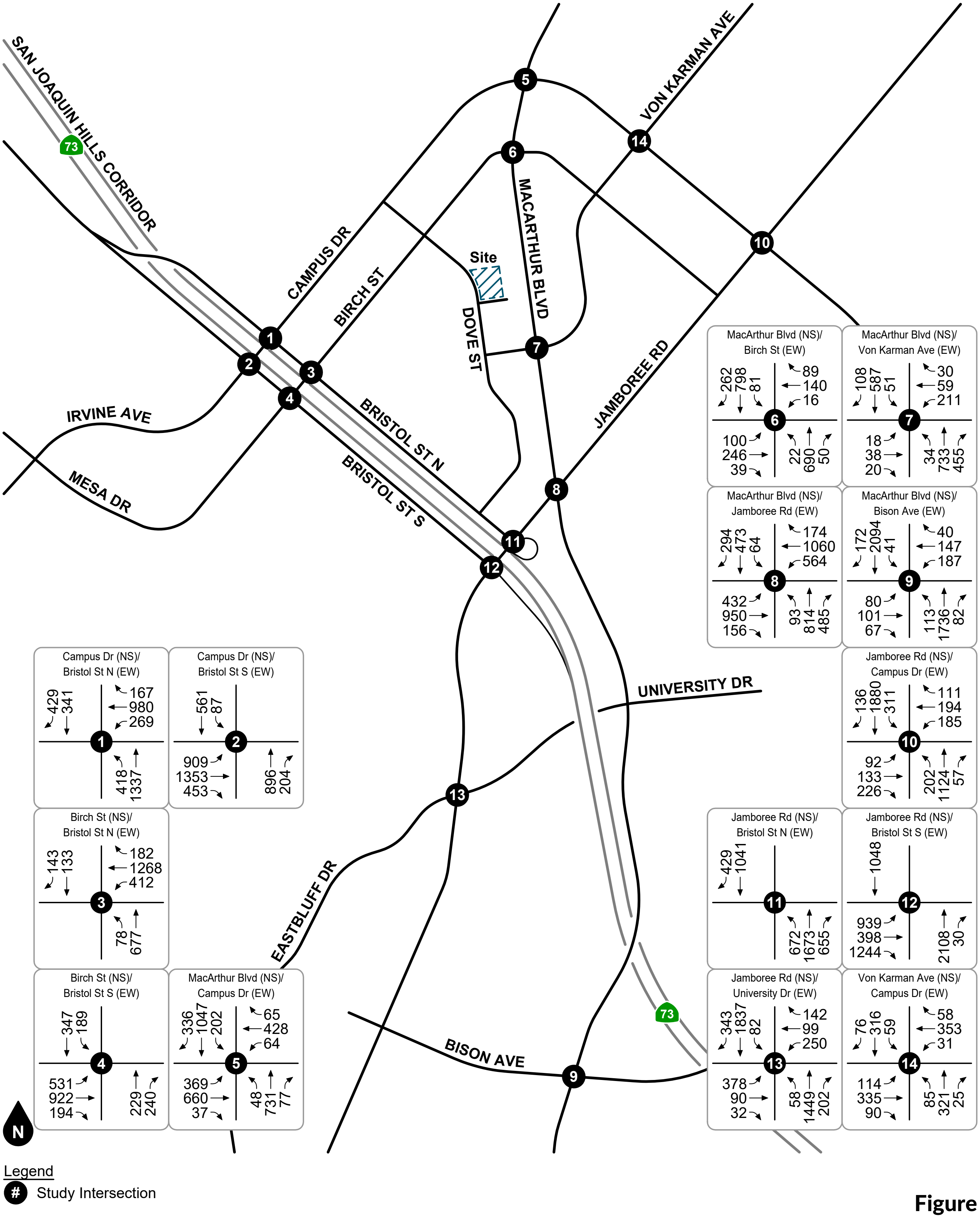


Figure 23
CEQA Year 2029 Without Project
AM Peak Hour Intersection Turning Movement Volumes

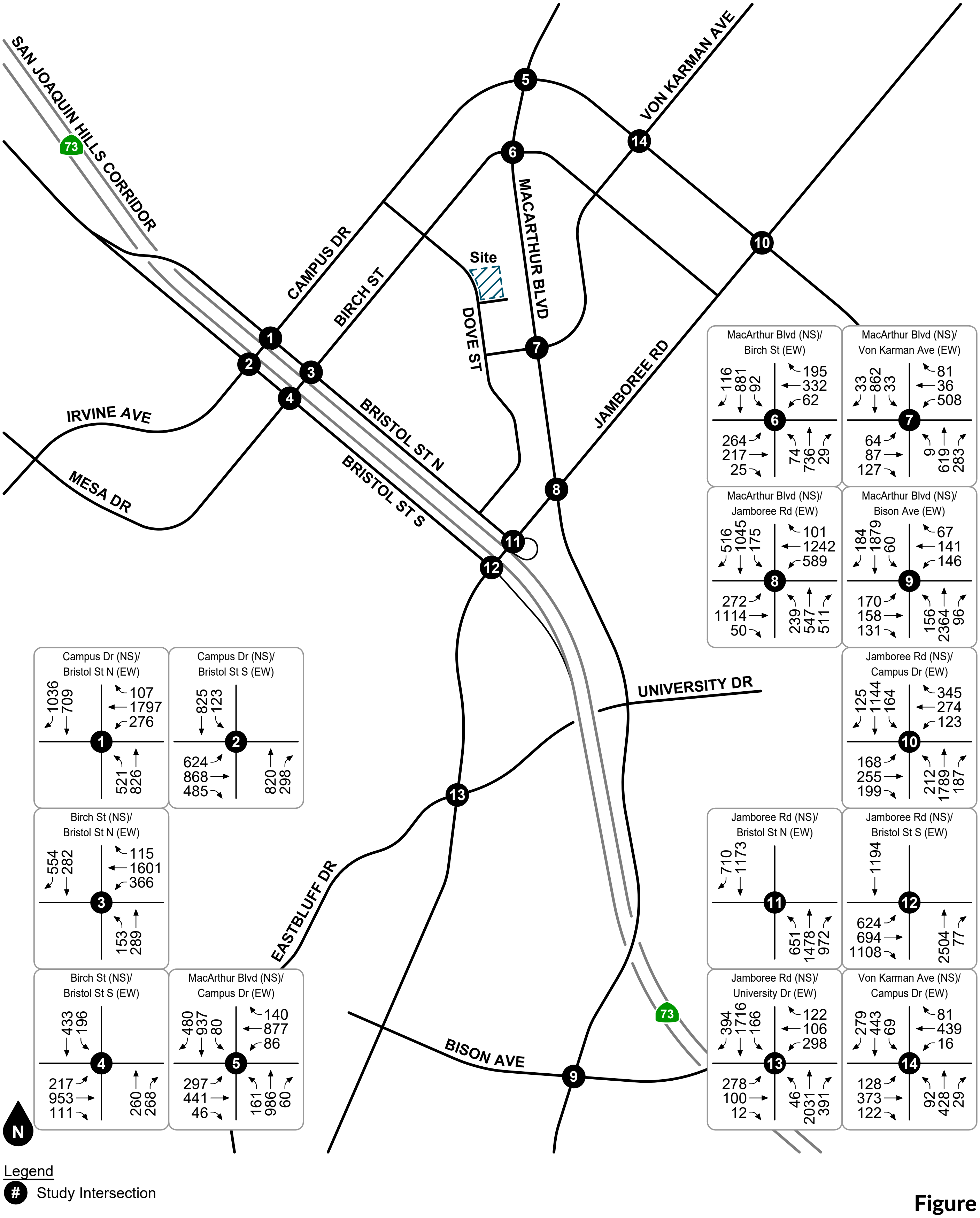


Figure 24
CEQA Year 2029 Without Project
PM Peak Hour Intersection Turning Movement Volumes

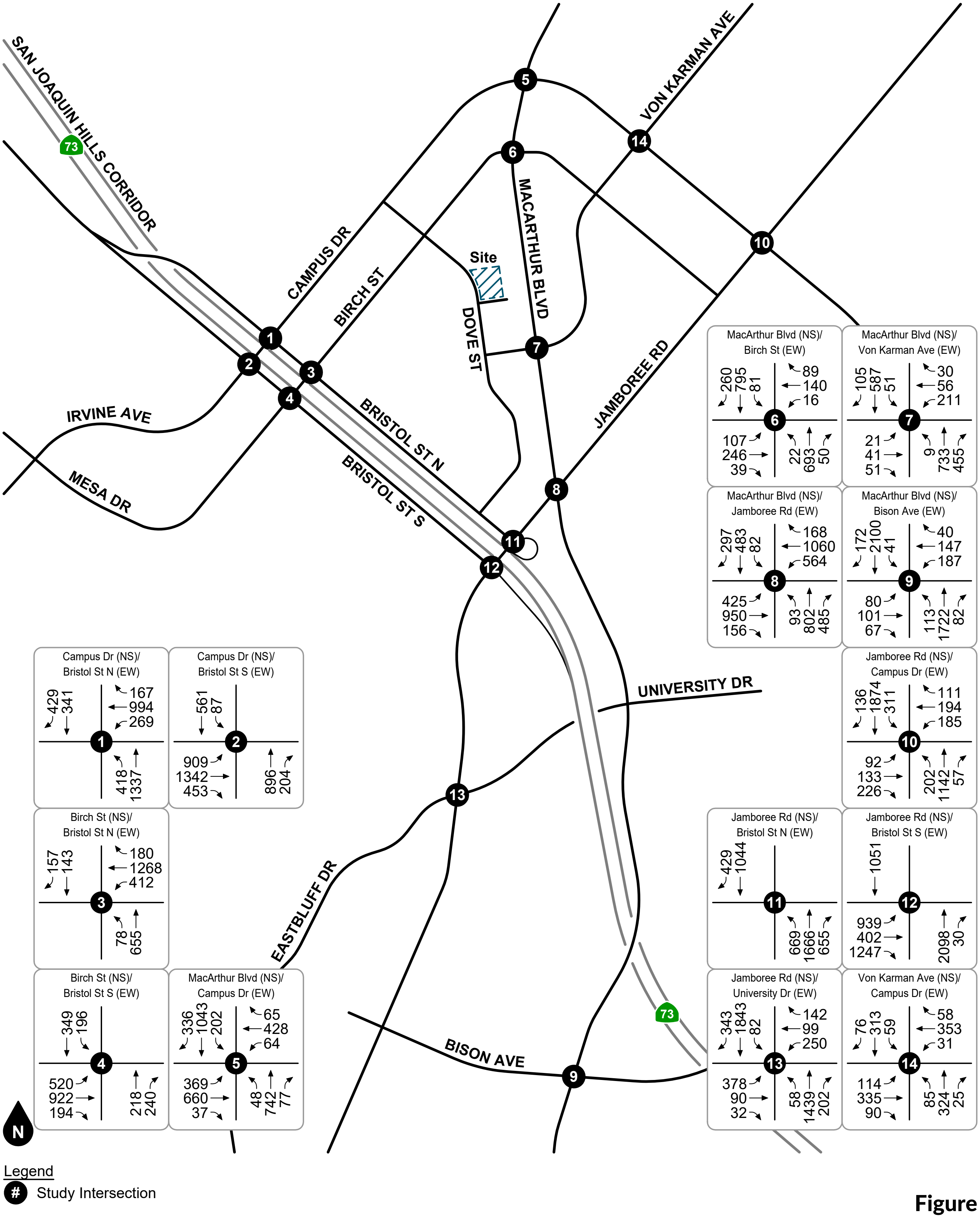


Figure 25
CEQA Year 2029 With Project
AM Peak Hour Intersection Turning Movement Volumes

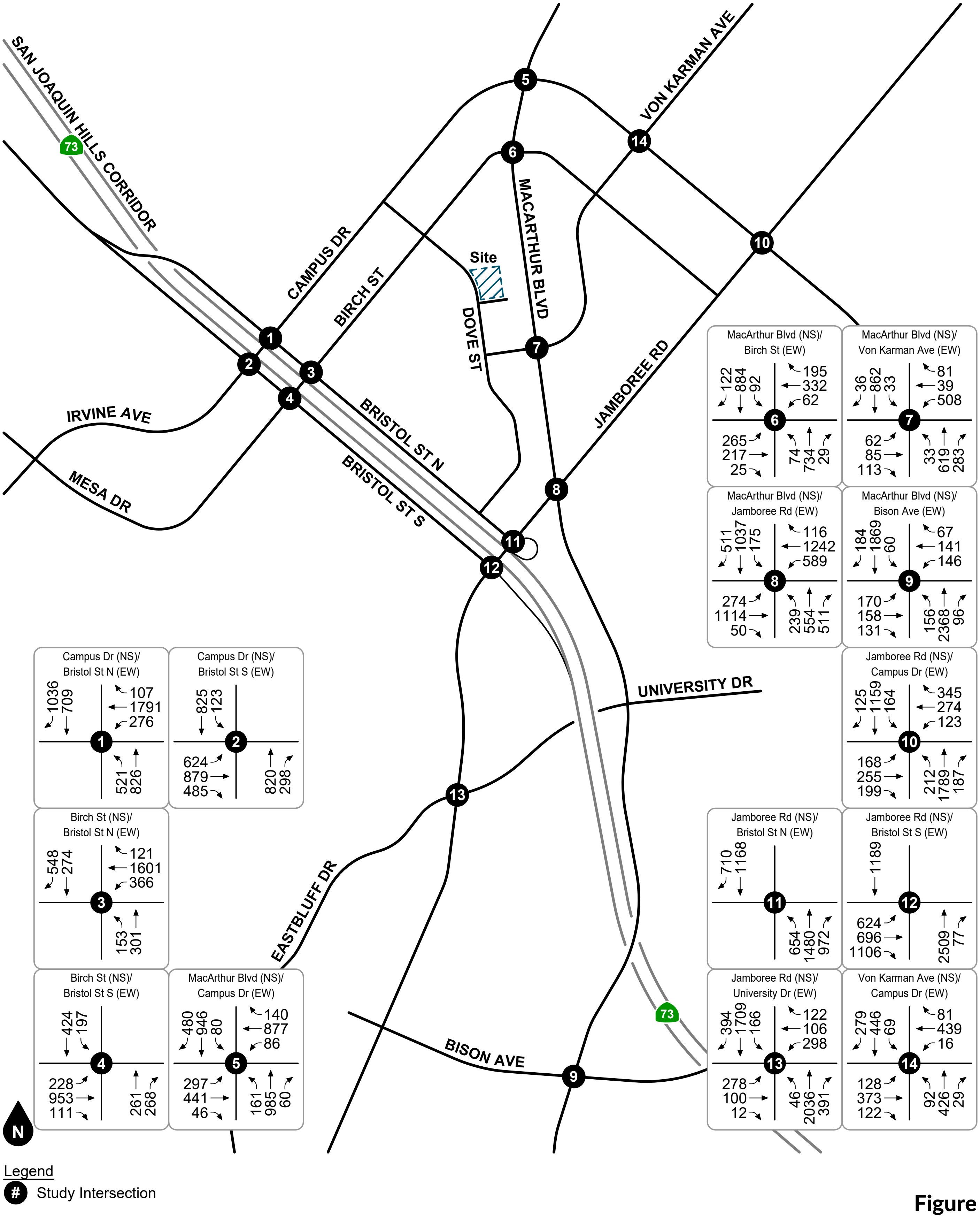


Figure 26
CEQA Year 2029 With Project
PM Peak Hour Intersection Turning Movement Volumes

8. GENERAL PLAN COMPARISON ANALYSIS

This section presents analysis of Post 2030 General Plan Buildout conditions in support of the project's proposed addendum to the 2006 General Plan EIR. Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix C.

GENERAL PLAN COMPARISON METHODOLOGY

This analysis compares the traffic analysis zone (TAZ) as analyzed in the Post 2030 General Plan Buildout traffic analysis with the proposed project. The Newport Beach Traffic Model (NBTM) TAZ 1383 was analyzed with 202,585 square feet of general office in the 2006 General Plan EIR. Since the project is constructing 282 multifamily housing dwelling units, the project is proposing 282 additional dwelling units compared to the 2006 General Plan EIR analysis. Therefore, Post 2030 General Plan Buildout With Project conditions were determined by adding the net increase in dwelling units proposed within TAZ 1383 to the Post 2030 General Plan Buildout forecasts originally evaluated in the 2006 General Plan EIR. The general office square footage stayed unchanged in this analysis.

GENERAL PLAN COMPARISON TRIP GENERATION AND TRIP DISTRIBUTION

Table 7 shows the project trip generation based upon trip generation rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for multifamily housing (mid-rise) not close to transit (Land Use Code 221) were determined to adequately represent the proposed land use and was selected for use in this analysis. The project trip generation forecast is determined by multiplying the trip generation rates by the land use quantity.

As shown in Table 7, the proposed increase in General Plan buildout units is estimated to generate approximately 1,280 additional daily trips, including 104 additional trips during the AM peak hour and 110 additional trips during the PM peak hour.

Project residential trip distribution patterns (see Figure 12 and Figure 13) were used for this analysis.

POST 2030 GENERAL PLAN BUILDOUT WITHOUT PROJECT VOLUME FORECASTS

Post 2030 General Plan Buildout Without Project volume forecasts were provided by the City of Newport Beach based on the 2006 General Plan EIR. Post 2030 General Plan Buildout Without Project AM and PM peak hour intersection turning movement volumes are shown on Figure 27 and Figure 28.

POST 2030 GENERAL PLAN BUILDOUT WITH PROJECT VOLUME FORECASTS

Post 2030 General Plan Buildout With Project volume forecasts were developed by adding the General Plan Comparison project trips to Post 2030 General Plan Buildout Without Project traffic volumes. Post 2030 General Plan Buildout With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 29 and Figure 30.

GENERAL PLAN COMPARISON IMPACT ASSESSMENT

ICU and Levels of Service at the applicable study intersections for General Plan Comparison: Post 2030 General Plan Buildout Without and With Project conditions are shown in Table 8. As shown in Table 8, the study intersections are forecast to operate at Levels of Service D or better during the peak hours for Post 2030 General Plan Buildout Without and With Project conditions, except for the following intersections:

1. Campus Drive (NS) at Bristol Street North (EW) (Both AM/PM Peak Hours)
3. Birch Street (NS) at Bristol Street North (EW) (AM Peak Hour)
5. MacArthur Boulevard (NS) at Campus Drive (EW) (PM Peak Hour)
6. MacArthur Boulevard (NS) at Birch Street (EW) (PM Peak Hour)
10. Jamboree Road (NS) at Campus Drive (EW) (PM Peak Hour)
12. Jamboree Road (NS) at Bristol Street South (EW) (AM Peak Hour)

Table 8 also calculates the net change in ICU at the study intersections for Post 2030 General Plan Buildout With Project conditions. As shown in Table 8, the addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no significant Level of Service impacts at the study intersections for Post General Plan Buildout With Project conditions and no new mitigation measures are required.

Table 7
General Plan Comparison Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Unit[2]	% In	% Out	Rate	% In	% Out	Rate	Daily
Multifamily Housing (Mid-Rise)	ITE 221	DU	23%	77%	0.37	61%	39%	0.39	4.54

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Unit[2]	In	Out	Total	In	Out	Total	Daily
Multifamily Housing (Mid-Rise)[3]	282	DU	25	79	104	68	42	110	1,280

Notes:

(1) ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code

(2) DU = Dwelling Units

(3) The General Plan comparison analysis evaluates an additional 282 DU to NBTM TAZ 1383. Project (282 DU) - TAZ 1383 (0 DU) = 282 DU.

Table 8
General Plan Comparison: Post 2030 General Plan Buildout Intersection Levels of Service and Impact Assessment

ID	Study Intersection	Traffic Control[1]	General Plan Buildout Without Project				General Plan Buildout With Project				V/C Increase		Significant Impact?
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
			V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	V/C[2]	LOS[3]	AM	PM	
1.	Campus Dr (NS) at Bristol St North (EW)	TS	**1.024**	**F**	**0.948**	**E**	**1.026**	**F**	**0.950**	**E**	+0.002	+0.002	No
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	TS	0.893	D	0.774	C	0.893	D	0.776	C	0.000	+0.002	No
3.	Birch St (NS) at Bristol St North (EW)	TS	**0.916**	**E**	0.811	D	**0.918**	**E**	0.815	D	+0.002	+0.004	No
4.	Birch St (NS) at Bristol St South (EW)	TS	0.547	A	0.625	B	0.550	A	0.626	B	+0.003	+0.001	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)[4]	TS	0.809	D	**1.241**	**F**	0.809	D	**1.241**	**F**	0.000	0.000	No
6.	MacArthur Blvd (NS) at Birch St (EW)	TS	0.796	C	**1.016**	**F**	0.797	C	**1.018**	**F**	+0.001	+0.002	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	TS	0.562	A	0.682	B	0.566	A	0.708	C	+0.004	+0.026	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)[4]	TS	0.877	D	0.858	D	0.884	D	0.859	D	+0.007	+0.001	No
9.	MacArthur Blvd (NS) at Bison Ave (EW)	TS	0.775	C	0.792	C	0.775	C	0.793	C	0.000	+0.001	No
10.	Jamboree Rd (NS) at Campus Dr (EW)[4]	TS	0.930	E	**1.180**	**F**	0.933	E	**1.184**	**F**	+0.003	+0.004	No
11.	Jamboree Rd (NS) at Bristol St North (EW)	TS	0.681	B	0.606	B	0.681	B	0.607	B	0.000	+0.001	No
12.	Jamboree Rd (NS) at Bristol St South (EW)	TS	**0.942**	**E**	0.867	D	**0.942**	**E**	0.868	D	0.000	+0.001	No
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	TS	0.681	B	0.667	B	0.682	B	0.668	B	+0.001	+0.001	No
14.	Von Karman Ave (NS) at Campus Dr (EW)[4]	TS	0.731	C	0.972	E	0.733	C	0.973	E	+0.002	+0.001	No

Notes:

(1) TS = Traffic Signal

(2) V/C = Volume/Capacity

(3) LOS = Level of Service

(4) Level of Service E is acceptable; shared jurisdiction with City of Irvine.

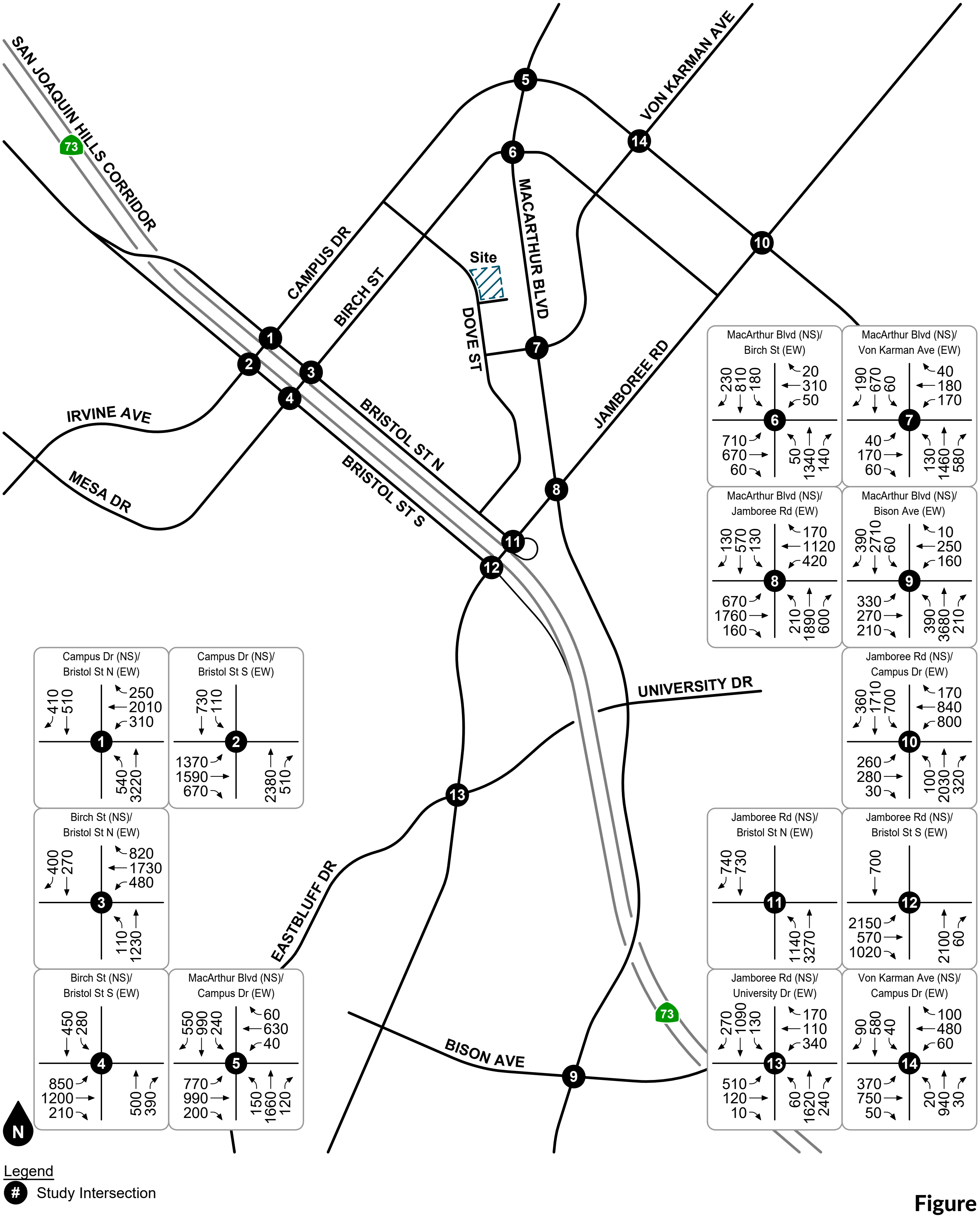


Figure 27
Post 2030 General Plan Buildout Without Project
AM Peak Hour Intersection Turning Movement Volumes

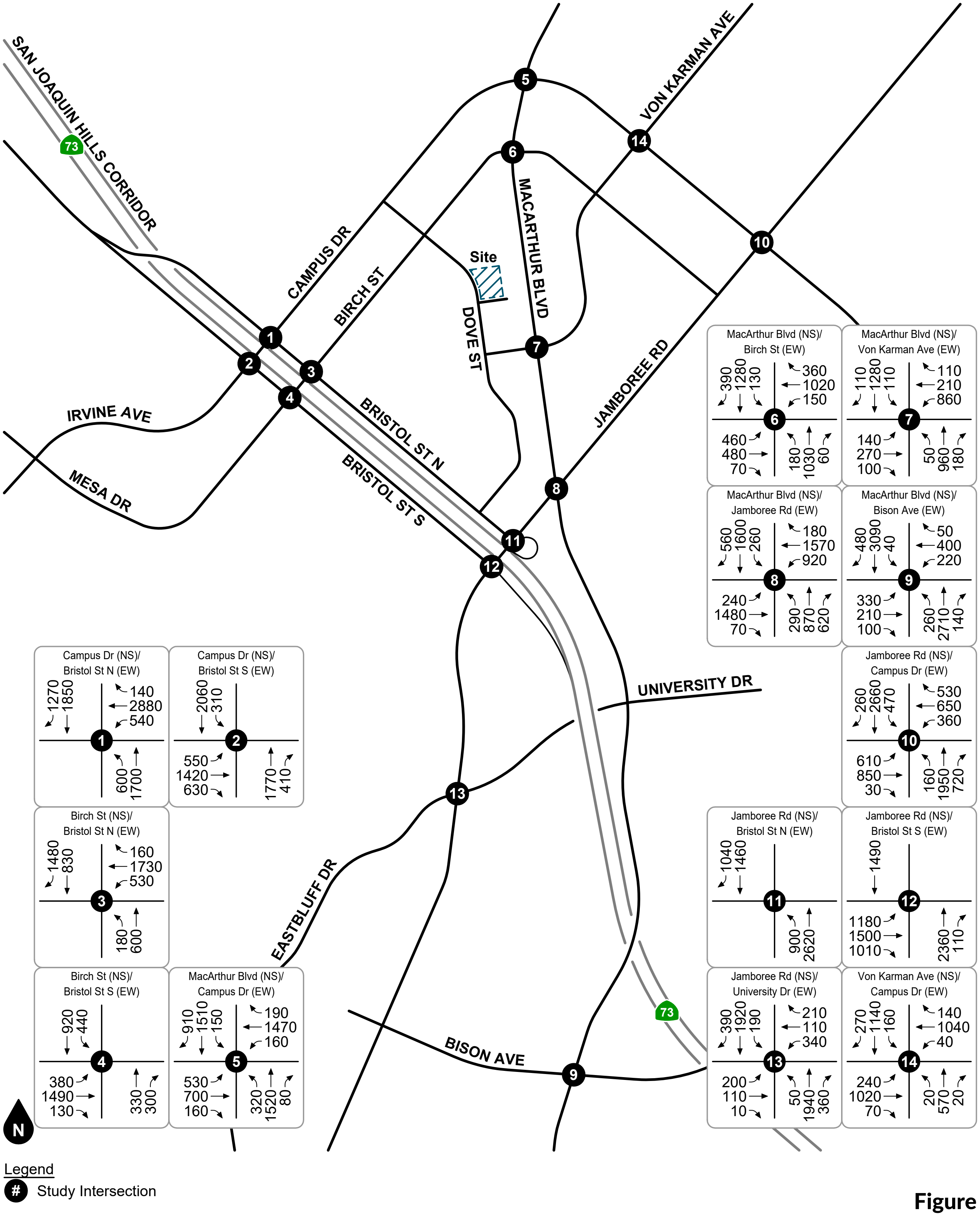


Figure 28
Post 2030 General Plan Buildout Without Project
PM Peak Hour Intersection Turning Movement Volumes

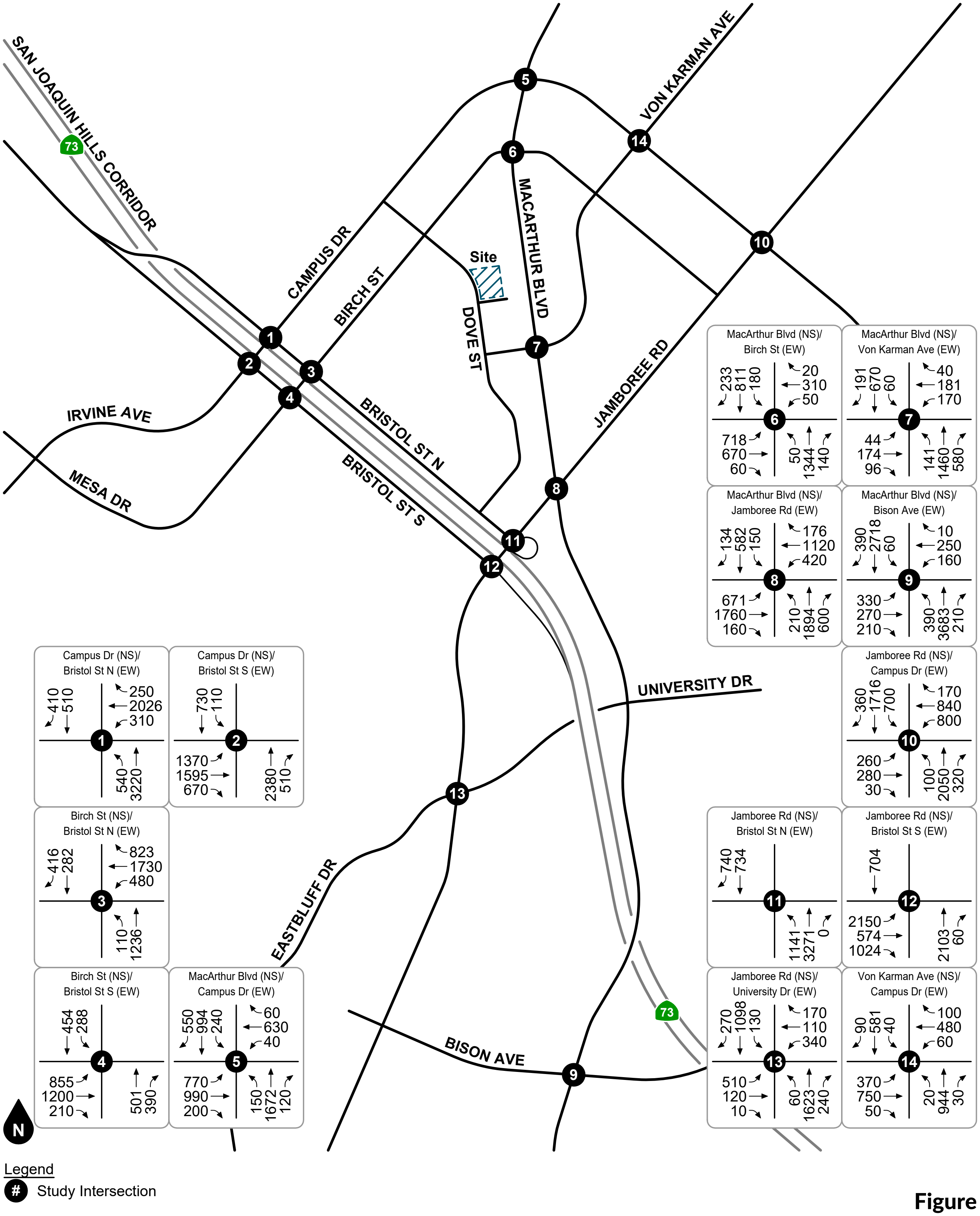


Figure 29
Post 2030 General Plan Buildout With Project
AM Peak Hour Intersection Turning Movement Volumes

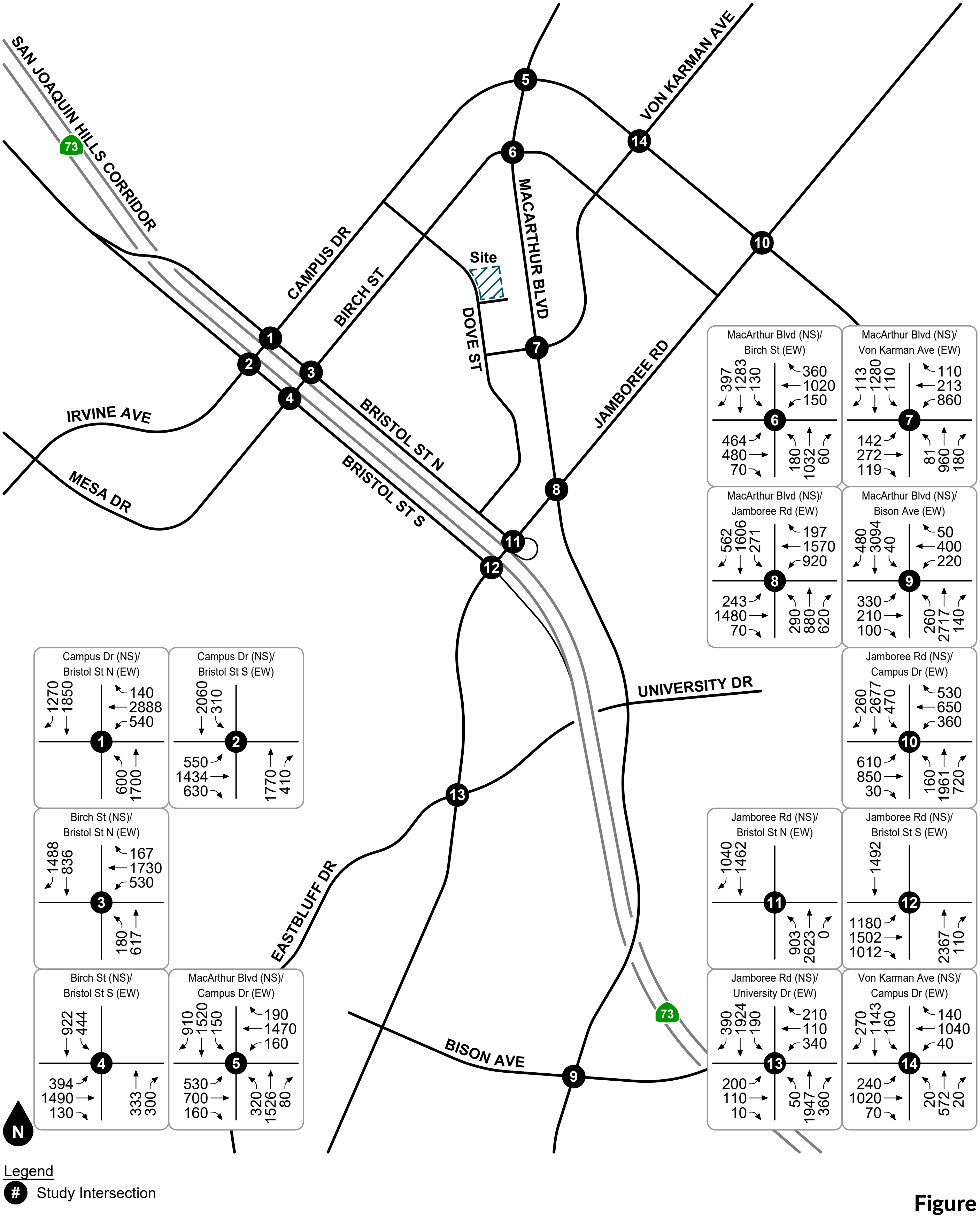


Figure 30
Post 2030 General Plan Buildout With Project
PM Peak Hour Intersection Turning Movement Volumes

9. CONGESTION MANAGEMENT PROGRAM

This section provides analysis of the project impacts at County facilities in accordance with typical Orange County Congestion Management Program (CMP) requirements.

BACKGROUND

The Orange County CMP is a result of Proposition 111, which was a statewide initiative approved by the voters in June 1990. To prevent gas tax revenues from being used to promote future development, the legislation requires that a traffic impact analysis be prepared for new development. The traffic impact analysis is prepared to monitor and mitigate traffic impacts caused by new development. In Orange County, the Measure M Growth Management Program requires similar efforts; however, compliance with the CMP is required for local jurisdictions to receive Measure M2 funds.

The Legislature requires that adjacent jurisdictions use a standard methodology for conducting a traffic impact analysis. Although details vary from one county to another, the general approach selected by each county for conducting traffic impact analyses has common elements. The Orange County CMP uses the Intersection Capacity Utilization methodology for analysis of intersections within the designated CMP roadway system.

CMP-MONITORED INTERSECTIONS

The following intersections in the City of Newport Beach are part of the CMP Highway System that require monitoring to ensure that Level of Service standards are maintained:

- Newport Boulevard at Coast Highway
- MacArthur Boulevard at Jamboree Road
- MacArthur Boulevard at Coast Highway

REQUIREMENTS FOR IMPROVEMENTS

To determine whether the addition of project-generated trips results in an operational impact at a CMP study intersection, and thus requires improvements, the Orange County CMP utilizes the following requirements:

- An operational project impact is defined to occur when a proposed project is forecast to increase traffic demand at a CMP study facility by more than three percent of capacity (V/C > 0.03), causing or worsening Level of Service F (V/C > 1.00).

CRITERIA FOR PREPARATION OF CMP IMPACT ANALYSIS

The Orange County CMP uses the following criteria to determine if a proposed development requires analysis:

- Development projects forecast to generate 2,400 daily trips or more and have indirect access to a CMP facility; or development projects forecast to generate 1,600 daily trips or more and have direct access to a CMP facility; or

- Projects with a potential to create an impact of more than three percent of Level of Service E capacity.

Since the proposed project has indirect access to a CMP facility (e.g., MacArthur Boulevard or Jamboree Road) and is forecast to generate less than 2,400 daily trips, the proposed project does not satisfy the criteria for preparation of a separate CMP impact analysis.

10. SITE ACCESS

This section includes a description of project improvements necessary to provide site access and an evaluation of site access and circulation. The following section is based on the site plan used in this traffic impact analysis.

SITE ACCESS

Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The project driveways at Dove Street and Dolphin Striker Way will continue to provide full access. Based on review of the adjacent development and lane configurations along Dove Street and Dolphin Striker Way, the existing lane configurations are anticipated to provide adequate circulation. The final parking and circulation will be reviewed and approved by the City of Newport Beach.

Based on the forecast project trip distribution patterns, the majority of the project trips, particularly resident trips during the AM/PM peak hours, are expected to access the site via the project driveway at Dove Street. Dove Street is a four-lane unclassified roadway at the project driveway that connects with other arterial and regional roadway facilities. Northbound traffic along Dove Street at the project driveway will operate in free-flow conditions. Right turns into the project site from Dove Street will have no conflicting vehicular movements and are therefore expected to cause minimal to no delays along Dove Street. The southbound left turn movement from Dove Street into the project driveway will need to yield to northbound traffic on Dove Street and may experience small delays while waiting for an acceptable gap, similar to current conditions. Left turn inbound access to the project site on Dove Street is currently permitted and consistent with adjacent uses along Dove Street.

11. VEHICLE MILES TRAVELED (VMT)

BACKGROUND

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. All agencies and projects State-wide are required to utilize the updated CEQA guidelines recommending use of VMT for evaluating transportation impacts as of July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

VMT ASSESSMENT AND SCREENING

The project VMT screening is for informational purposes only.

The project VMT impact has been assessed in accordance with guidance provided by the City of Newport Beach *SB743 Implementation* (April 6, 2020) ["the City VMT Guidelines"] and City Council Policy K-3. The transportation guidelines provide a framework for "screening thresholds" for certain projects that are expected to cause a less than significant impact without conducting a detailed VMT study. The proposed project is considered a residential land use.

The City VMT Guidelines contain a map of VMT per capita for all existing Newport Beach residential areas (see Appendix F). VMT per capita in each area is compared to the regional average VMT per capita for Orange County. This map shows areas where residential development have a VMT per capita lower than the Orange County regional average and may therefore be presumed to result in a less than significant VMT impact based on guidance provided in the OPR Technical Advisory.

The proposed project is in an area with low residential VMT per capita. Therefore, the proposed project is presumed to have a less than significant impact on VMT since it satisfies the City-established screening criteria. No additional VMT modeling or mitigation measures are required.

12. CONCLUSIONS

This section summarizes the findings and mitigation measures (if any) identified in previous sections of this study.

PROJECT TRIP GENERATION

The existing project site land use is estimated per Table 2 to generate approximately 658 daily trips, including 92 trips during the AM peak hour and 88 trips during the PM peak hour. The proposed project site land use is forecast to generate approximately 1,280 daily trips, including 104 trips during the AM peak hour and 110 trips during the PM peak hour. Therefore, the proposed project is forecast to result in a net increase of approximately 622 net new daily trips, including 12 net new trips during the AM peak hour and 22 net new trips during the PM peak hour.

TPO IMPACT ANALYSIS

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no Level of Service impacts at the study intersections for TPO Year 2029 With Project conditions and no improvements are required.

CEQA YEAR 2029 IMPACT ANALYSIS

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no significant Level of Service impacts at the study intersections for CEQA Year 2029 With Project conditions and no new mitigation measures are required.

CEQA GENERAL PLAN COMPARISON IMPACT ANALYSIS

The addition of project-generated trips is not forecast to cause any study intersection to operate deficiently (Level of Service E or F) or worsen a deficient intersection operation by more than one percent of capacity; therefore, the proposed project is forecast to result in no significant Level of Service impacts at the study intersections for General Plan Comparison: Post 2030 General Plan Buildout With Project conditions and no new mitigation measures are required.

VMT SCREENING (INFORMATIONAL PURPOSES ONLY)

The proposed project is located in an area with VMT per capita lower than the Orange County regional average for residential use. Per the City VMT Guidelines, the project is therefore presumed to have a less than significant impact on VMT.

CONGESTION MANAGEMENT PROGRAM

Since the proposed project has indirect access to a CMP facility (e.g., MacArthur Boulevard or Jamboree Road) and is forecast to generate less than 2,400 daily trips, the proposed project does not satisfy the criteria for preparation of a separate CMP impact analysis.

SITE ACCESS AND CIRCULATION

Vehicular access is proposed to be maintained via existing driveways at Dove Street and Dolphin Striker Way. The project driveways at Dove Street and Dolphin Striker Way will continue to provide full access. Based on review of the adjacent development and lane configurations along Dove Street and Dolphin Striker Way, the existing lane configurations are anticipated to provide adequate circulation.

APPENDICES

APPENDIX A

GLOSSARY

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
LOS	Level of Service
PCE	Passenger Car Equivalent
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

ACTUATED SIGNAL CONTROL: A type of traffic signal control in which display of each phase depends on whether the corresponding phase detector has registered a service call or the phase is on recall.

ACTUATION: Detection of a roadway user that is forwarded to the signal controller.

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CALL: An indication within a signal controller that a particular phase is waiting for service, either through actuation from a roadway user or phase recall.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass through a roadway facility during a specified period.

CHANNELIZATION: The separation of conflicting traffic movements by use of pavement markings, raised curbs, or other suitable means to facilitate free flow movement.

CLEARANCE INTERVAL: Equal to the yellow plus all-red time, if any, when a traffic signal changes between phases (i.e., the amount of time between the end of a green light from one movement to the beginning of a green light for the next).

COORDINATED SIGNAL CONTROL: A type of traffic signal control in which non-coordinated phases associated with minor movements are constrained such that the coordinated phases are served at a specific time during the signal cycle, thus maintaining the efficient progression of traffic flow along the major roadway.

CONTROL DELAY: The portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign). It includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay.

CORDON: An imaginary boundary line around or across a study area across which vehicles, persons, or other information can be collected for survey and analytical purposes.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic traveling at a given speed to radically alter their speed or trajectory.

CYCLE: A complete sequence of signal indications for all phases.

CYCLE LENGTH: The total time for a traffic signal to complete one full cycle.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The total additional travel time experienced by a roadway user (driver, passenger, bicyclist, or pedestrian) beyond that required to travel at a desired speed.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device used to count or determine the presence of a roadway user.

DESIGN SPEED: A speed used for purposes of designing horizontal and vertical alignments of a highway.

DIRECTIONAL SPLIT: The percent of two-way traffic traveling in a specified direction.

DIVERSION: The rerouting of traffic from a normal path of travel between two points, such as to avoid congestion or perform a secondary trip.

FREE FLOW: Traffic flow that is unaffected by a traffic control and/or or upstream or downstream conditions.

GAP: Time or distance between two vehicles measured from rear bumper of the front vehicle to front bumper of the second vehicle.

GAP ACCEPTANCE: The method by which a driver accepts an available gap in traffic to enter or cross the road.

HEADWAY: Time or distance between two successive vehicles measured from same point on both vehicles (i.e., front bumper to front bumper).

LEVEL OF SERVICE: A grading scale of quantitative performance measures representing the quality of service of a transportation facility or service from an average traveler’s perspective.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MULTI-MODAL: More than one mode, such as automobile, transit, bicycle, and pedestrian.

OFFSET: The time interval between the beginning of a traffic signal cycle at one intersection and the beginning of signal cycle an adjacent intersection.

PLATOON: A set of vehicles traveling at similar speed and moving as a general group with clear separation between other vehicles ahead and behind.

PASSENGER CAR EQUIVALENT: A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEDESTRIAN CLEARANCE INTERVAL: Also known as the "Flashing Don't Walk" interval, it signals the end of pedestrian entry into the crosswalk following the "Walk" indication and provides time for pedestrians who have already entered the crosswalk to finishing crossing.

PEAK HOUR: The hour within a day in which the maximum volume occurs.

PEAK HOUR FACTOR: The peak hour volume divided by the four times the peak 15-minute flow rate. This

PHASE: In traffic signals, the green, yellow, and red clearance intervals assigned to a specified traffic movement.

PRETIMED SIGNAL: A traffic signal operation in which the cycle length, phasing sequence, and phasing times are predetermined and fixed, regardless of actual demand for any given traffic movement. Also known as a fixed time signal.

PROGRESSION: The coordinated movement of vehicles through signalized intersections along a corridor.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

RECALL: A signal phasing operation in which a specified phase places a call to the signal controller each time a conflicting phase is served, thus ensuring the specified phase will be serviced again.

SEMI-ACTUATED CONTROL: A type of traffic signal control in which only the minor movements are provided detection.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible, including reaction and response time.

TRIP OR TRIP END: The one-directional movement of a person or vehicle. Every trip has an origin and a destination at its respective ends (i.e., trip ends). In terms of site trip generation, the same vehicle entering and exiting a site generates two trips: one inbound trip and one outbound trip.

TRIP GENERATION RATE: The rate at which a land use generates trips per the specified land use variable, such per dwelling unit or per thousand square feet.

TRUCK: A heavy motor vehicle generally used for transporting goods.

VEHICLE MILES TRAVELED: A measure of the amount and distance of automobile travel essentially calculated as the sum of each trip times the trip length.

APPENDIX B

VOLUME COUNT WORKSHEETS

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Campus Dr
E-W Direction: Bristol St N

File Name : BR 4172
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

Groups Printed- Turning Movements

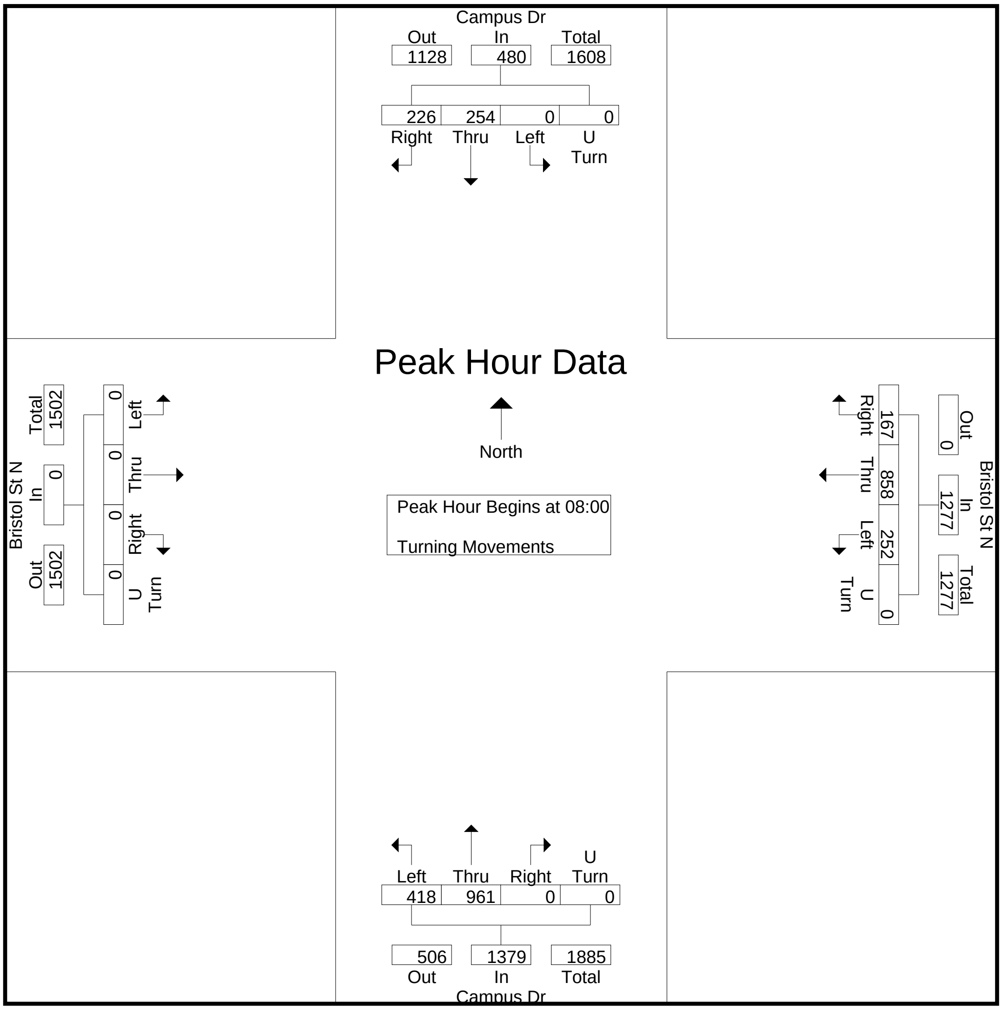
	Campus Dr Southbound				Bristol St N Westbound				Campus Dr Northbound				Bristol St N Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	32	40	0	0	20	117	33	0	0	102	76	0	0	0	0	0	420
07:15	38	49	0	0	23	116	18	0	0	120	76	0	0	0	0	0	440
07:30	48	53	0	0	25	122	33	0	0	161	84	0	0	0	0	0	526
07:45	52	82	0	0	41	190	53	0	0	206	102	0	0	0	0	0	726
Total	170	224	0	0	109	545	137	0	0	589	338	0	0	0	0	0	2112
08:00	43	72	0	0	34	167	66	0	0	250	89	0	0	0	0	0	721
08:15	59	65	0	0	38	201	55	0	0	244	107	0	0	0	0	0	769
08:30	65	57	0	0	39	248	61	0	0	225	112	0	0	0	0	0	807
08:45	59	60	0	0	56	242	70	0	0	242	110	0	0	0	0	0	839
Total	226	254	0	0	167	858	252	0	0	961	418	0	0	0	0	0	3136
16:30	149	116	0	0	15	380	78	0	0	141	140	0	0	0	0	0	1019
16:45	138	111	0	0	38	417	80	0	0	132	140	0	0	0	0	0	1056
Total	287	227	0	0	53	797	158	0	0	273	280	0	0	0	0	0	2075
17:00	248	178	0	0	21	463	40	0	0	160	165	0	0	0	0	0	1275
17:15	233	148	0	0	30	404	81	0	0	144	100	0	0	0	0	0	1140
17:30	194	138	0	0	18	413	77	0	0	121	116	0	0	0	0	0	1077
17:45	179	135	0	0	17	369	84	0	0	118	106	0	0	0	0	0	1008
Total	854	599	0	0	86	1649	282	0	0	543	487	0	0	0	0	0	4500
18:00	124	110	0	0	22	334	57	0	0	96	99	0	0	0	0	0	842
18:15	109	74	0	0	16	251	49	0	0	101	110	0	0	0	0	0	710
Grand Total	1770	1488	0	0	453	4434	935	0	0	2563	1732	0	0	0	0	0	13375
Apprch %	54.3	45.7	0	0	7.8	76.2	16.1	0	0	59.7	40.3	0	0	0	0	0	
Total %	13.2	11.1	0	0	3.4	33.2	7	0	0	19.2	12.9	0	0	0	0	0	

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Campus Dr
E-W Direction: Bristol St N

File Name : BR 4172
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

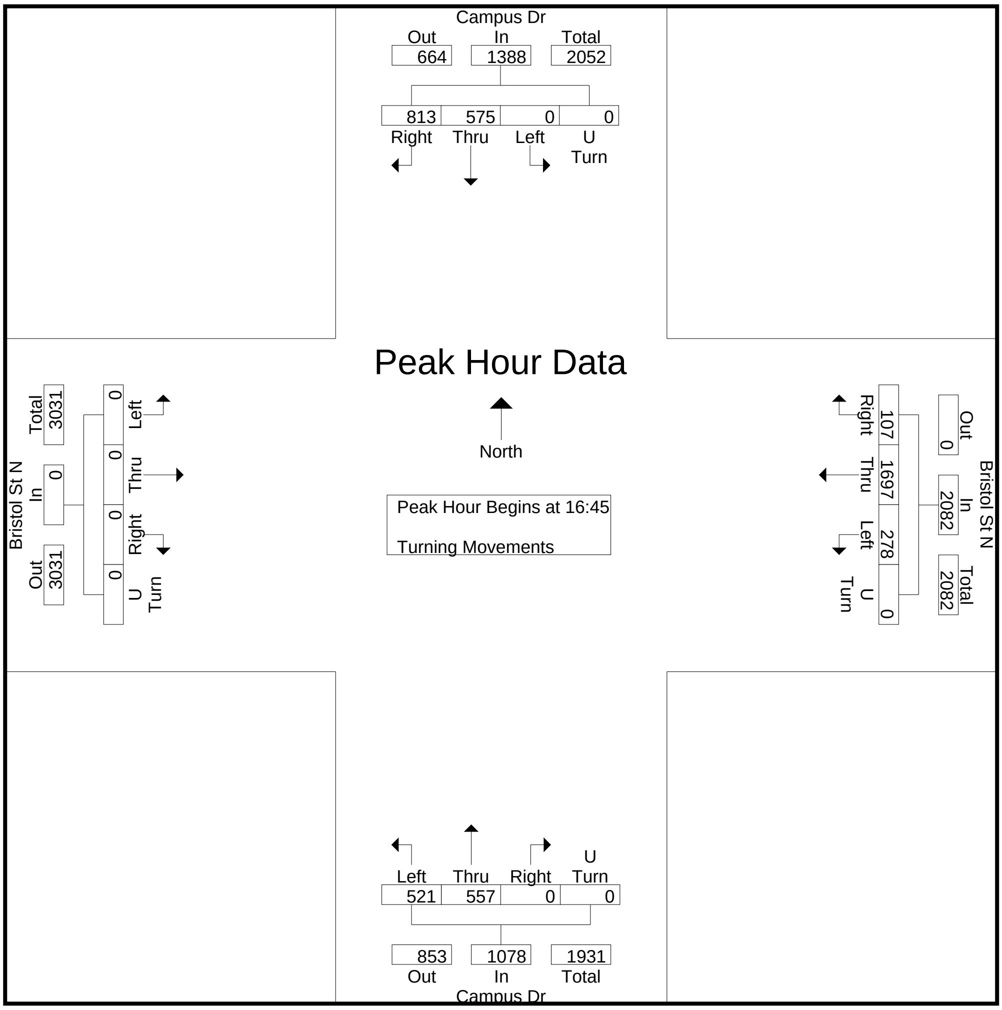
	Campus Dr Southbound					Bristol St N Westbound					Campus Dr Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	43	**72**	0	0	115	34	167	66	0	267	0	**250**	89	0	339	0	0	0	0	0	721
08:15	59	65	0	0	**124**	38	201	55	0	294	0	244	107	0	351	0	0	0	0	0	769
08:30	**65**						**248**	61	0	348	0	225	**112**								
08:45	**59**	**60**	**0**	**0**	**119**	**56**	**242**	**70**	**0**	**368**	0	242	110	0	**352**	0	0	0	0	0	**839**
Total Volume	226	254	0	0	480	167	858	252	0	1277	0	961	418	0	1379	0	0	0	0	0	3136
% App. Total	47.1	52.9	0	0		13.1	67.2	19.7	0		0	69.7	30.3	0		0	0	0	0		
PHF	.869	.882	.000	.000	.968	.746	.865	.900	.000	.868	.000	.961	.933	.000	.979	.000	.000	.000	.000	.000	.934



City : Newport Beach
N-S Direction : Campus Dr
E-W Direction: Bristol St N

File Name : BR 4172
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

	Campus Dr Southbound					Bristol St N Westbound					Campus Dr Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	138	111	0	0	249	**38**				**535**	0	132	140	0	272	0	0	0	0	0	1056
17:00	**248**	**178**	0	0	**426**	21	**463**	40	0	524	0	**160**	**165**		**325**	0	0	0	0	0	**1275**
17:15	233	148	0	0	381	30	404	**81**													
17:30	**194**	**138**	**0**	**0**	**332**	**18**	**413**	**77**	**0**	**508**	**0**	**121**	**116**	**0**	**237**	**0**	**0**	**0**	**0**	**0**	**1077**
Total Volume	813	575	0	0	1388	107	1697	278	0	2082	0	557	521	0	1078	0	0	0	0	0	4548
% App. Total	58.6	41.4	0	0		5.1	81.5	13.4	0		0	51.7	48.3	0		0	0	0	0		
PHF	.820	.808	.000	.000	.815	.704	.916	.858	.000	.973	.000	.870	.789	.000	.829	.000	.000	.000	.000	.000	.892



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Campus Dr, Irvine Ave
E-W Direction: Bristol St S

File Name : BR 4155
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

Groups Printed- Turning Movements

	Campus Dr, Southbound				Bristol St S Westbound				Irvine Ave Northbound				Bristol St S Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	0	65	13	0	0	0	0	0	33	80	0	0	83	211	94	0	579
07:15	0	61	12	0	0	0	0	0	30	103	0	0	83	226	103	0	618
07:30	0	89	8	0	0	0	0	0	52	122	0	0	87	279	124	0	761
07:45	0	89	14	0	0	0	0	0	57	139	0	0	102	339	156	0	896
Total	0	304	47	0	0	0	0	0	172	444	0	0	355	1055	477	0	2854
08:00	0	137	28	0	0	0	0	0	44	176	0	0	103	284	163	0	935
08:15	0	104	18	0	0	0	0	0	50	187	0	0	127	288	180	0	954
08:30	0	112	19	0	0	0	0	0	55	168	0	0	107	342	169	0	972
08:45	0	104	22	0	0	0	0	0	50	167	0	0	116	378	170	0	1007
Total	0	457	87	0	0	0	0	0	199	698	0	0	453	1292	682	0	3868
16:30	0	166	27	0	0	0	0	0	64	161	0	0	113	210	104	0	845
16:45	0	162	27	0	0	0	0	0	61	155	0	0	125	190	127	0	847
Total	0	328	54	0	0	0	0	0	125	316	0	0	238	400	231	0	1692
17:00	0	171	32	0	0	0	0	0	78	218	0	0	111	219	112	0	941
17:15	0	195	37	0	0	0	0	0	59	158	0	0	136	203	92	0	880
17:30	0	184	37	0	0	0	0	0	65	165	0	0	106	217	71	0	845
17:45	0	195	24	1	0	0	0	0	55	131	0	0	99	204	83	0	792
Total	0	745	130	1	0	0	0	0	257	672	0	0	452	843	358	0	3458
18:00	0	152	22	0	0	0	0	0	51	140	0	0	111	167	79	0	722
18:15	0	102	23	0	0	0	0	0	58	131	0	0	114	161	65	0	654
Grand Total	0	2088	363	1	0	0	0	0	862	2401	0	0	1723	3918	1892	0	13248
Apprch %	0	85.2	14.8	0	0	0	0	0	26.4	73.6	0	0	22.9	52	25.1	0	
Total %	0	15.8	2.7	0	0	0	0	0	6.5	18.1	0	0	13	29.6	14.3	0	

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
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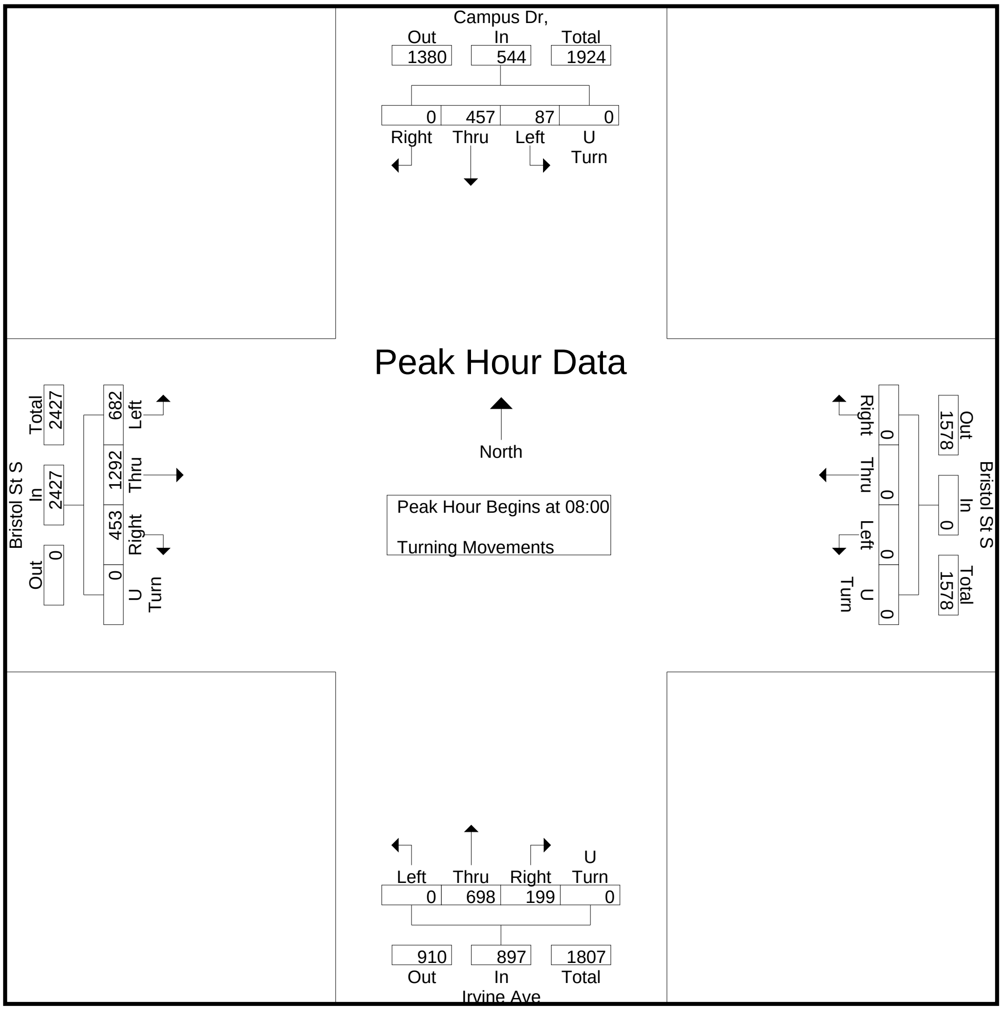
City : Newport Beach
N-S Direction : Campus Dr, Irvine Ave
E-W Direction: Bristol St S

File Name : BR 4155
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

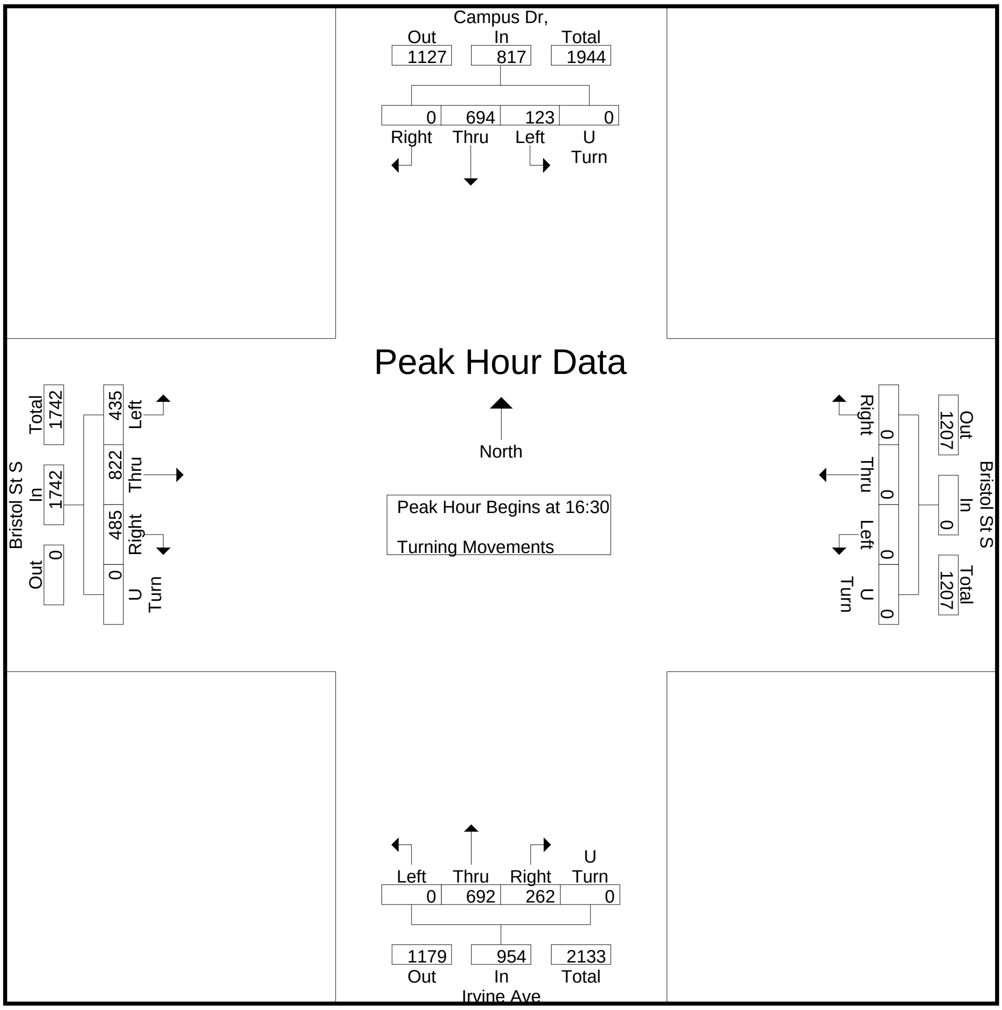
	Campus Dr, Southbound					Bristol St S Westbound					Irvine Ave Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	**137**	**28**		**165**	0	0	0	0	0	44	176	0	0	220	103	284	163	0	550	935
08:15	0	104	18	0	122	0	0	0	0	0	50	**187**	0	0	**237**	**127**		**180**			
08:30	**0**	**112**	**19**	**0**	**131**	**0**	**0**	**0**	**0**	**0**	**55**	**168**	**0**	**0**	**223**	**107**	**342**	**169**	**0**	**618**	**972**
08:45	**0**	**104**	**22**	**0**	**126**	**0**	**0**	**0**	**0**	**0**	**50**	**167**	**0**	**0**	**217**	**116**	**378**	170	0	**664**	**1007**
Total Volume	0	457	87	0	544	0	0	0	0	0	199	698	0	0	897	453	1292	682	0	2427	3868
% App. Total	0	84	16	0		0	0	0	0		22.2	77.8	0	0		18.7	53.2	28.1	0		
PHF	.000	.834	.777	.000	.824	.000	.000	.000	.000	.000	.905	.933	.000	.000	.946	.892	.854	.947	.000	.914	.960



City : Newport Beach
N-S Direction : Campus Dr, Irvine Ave
E-W Direction: Bristol St S

File Name : BR 4155
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

	Campus Dr, Southbound					Bristol St S Westbound					Irvine Ave Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	0	166	27	0	193	0	0	0	0	0	64	161	0	0	225	113	210	104	0	427	845
16:45	0	162	27	0	189	0	0	0	0	0	61	155	0	0	216	125	190	**127**		**442**	847
17:00	0	171	32	0	203	0	0	0	0	0	**78**	**218**	0	0	**296**	111	**219**	112	0	442	**941**
17:15	0	**195**	**37**		**232**	0	0	0	0	0	59	158	0	0	217	**136**					
Total Volume	0	694	123	0	817	0	0	0	0	0	262	692	0	0	954	485	822	435	0	1742	3513
% App. Total	0	84.9	15.1	0		0	0	0	0		27.5	72.5	0	0		27.8	47.2	25	0		
PHF	.000	.890	.831	.000	.880	.000	.000	.000	.000	.000	.840	.794	.000	.000	.806	.892	.938	.856	.000	.985	.933



City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St N

File Name : BR 4175
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

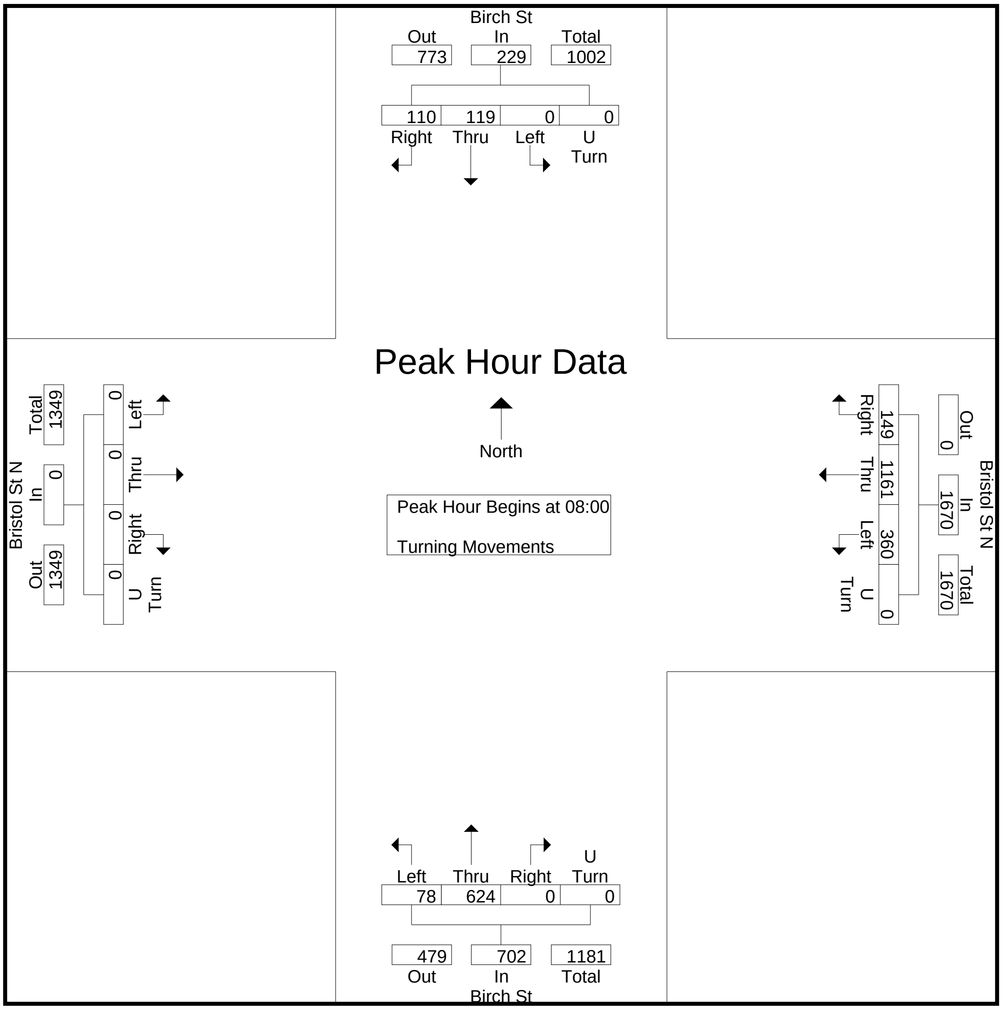
Groups Printed- Turning Movements

	Birch St Southbound				Bristol St N Westbound				Birch St Northbound				Bristol St N Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	27	10	0	0	18	142	27	0	0	66	12	0	0	0	0	0	302
07:15	17	24	0	0	11	132	36	0	0	99	11	0	0	0	0	0	330
07:30	19	16	0	0	15	163	41	0	0	102	17	0	0	0	0	0	373
07:45	15	25	0	0	25	266	67	0	0	134	19	0	0	0	0	0	551
Total	78	75	0	0	69	703	171	0	0	401	59	0	0	0	0	0	1556
08:00	22	27	0	0	40	239	76	0	0	140	22	0	0	0	0	0	566
08:15	25	24	0	0	30	267	81	0	0	161	11	0	0	0	0	0	599
08:30	32	33	0	0	32	322	88	0	0	167	23	0	0	0	0	0	697
08:45	31	35	0	0	47	333	115	0	0	156	22	0	0	0	0	0	739
Total	110	119	0	0	149	1161	360	0	0	624	78	0	0	0	0	0	2601
16:30	121	54	0	0	33	371	86	0	0	66	34	0	0	0	0	0	765
16:45	134	64	0	0	27	369	94	0	0	78	50	0	0	0	0	0	816
Total	255	118	0	0	60	740	180	0	0	144	84	0	0	0	0	0	1581
17:00	164	79	0	0	26	373	93	0	0	75	42	0	0	0	0	0	852
17:15	94	54	0	0	32	390	102	0	0	58	35	0	0	0	0	0	765
17:30	114	62	0	0	25	405	81	0	0	55	26	0	0	0	0	0	768
17:45	110	58	0	0	16	343	61	0	0	51	16	0	0	0	0	0	655
Total	482	253	0	0	99	1511	337	0	0	239	119	0	0	0	0	0	3040
18:00	92	51	0	0	16	290	59	0	0	40	32	0	0	0	0	0	580
18:15	83	29	0	0	18	222	55	0	0	48	20	0	0	0	0	0	475
Grand Total	1100	645	0	0	411	4627	1162	0	0	1496	392	0	0	0	0	0	9833
Apprch %	63	37	0	0	6.6	74.6	18.7	0	0	79.2	20.8	0	0	0	0	0	
Total %	11.2	6.6	0	0	4.2	47.1	11.8	0	0	15.2	4	0	0	0	0	0	

City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St N

File Name : BR 4175
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

	Birch St Southbound					Bristol St N Westbound					Birch St Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	22	27	0	0	49	40	239	76	0	355	0	140	22	0	162	0	0	0	0	0	566
08:15	25	24	0	0	49	30	267	81	0	378	0	161	11	0	172	0	0	0	0	0	599
08:30	**32**											**167**	**23**		**190**	0	0	0	0	0	697
08:45	31	**35**	0	0	**66**	**47**	**333**	**115**		**495**	0	156	22	0	178	0	0	0	0	0	**739**
Total Volume	110	119	0	0	229	149	1161	360	0	1670	0	624	78	0	702	0	0	0	0	0	2601
% App. Total	48	52	0	0		8.9	69.5	21.6	0		0	88.9	11.1	0		0	0	0	0		
PHF	.859	.850	.000	.000	.867	.793	.872	.783	.000	.843	.000	.934	.848	.000	.924	.000	.000	.000	.000	.000	.880

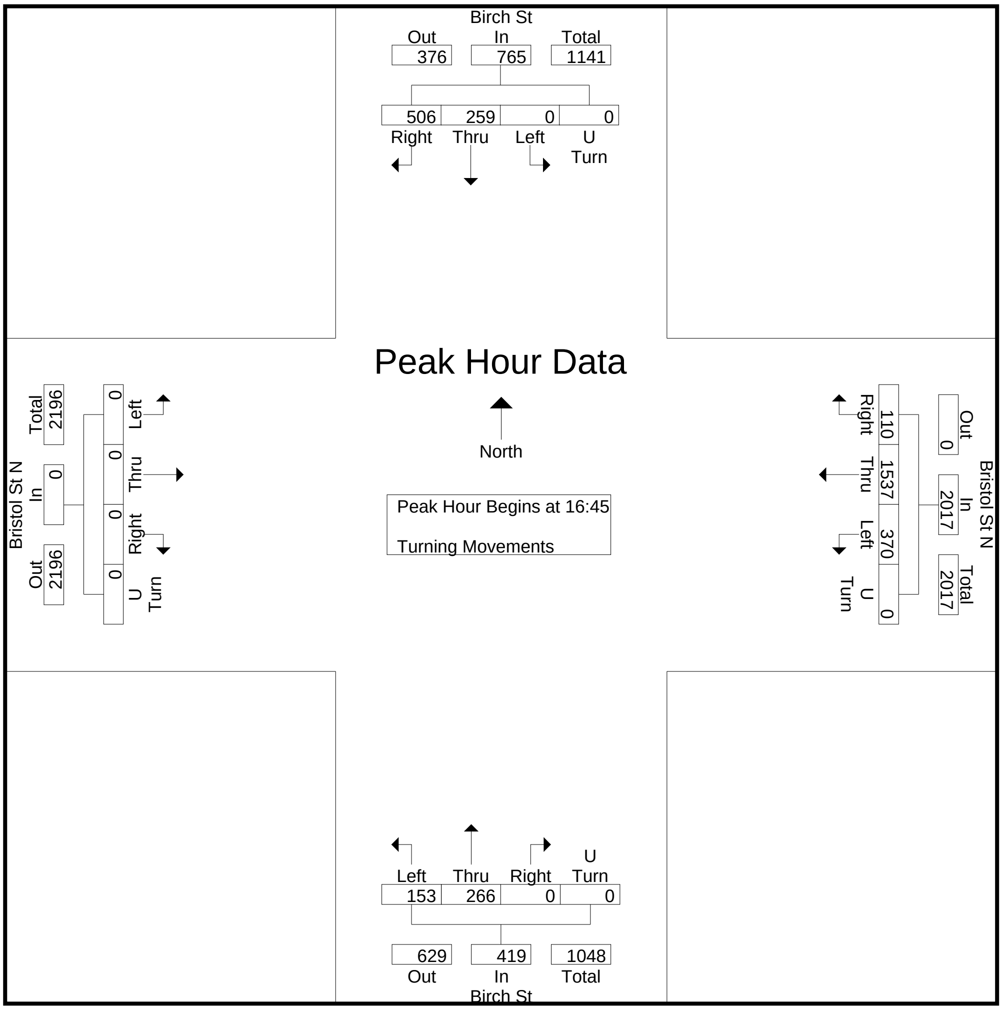


Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St N

File Name : BR 4175
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

	Birch St Southbound					Bristol St N Westbound					Birch St Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	134	64	0	0	198	27	369	94	0	490	0	**78**	**50**		**128**	0	0	0	0	0	816
17:00	**164**	**79**	0	0	**243**	26	373	93	0	492	0	75	42	0	117	0	0	0	0	0	**852**
17:15	94	54	0	0	148	**32**		**102**		**524**	0	58	35	0	93	0	0	0	0	0	765
17:30	114	62	0	0	176	25	**405**	81	0	511	0	55	26	0	81	0	0	0	0	0	768
Total Volume	506	259	0	0	765	110	1537	370	0	2017	0	266	153	0	419	0	0	0	0	0	3201
% App. Total	66.1	33.9	0	0		5.5	76.2	18.3	0		0	63.5	36.5	0		0	0	0	0		
PHF	.771	.820	.000	.000	.787	.859	.949	.907	.000	.962	.000	.853	.765	.000	.818	.000	.000	.000	.000	.000	.939



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St S

File Name : BR 4160
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

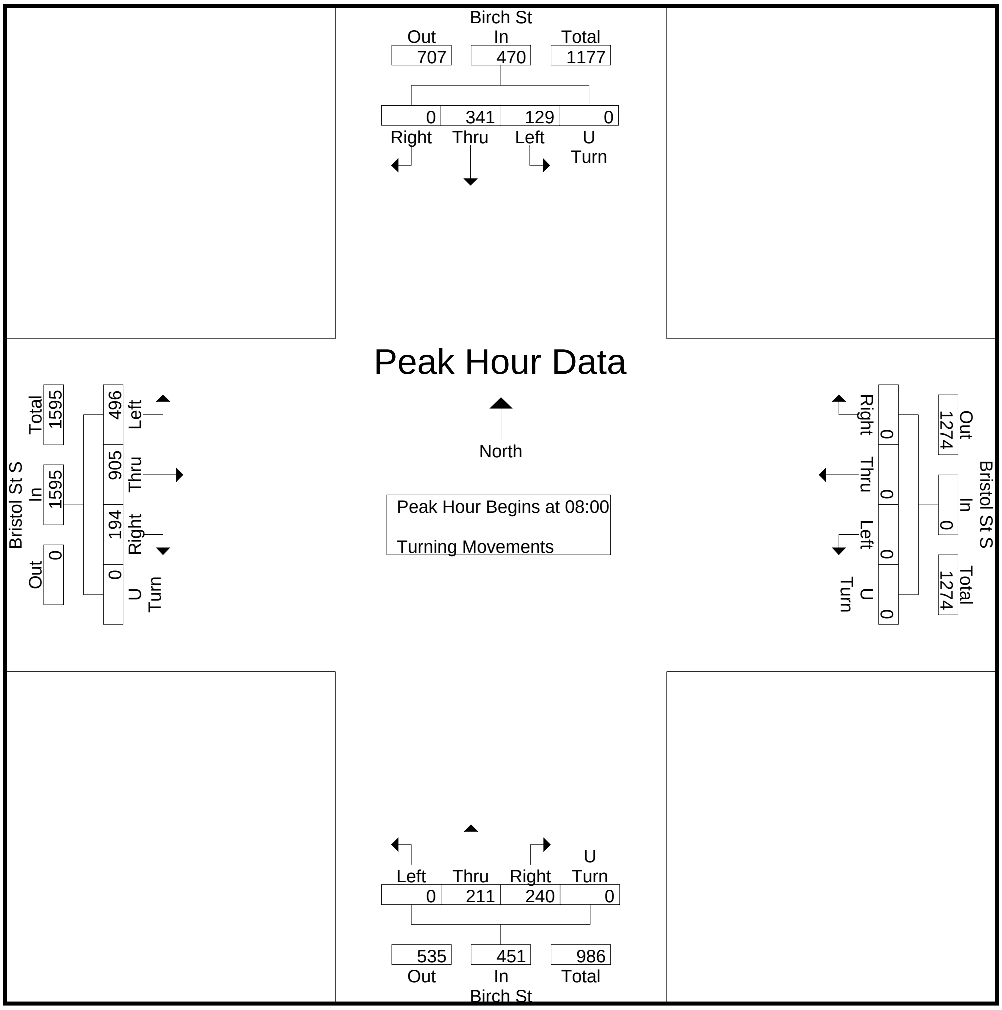
Groups Printed- Turning Movements

	Birch St				Bristol St S				Birch St				Bristol St S				
	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	0	25	13	0	0	0	0	0	25	12	0	0	25	166	71	0	337
07:15	0	30	15	0	0	0	0	0	30	16	0	0	20	184	76	0	371
07:30	0	34	27	0	0	0	0	0	45	41	0	0	28	222	84	0	481
07:45	0	58	25	0	0	0	0	0	57	45	0	0	40	242	111	0	578
Total	0	147	80	0	0	0	0	0	157	114	0	0	113	814	342	0	1767
08:00	0	73	26	0	0	0	0	0	49	55	0	0	45	219	99	0	566
08:15	0	73	26	0	0	0	0	0	53	52	0	0	40	224	115	0	583
08:30	0	86	37	0	0	0	0	0	67	48	0	0	57	218	153	0	666
08:45	0	109	40	0	0	0	0	0	71	56	0	0	52	244	129	0	701
Total	0	341	129	0	0	0	0	0	240	211	0	0	194	905	496	0	2516
16:30	0	67	53	0	0	0	0	0	73	60	0	0	38	211	49	0	551
16:45	0	109	50	0	0	0	0	0	64	63	0	0	22	209	62	0	579
Total	0	176	103	0	0	0	0	0	137	123	0	0	60	420	111	0	1130
17:00	0	110	55	0	0	0	0	0	80	81	0	0	28	246	45	0	645
17:15	0	127	40	0	0	0	0	0	47	48	0	0	23	237	46	0	568
17:30	0	96	38	0	0	0	0	0	59	42	0	0	30	241	39	0	545
17:45	0	87	39	0	0	0	0	0	60	28	0	0	28	240	41	0	523
Total	0	420	172	0	0	0	0	0	246	199	0	0	109	964	171	0	2281
18:00	0	57	41	0	0	0	0	0	32	38	0	0	21	199	26	0	414
18:15	0	59	38	0	0	0	0	0	46	38	0	0	20	195	39	0	435
Grand Total	0	1200	563	0	0	0	0	0	858	723	0	0	517	3497	1185	0	8543
Apprch %	0	68.1	31.9	0	0	0	0	0	54.3	45.7	0	0	9.9	67.3	22.8	0	
Total %	0	14	6.6	0	0	0	0	0	10	8.5	0	0	6.1	40.9	13.9	0	

City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St S

File Name : BR 4160
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

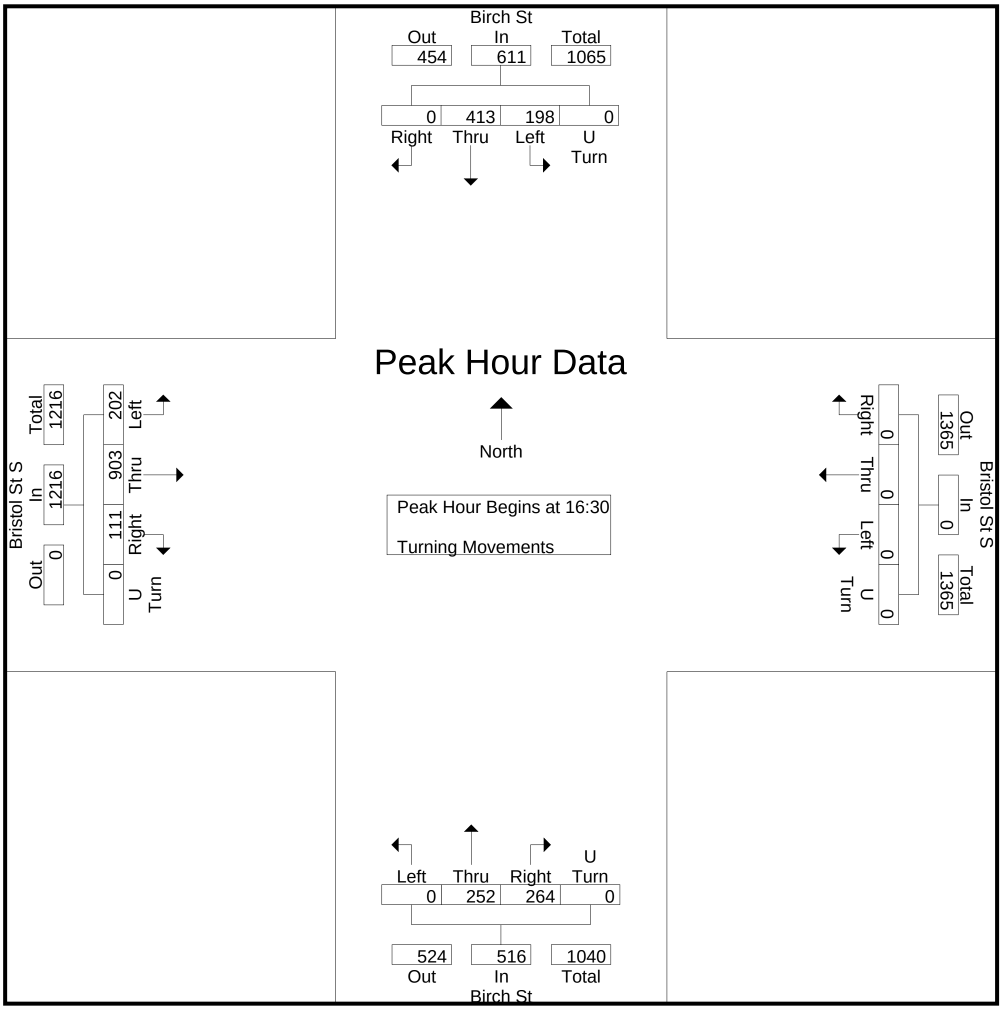
	Birch St Southbound					Bristol St S Westbound					Birch St Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	73	26	0	99	0	0	0	0	0	49	55	0	0	104	45	219	99	0	363	566
08:15	0	73	26	0	99	0	0	0	0	0	53	52	0	0	105	40	224	115	0	379	583
08:30	0	86	37	0	123	0	0	0	0	0	67	48	0	0	115	**57**		**153**		**428**	666
08:45	0	**109**	**40**		**149**	0	0	0	0	0	**71**	**56**	0	0	**127**	52	**244**	129	0	425	**701**
Total Volume	0	341	129	0	470	0	0	0	0	0	240	211	0	0	451	194	905	496	0	1595	2516
% App. Total	0	72.6	27.4	0		0	0	0	0		53.2	46.8	0	0		12.2	56.7	31.1	0		
PHF	.000	.782	.806	.000	.789	.000	.000	.000	.000	.000	.845	.942	.000	.000	.888	.851	.927	.810	.000	.932	.897



City : Newport Beach
N-S Direction : Birch St
E-W Direction: Bristol St S

File Name : BR 4160
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

	Birch St Southbound					Bristol St S Westbound					Birch St Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	0	67	53	0	120	0	0	0	0	0	73	60	0	0	133	**38**					
16:45	**0**	**109**	**50**	**0**	**159**	**0**	**0**	**0**	**0**	**0**	**64**	**63**	**0**	**0**	**127**	**22**	**209**	**62**	**0**	**293**	**579**
17:00	**0**	**110**	**55**	**0**	**165**	**0**	**0**	**0**	**0**	**0**	**80**	**81**	0	0	**161**	28	**246**	45	0	**319**	**645**
17:15	0	**127**	40	0	**167**	0	0	0	0	0	47	48	0	0	95	23	237	46	0	306	568
Total Volume	0	413	198	0	611	0	0	0	0	0	264	252	0	0	516	111	903	202	0	1216	2343
% App. Total	0	67.6	32.4	0		0	0	0	0		51.2	48.8	0	0		9.1	74.3	16.6	0		
PHF	.000	.813	.900	.000	.915	.000	.000	.000	.000	.000	.825	.778	.000	.000	.801	.730	.918	.815	.000	.953	.908



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACATHUR BOULEVARD
E-W Direction: CAMPUS DRIVE

File Name : MA 4300
Site Code : 00000000
Start Date : 4/6/2022
Page No : 1

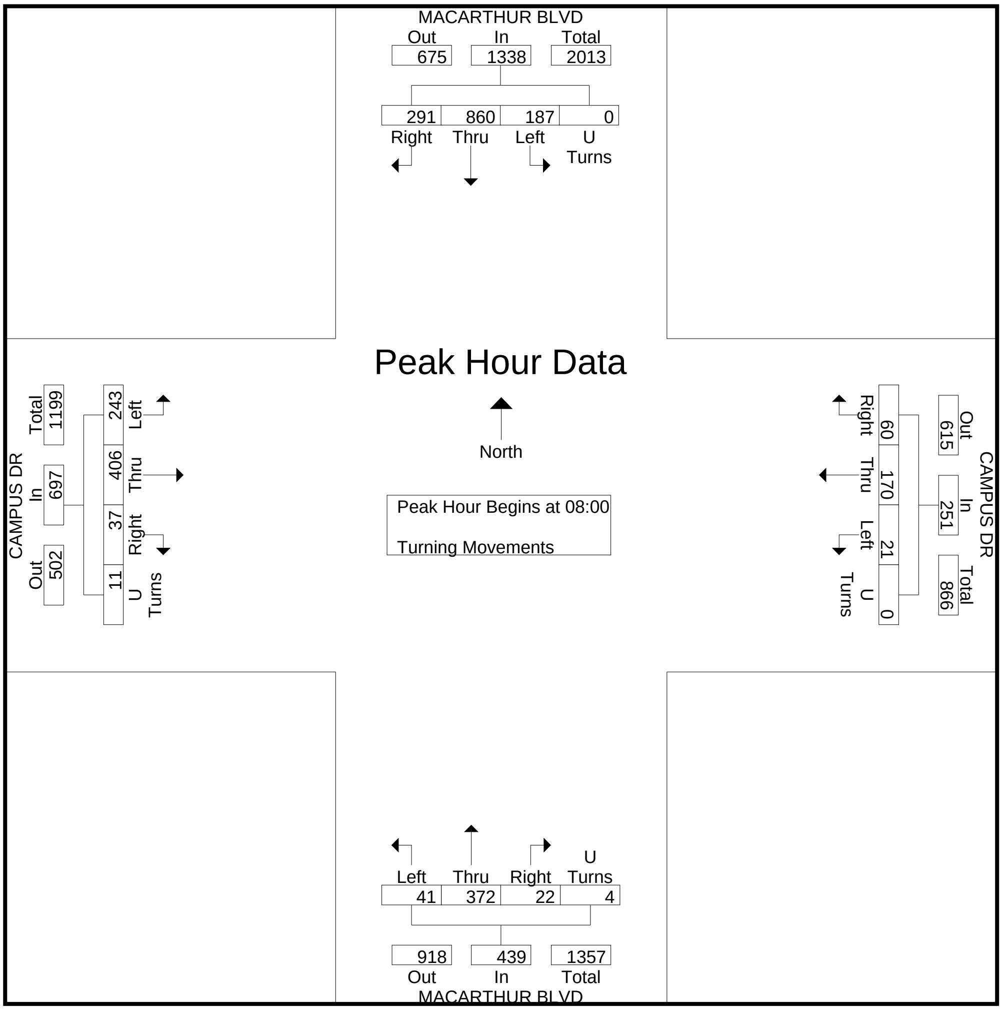
Groups Printed- Turning Movements

	MACARTHUR BLVD Southbound				CAMPUS DR Westbound				MACARTHUR BLVD Northbound				CAMPUS DR Eastbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	39	144	39	1	9	19	0	0	2	36	1	0	1	48	15	1	355
07:15	42	179	42	0	6	33	3	0	3	52	5	1	9	45	31	0	451
07:30	50	213	54	0	12	38	5	0	6	67	5	0	6	67	35	1	559
07:45	76	200	51	0	16	43	6	0	8	81	5	1	11	91	61	2	652
Total	207	736	186	1	43	133	14	0	19	236	16	2	27	251	142	4	2017
08:00	77	187	51	0	15	44	7	0	6	81	9	1	12	99	61	2	652
08:15	71	217	39	0	11	56	7	0	7	85	10	1	5	117	77	2	705
08:30	67	221	54	0	14	39	5	0	5	93	15	0	12	96	51	4	676
08:45	76	235	43	0	20	31	2	0	4	113	7	2	8	94	54	3	692
Total	291	860	187	0	60	170	21	0	22	372	41	4	37	406	243	11	2725
16:30	71	107	13	0	27	104	2	0	3	192	27	0	8	63	62	0	679
16:45	61	127	18	0	23	118	8	0	5	165	29	0	12	57	56	2	681
Total	132	234	31	0	50	222	10	0	8	357	56	0	20	120	118	2	1360
17:00	116	142	15	0	36	190	8	0	5	197	44	0	10	55	80	5	903
17:15	99	167	20	0	35	194	8	0	5	193	42	1	12	54	55	7	892
17:30	78	162	16	0	43	123	11	0	4	206	34	0	12	55	54	3	801
17:45	64	105	16	1	22	126	2	0	6	160	26	1	8	47	49	2	635
Total	357	576	67	1	136	633	29	0	20	756	146	2	42	211	238	17	3231
18:00	59	124	19	1	20	57	6	0	5	135	27	0	6	49	45	2	555
18:15	59	100	10	1	24	82	3	0	5	103	18	2	11	50	45	3	516
Grand Total	1105	2630	500	4	333	1297	83	0	79	1959	304	10	143	1087	831	39	10404
Apprch %	26.1	62	11.8	0.1	19.4	75.7	4.8	0	3.4	83.3	12.9	0.4	6.8	51.8	39.6	1.9	
Total %	10.6	25.3	4.8	0	3.2	12.5	0.8	0	0.8	18.8	2.9	0.1	1.4	10.4	8	0.4	

City: NEWPORT BEACH
N-S Direction: MACATHUR BOULEVARD
E-W Direction: CAMPUS DRIVE

File Name : MA 4300
Site Code : 00000000
Start Date : 4/6/2022
Page No : 2

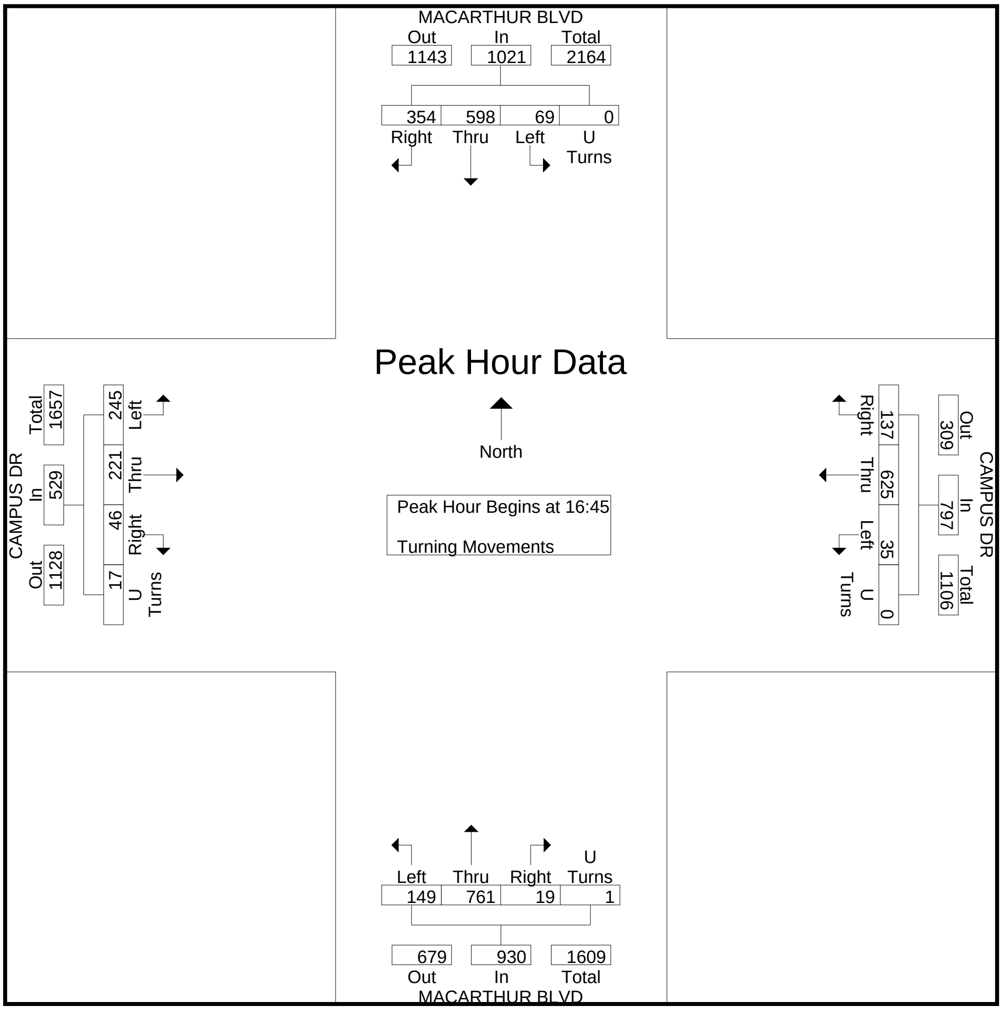
	MACARTHUR BLVD Southbound					CAMPUS DR Westbound					MACARTHUR BLVD Northbound					CAMPUS DR Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	**77**							**7**								**12**					
08:15	**71**	**217**	**39**	**0**	**327**	**11**	**56**	7	0	**74**	**7**	**85**	**10**	**1**	**103**	**5**	**117**	**77**	**2**	**201**	**705**
08:30	67	221	**54**										**15**						**4**		
08:45	**76**	**235**	43	0	**354**	**20**	**31**	**2**	**0**	**53**	**4**	**113**	7	**2**	**126**	8	94	54	3	159	692
Total Volume	291	860	187	0	1338	60	170	21	0	251	22	372	41	4	439	37	406	243	11	697	2725
% App. Total	21.7	64.3	14	0		23.9	67.7	8.4	0		5	84.7	9.3	0.9		5.3	58.2	34.9	1.6		
PHF	.945	.915	.866	.000	.945	.750	.759	.750	.000	.848	.786	.823	.683	.500	.871	.771	.868	.789	.688	.867	.966



City: NEWPORT BEACH
N-S Direction: MACATHUR BOULEVARD
E-W Direction: CAMPUS DRIVE

File Name : MA 4300
Site Code : 00000000
Start Date : 4/6/2022
Page No : 3

	MACARTHUR BLVD Southbound					CAMPUS DR Westbound					MACARTHUR BLVD Northbound					CAMPUS DR Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	61	127	18	0	206	23	118	8	0	149	**5**					**12**	**57**	56	2	127	681
17:00	**116**												**44**		**246**	10	55	**80**		**150**	**903**
17:15	99	**167**	**20**		**286**	35	**194**	8	0	**237**	5	193	42	**1**					**7**		
17:30	**78**	**162**	**16**	**0**	**256**	**43**	**123**	**11**	**0**	**177**	**4**	**206**	34	0	244	12	55	54	3	124	801
Total Volume	354	598	69	0	1021	137	625	35	0	797	19	761	149	1	930	46	221	245	17	529	3277
% App. Total	34.7	58.6	6.8	0		17.2	78.4	4.4	0		2	81.8	16	0.1		8.7	41.8	46.3	3.2		
PHF	.763	.895	.863	.000	.892	.797	.805	.795	.000	.841	.950	.924	.847	.250	.945	.958	.969	.766	.607	.882	.907



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BIRCH STREET

File Name : MA 4295
Site Code : 00000000
Start Date : 4/6/2022
Page No : 1

Groups Printed- Turning Movements

	MACARTHUR BLVD Southbound				BIRCH ST Westbound				MACARTHUR BLVD Northbound				BIRCH ST Eastbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	31	100	9	2	2	9	2	0	3	30	4	0	8	12	9	0	221
07:15	41	135	14	0	10	13	3	0	13	42	5	0	5	19	8	0	308
07:30	50	174	10	0	12	19	1	0	13	67	6	0	6	30	12	0	400
07:45	47	145	7	0	6	23	1	0	21	67	5	0	11	34	16	0	383
Total	169	554	40	2	30	64	7	0	50	206	20	0	30	95	45	0	1312
08:00	48	148	6	0	4	24	3	0	18	85	2	0	11	49	10	0	408
08:15	55	153	14	0	5	29	4	0	8	75	3	2	11	46	19	0	424
08:30	74	167	12	0	10	29	4	0	8	97	3	2	11	48	15	0	480
08:45	68	140	15	2	15	31	5	0	13	106	8	1	6	36	15	0	461
Total	245	608	47	2	34	113	16	0	47	363	16	5	39	179	59	0	1773
16:30	16	93	6	0	37	51	7	0	8	109	13	0	3	46	75	0	464
16:45	30	111	10	2	29	62	17	0	9	128	15	2	6	50	50	0	521
Total	46	204	16	2	66	113	24	0	17	237	28	2	9	96	125	0	985
17:00	23	121	10	2	44	90	14	0	9	148	24	1	5	46	71	0	608
17:15	29	163	4	1	36	48	17	0	4	127	13	1	8	54	72	0	577
17:30	26	144	1	1	40	63	14	0	5	132	13	0	6	36	59	0	540
17:45	26	89	6	0	33	65	8	0	8	115	13	1	5	33	40	0	442
Total	104	517	21	4	153	266	53	0	26	522	63	3	24	169	242	0	2167
18:00	14	111	1	1	29	39	9	0	6	90	11	2	4	31	39	0	387
18:15	13	102	2	1	15	32	4	0	5	79	7	1	9	23	32	0	325
Grand Total	591	2096	127	12	327	627	113	0	151	1497	145	13	115	593	542	0	6949
Apprch %	20.9	74.2	4.5	0.4	30.6	58.8	10.6	0	8.4	82.9	8	0.7	9.2	47.4	43.4	0	
Total %	8.5	30.2	1.8	0.2	4.7	9	1.6	0	2.2	21.5	2.1	0.2	1.7	8.5	7.8	0	

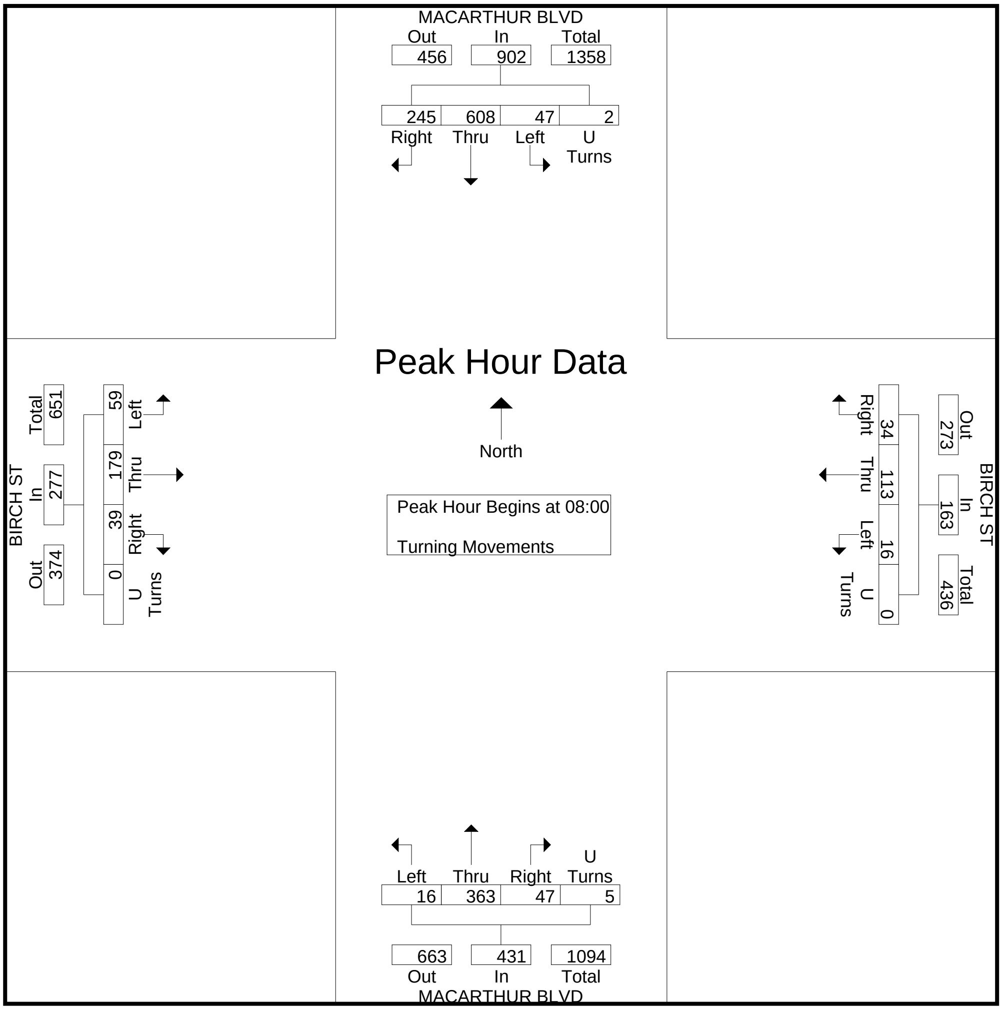
Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BIRCH STREET

File Name : MA 4295
Site Code : 00000000
Start Date : 4/6/2022
Page No : 2

Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 08:00

	MACARTHUR BLVD Southbound					BIRCH ST Westbound					MACARTHUR BLVD Northbound					BIRCH ST Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
08:00	48	148	6	0	202	4	24	3	0	31	**18**					**11**	**49**	10	0	70	408
08:15	55	153	14	0	222	5	29	4	0	38	8	75	3	**2**				**19**		**76**	424
08:30	**74**	**167**	12	0	**253**	10	29	4	0	43	8	97	3	2	110	11	48	15	0	74	**480**
08:45	68	140	**15**	**2**		**15**	**31**	**5**		**51**	13	**106**	**8**		**128**	6	36	15	0	57	461
Total Volume	245	608	47	2	902	34	113	16	0	163	47	363	16	5	431	39	179	59	0	277	1773
% App. Total	27.2	67.4	5.2	0.2		20.9	69.3	9.8	0		10.9	84.2	3.7	1.2		14.1	64.6	21.3	0		
PHF	.828	.910	.783	.250	.891	.567	.911	.800	.000	.799	.653	.856	.500	.625	.842	.886	.913	.776	.000	.911	.923

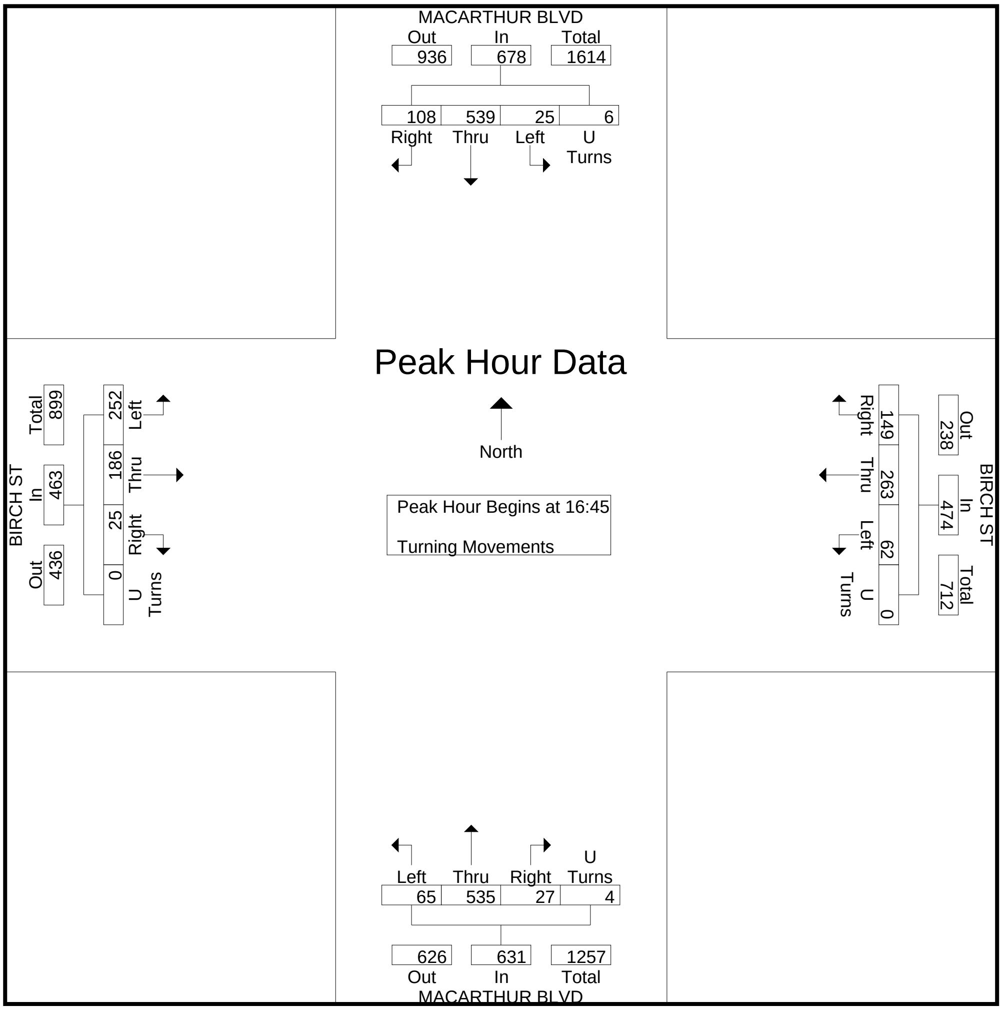


City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: BIRCH STREET

File Name : MA 4295
Site Code : 00000000
Start Date : 4/6/2022
Page No : 3

Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:45

	MACARTHUR BLVD Southbound					BIRCH ST Westbound					MACARTHUR BLVD Northbound					BIRCH ST Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
16:45	**30**		**10**	**2**				**17**			**9**			**2**							
17:00	**23**	**121**	**10**	**2**	**156**	**44**	**90**	14	0	**148**	9	**148**	**24**	**1**	**182**	5	46	71	0	122	**608**
17:15	29	**163**	4	1	**197**	36	48	17	0	101	4	127	13	1	145	**8**	**54**	**72**		**134**	577
17:30	26	144	1	1	172	40	63	14	0	117	5	132	13	0	150	6	36	59	0	101	540
Total Volume	108	539	25	6	678	149	263	62	0	474	27	535	65	4	631	25	186	252	0	463	2246
% App. Total	15.9	79.5	3.7	0.9		31.4	55.5	13.1	0		4.3	84.8	10.3	0.6		5.4	40.2	54.4	0		
PHF	.900	.827	.625	.750	.860	.847	.731	.912	.000	.801	.750	.904	.677	.500	.867	.781	.861	.875	.000	.864	.924



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : MA 4285
Site Code : 00000000
Start Date : 4/6/2022
Page No : 1

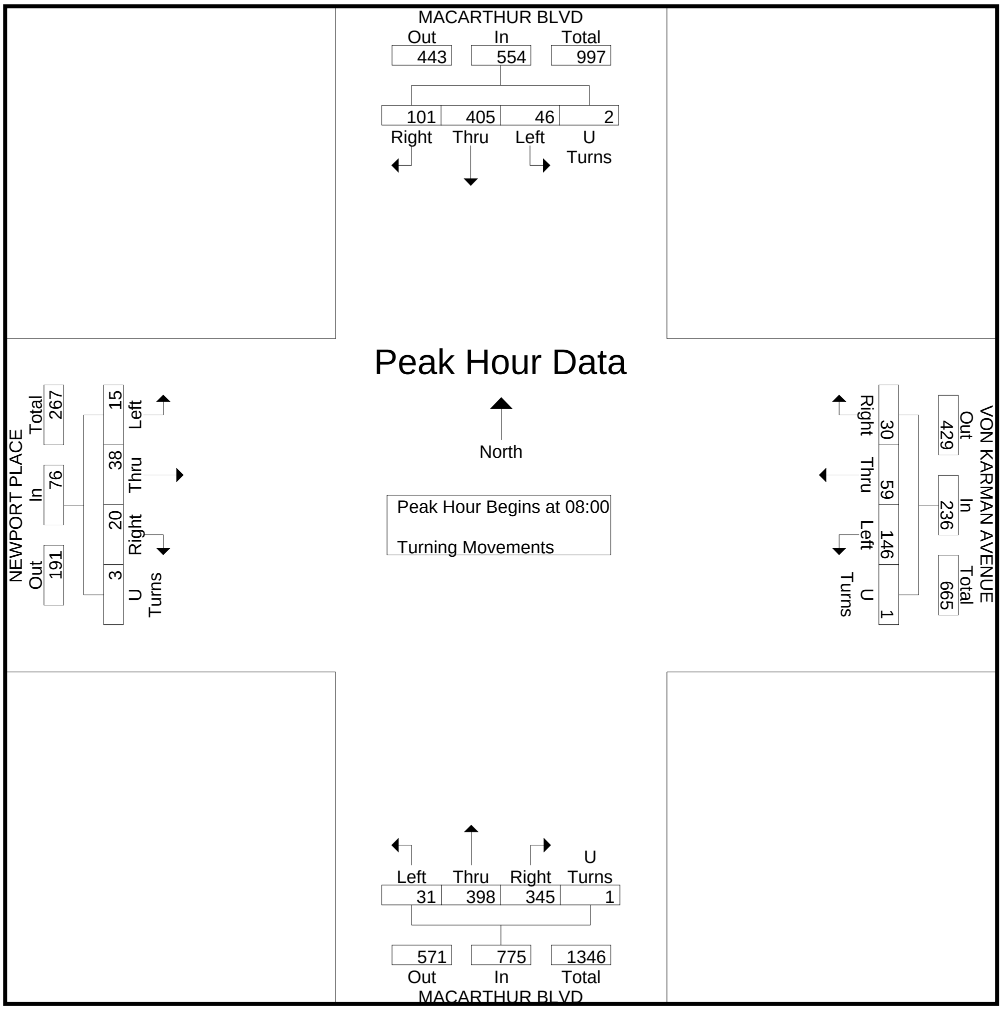
Groups Printed- Turning Movements

	MACARTHUR BLVD Southbound				VON KARMAN AVENUE Westbound				MACARTHUR BLVD Northbound				NEWPORT PLACE Eastbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	18	64	8	1	3	8	15	0	42	36	0	0	2	4	0	0	201
07:15	21	82	11	1	3	11	16	0	54	49	4	0	1	5	0	0	258
07:30	18	95	13	0	2	18	19	0	56	61	7	0	4	4	3	0	300
07:45	26	98	13	0	6	16	42	1	77	104	6	0	4	10	2	0	405
Total	83	339	45	2	14	53	92	1	229	250	17	0	11	23	5	0	1164
08:00	20	105	14	0	7	18	38	0	87	99	5	0	1	9	6	0	409
08:15	29	99	9	1	3	14	38	0	85	85	7	0	4	14	3	2	393
08:30	30	96	11	1	9	15	34	1	80	98	6	1	5	8	2	1	398
08:45	22	105	12	0	11	12	36	0	93	116	13	0	10	7	4	0	441
Total	101	405	46	2	30	59	146	1	345	398	31	1	20	38	15	3	1641
16:30	13	102	5	2	10	8	68	0	52	105	2	0	28	20	18	0	433
16:45	12	109	8	2	7	14	67	0	47	110	5	1	14	15	14	0	425
Total	25	211	13	4	17	22	135	0	99	215	7	1	42	35	32	0	858
17:00	9	117	4	0	32	11	115	0	53	101	0	1	41	24	22	0	530
17:15	7	164	7	1	21	4	92	0	54	104	5	0	33	27	21	0	540
17:30	12	133	7	5	17	9	114	0	53	121	2	0	24	17	10	0	524
17:45	3	114	6	1	11	12	88	0	41	94	0	0	29	19	11	0	429
Total	31	528	24	7	81	36	409	0	201	420	7	1	127	87	64	0	2023
18:00	8	102	6	1	14	5	59	0	61	88	1	0	25	14	8	0	392
18:15	5	94	3	1	6	4	68	0	35	62	1	0	13	14	7	0	313
Grand Total	253	1679	137	17	162	179	909	2	970	1433	64	3	238	211	131	3	6391
Apprch %	12.1	80.5	6.6	0.8	12.9	14.3	72.6	0.2	39.3	58	2.6	0.1	40.8	36.2	22.5	0.5	
Total %	4	26.3	2.1	0.3	2.5	2.8	14.2	0	15.2	22.4	1	0	3.7	3.3	2	0	

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : MA 4285
Site Code : 00000000
Start Date : 4/6/2022
Page No : 2

	MACARTHUR BLVD Southbound					VON KARMAN AVENUE Westbound					MACARTHUR BLVD Northbound					NEWPORT PLACE Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	20	**105**	**14**		**139**	7	**18**	**38**		**63**	87	99	5	0	191	1	9	**6**			
08:15	**29**	**99**	**9**	**1**	**138**	**3**	**14**	**38**	**0**	**55**	**85**	**85**	**7**	**0**	**177**	**4**	**14**	3	**2**	**23**	393
08:30	**30**								**1**					**1**							
08:45	**22**	**105**	**12**	**0**	**139**	**11**	**12**	**36**	**0**	**59**	**93**	**116**	**13**	**0**	**222**	**10**	**7**	**4**	**0**	**21**	**441**
Total Volume	101	405	46	2	554	30	59	146	1	236	345	398	31	1	775	20	38	15	3	76	1641
% App. Total	18.2	73.1	8.3	0.4		12.7	25	61.9	0.4		44.5	51.4	4	0.1		26.3	50	19.7	3.9		
PHF	.842	.964	.821	.500	.996	.682	.819	.961	.250	.937	.927	.858	.596	.250	.873	.500	.679	.625	.375	.826	.930

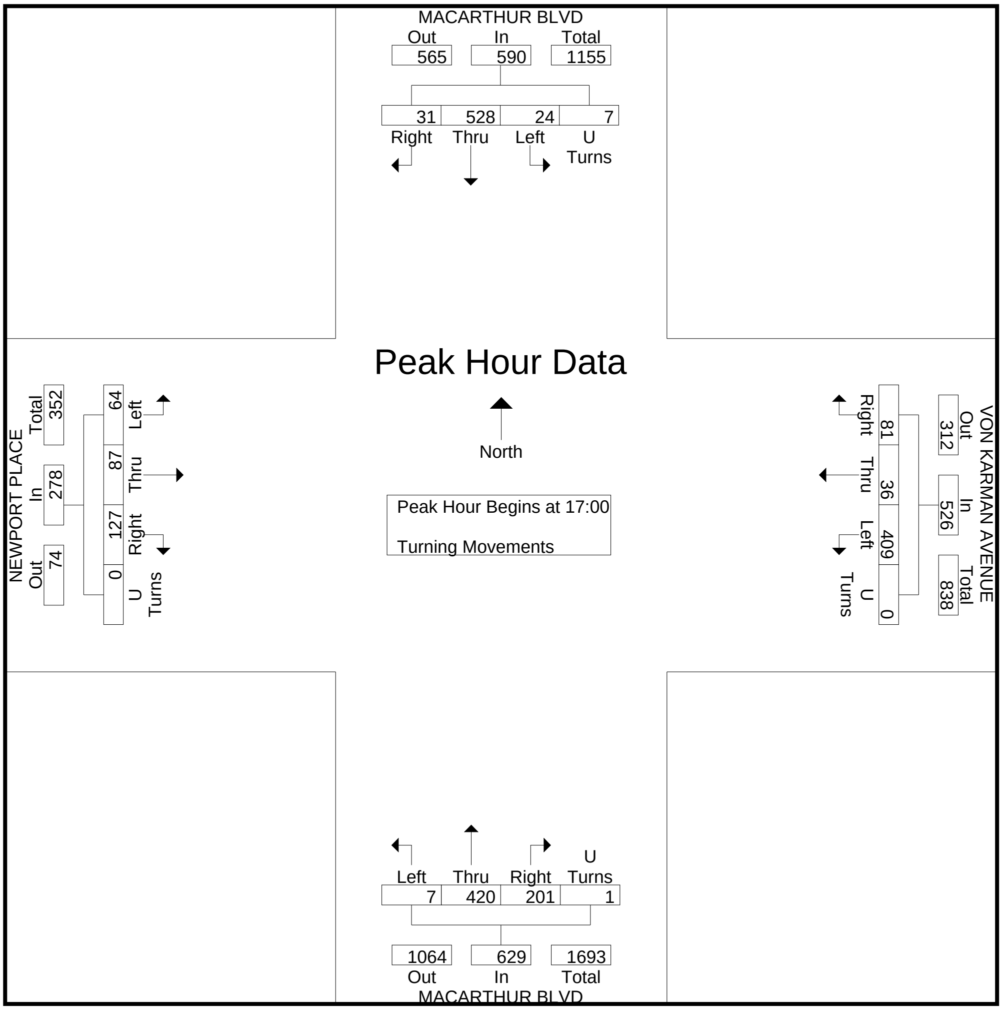


Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BOULEVARD
E-W Direction: VON KARMAN AVENUE

File Name : MA 4285
Site Code : 00000000
Start Date : 4/6/2022
Page No : 3

	MACARTHUR BLVD Southbound					VON KARMAN AVENUE Westbound					MACARTHUR BLVD Northbound					NEWPORT PLACE Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	9	117	4	0	130	**32**		**115**		**158**	53	101	0	**1**		**41**		**22**		**87**	530
17:15	7	**164**	**7**		**179**	21	4	92	0	117	**54**		**5**				**27**	21	0	81	**540**
17:30	**12**			**5**								**121**	2	0	**176**	24	17	10	0	51	524
17:45	3	114	6	1	124	11	**12**	88	0	111	41	94	0	0	135	29	19	11	0	59	429
Total Volume	31	528	24	7	590	81	36	409	0	526	201	420	7	1	629	127	87	64	0	278	2023
% App. Total	5.3	89.5	4.1	1.2		15.4	6.8	77.8	0		32	66.8	1.1	0.2		45.7	31.3	23	0		
PHF	.646	.805	.857	.350	.824	.633	.750	.889	.000	.832	.931	.868	.350	.250	.893	.774	.806	.727	.000	.799	.937



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
E-W ~~N-S~~ Direction: JAMBOREE ROAD
N-S ~~E-W~~ Direction: MACATHUR BOULEVARD

File Name : JA 4275
Site Code : 00000000
Start Date : 3/31/2022
Page No : 1

Groups Printed- Turning Movements

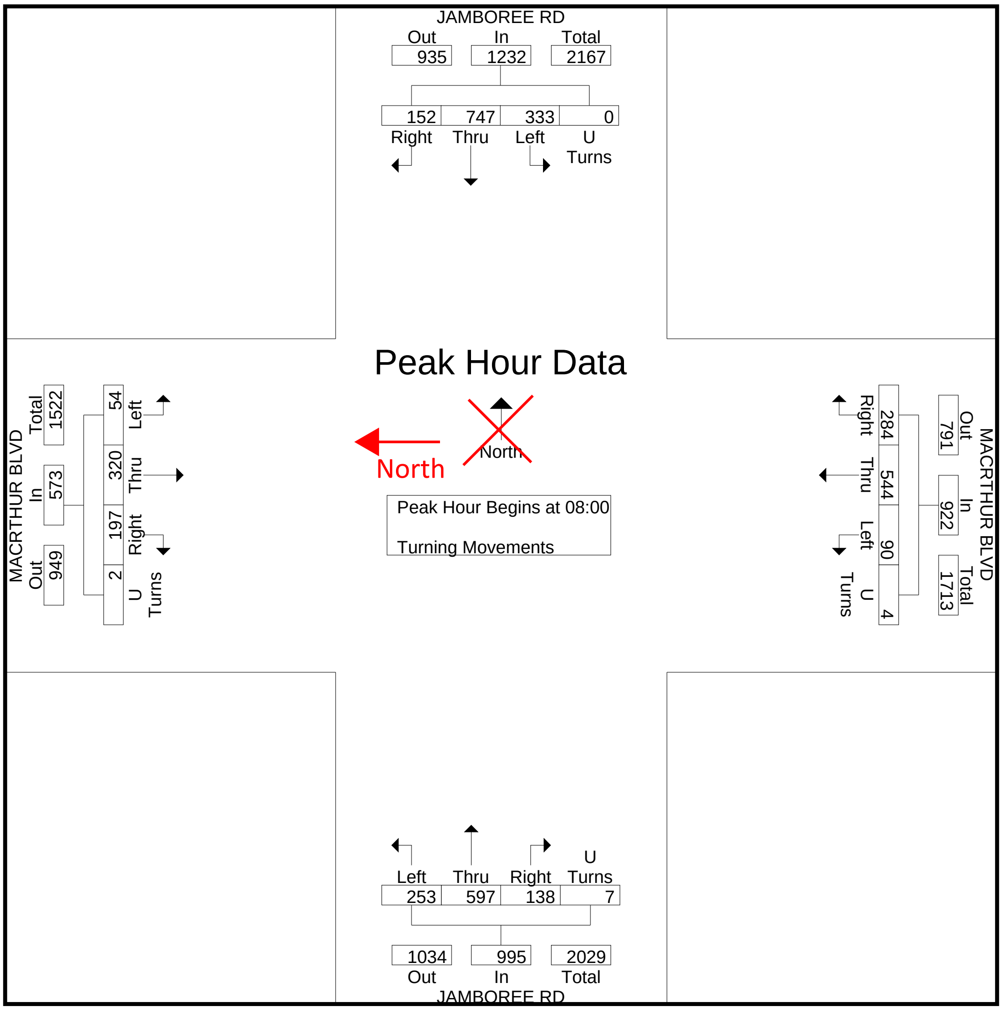
	JAMBOREE RD				MACRTHUR BLVD				JAMBOREE RD				MACRTHUR BLVD				
	~~Southbound~~ Westbound				~~Westbound~~ Northbound				~~Northbound~~ Eastbound				~~Eastbound~~ Southbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	14	123	37	0	35	50	2	0	15	84	53	1	24	44	4	1	487
07:15	19	149	67	0	38	73	13	0	18	120	29	2	35	61	5	0	629
07:30	32	144	67	0	32	71	16	0	30	109	36	3	41	83	13	0	677
07:45	33	168	80	0	54	110	22	0	49	155	75	1	66	73	12	0	898
Total	98	584	251	0	159	304	53	0	112	468	193	7	166	261	34	1	2691
08:00	41	208	94	0	64	131	23	1	43	153	72	1	41	69	10	0	951
08:15	36	162	70	0	72	143	22	0	32	150	75	2	47	80	22	1	914
08:30	40	204	98	0	82	126	21	1	32	152	38	2	53	93	15	1	958
08:45	35	173	71	0	66	144	24	2	31	142	68	2	56	78	7	0	899
Total	152	747	333	0	284	544	90	4	138	597	253	7	197	320	54	2	3722
16:30	26	131	70	0	70	96	49	3	14	192	46	3	78	140	34	0	952
16:45	20	192	61	0	88	76	35	2	10	195	48	4	79	122	27	0	959
Total	46	323	131	0	158	172	84	5	24	387	94	7	157	262	61	0	1911
17:00	25	200	101	0	63	91	55	7	16	182	34	1	89	199	49	1	1113
17:15	22	222	83	0	73	95	61	4	7	219	50	5	90	205	35	2	1173
17:30	21	202	75	0	101	96	43	4	14	213	34	3	84	185	32	1	1108
17:45	20	204	98	0	71	85	31	2	18	138	49	3	70	173	32	0	994
Total	88	828	357	0	308	367	190	17	55	752	167	12	333	762	148	4	4388
18:00	11	156	70	0	62	67	46	5	16	156	36	4	54	123	28	1	835
18:15	14	161	74	0	58	57	23	1	10	158	27	4	76	119	18	1	801
Grand Total	409	2799	1216	0	1029	1511	486	32	355	2518	770	41	983	1847	343	9	14348
Apprch %	9.2	63.3	27.5	0	33.6	49.4	15.9	1	9.6	68.3	20.9	1.1	30.9	58	10.8	0.3	
Total %	2.9	19.5	8.5	0	7.2	10.5	3.4	0.2	2.5	17.5	5.4	0.3	6.9	12.9	2.4	0.1	

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
E-W ~~N-S~~ Direction: JAMBOREE ROAD
N-S ~~E-W~~ Direction: MACATHUR BOULEVARD

File Name : JA 4275
Site Code : 00000000
Start Date : 3/31/2022
Page No : 2

	JAMBOREE RD ~~Southbound~~ Westbound					MACRTHUR BLVD ~~Westbound~~ Northbound					JAMBOREE RD ~~Northbound~~ Eastbound					MACRTHUR BLVD ~~Eastbound~~ Southbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	**41**	**208**	94	0	**343**	64	131	23	1	219	**43**	**153**	72	1	**269**	41	69	10	0	120	951
08:15	36	162	70	0	268	72	143	22	0	**237**	32	150	**75**	**2**				**22**	**1**		
08:30	**40**	**204**	**98**	**0**	**342**	**82**	**126**	**21**	**1**	**230**	**32**	**152**	**38**	**2**	**224**	**53**	**93**	15	1	**162**	**958**
08:45	35	173	71	0	279	66	**144**	**24**	**2**							**56**					
Total Volume	152	747	333	0	1232	284	544	90	4	922	138	597	253	7	995	197	320	54	2	573	3722
% App. Total	12.3	60.6	27	0		30.8	59	9.8	0.4		13.9	60	25.4	0.7		34.4	55.8	9.4	0.3		
PHF	.927	.898	.849	.000	.898	.866	.944	.938	.500	.973	.802	.975	.843	.875	.925	.879	.860	.614	.500	.884	.971

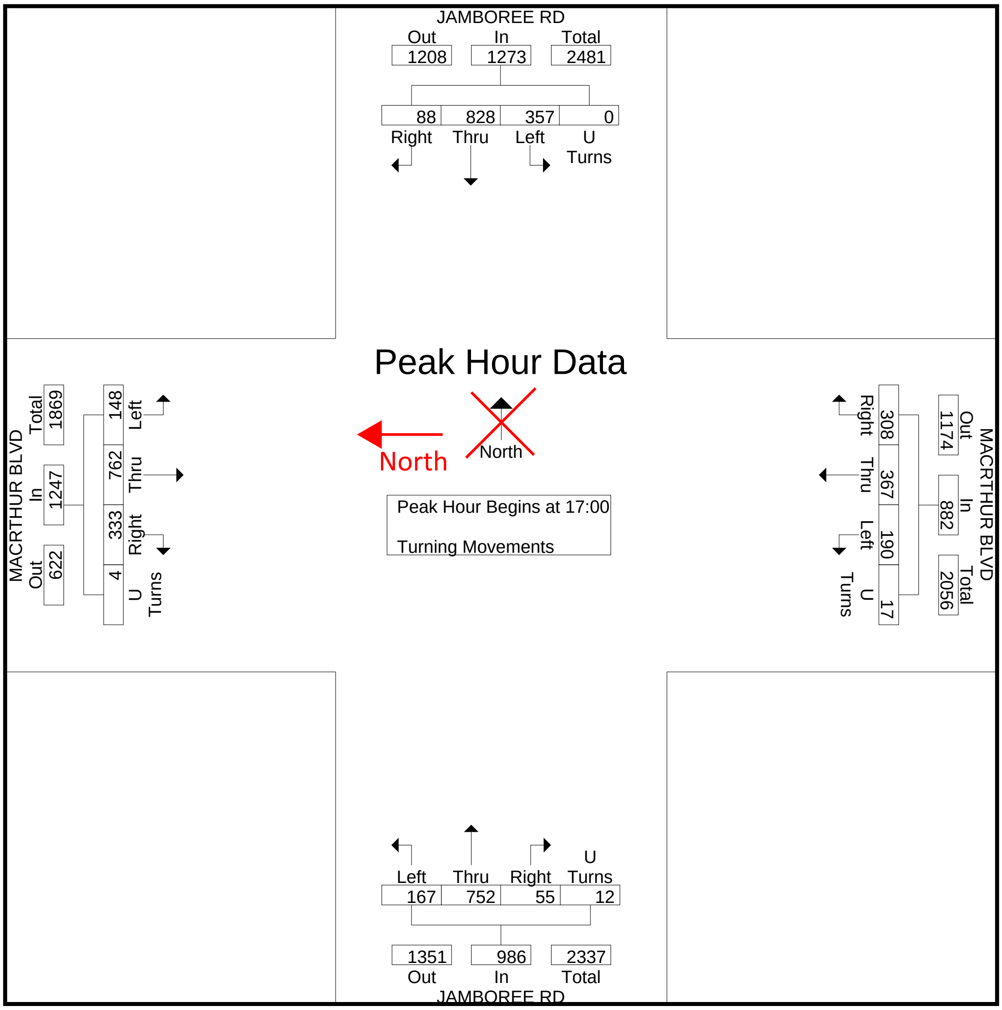


Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
E-W ~~N-S~~ Direction: JAMBOREE ROAD
N-S ~~E-W~~ Direction: MACATHUR BOULEVARD

File Name : JA 4275
Site Code : 00000000
Start Date : 3/31/2022
Page No : 3

	JAMBOREE RD ~~Southbound~~ Westbound					MACRTHUR BLVD ~~Westbound~~ Northbound					JAMBOREE RD ~~Northbound~~ Eastbound					MACRTHUR BLVD ~~Eastbound~~ Southbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	**25**		**101**						**7**									**49**		**338**	1113
17:15	22	**222**	83	0	**327**	73	95	**61**				**219**	**50**	**5**	**281**	**90**	**205**	35	**2**		**1173**
17:30	21	202	75	0	298	**101**	**96**	43	4	**244**	14	213	34	3	264	84	185	32	1	302	1108
17:45	20	204	98	0	322	71	85	31	2	189	**18**										
Total Volume	88	828	357	0	1273	308	367	190	17	882	55	752	167	12	986	333	762	148	4	1247	4388
% App. Total	6.9	65	28	0		34.9	41.6	21.5	1.9		5.6	76.3	16.9	1.2		26.7	61.1	11.9	0.3		
PHF	.880	.932	.884	.000	.973	.762	.956	.779	.607	.904	.764	.858	.835	.600	.877	.925	.929	.755	.500	.922	.935



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BLVD
E-W Direction: BISON AVE

File Name : MA 4995
Site Code : 00000000
Start Date : 3/16/2022
Page No : 1

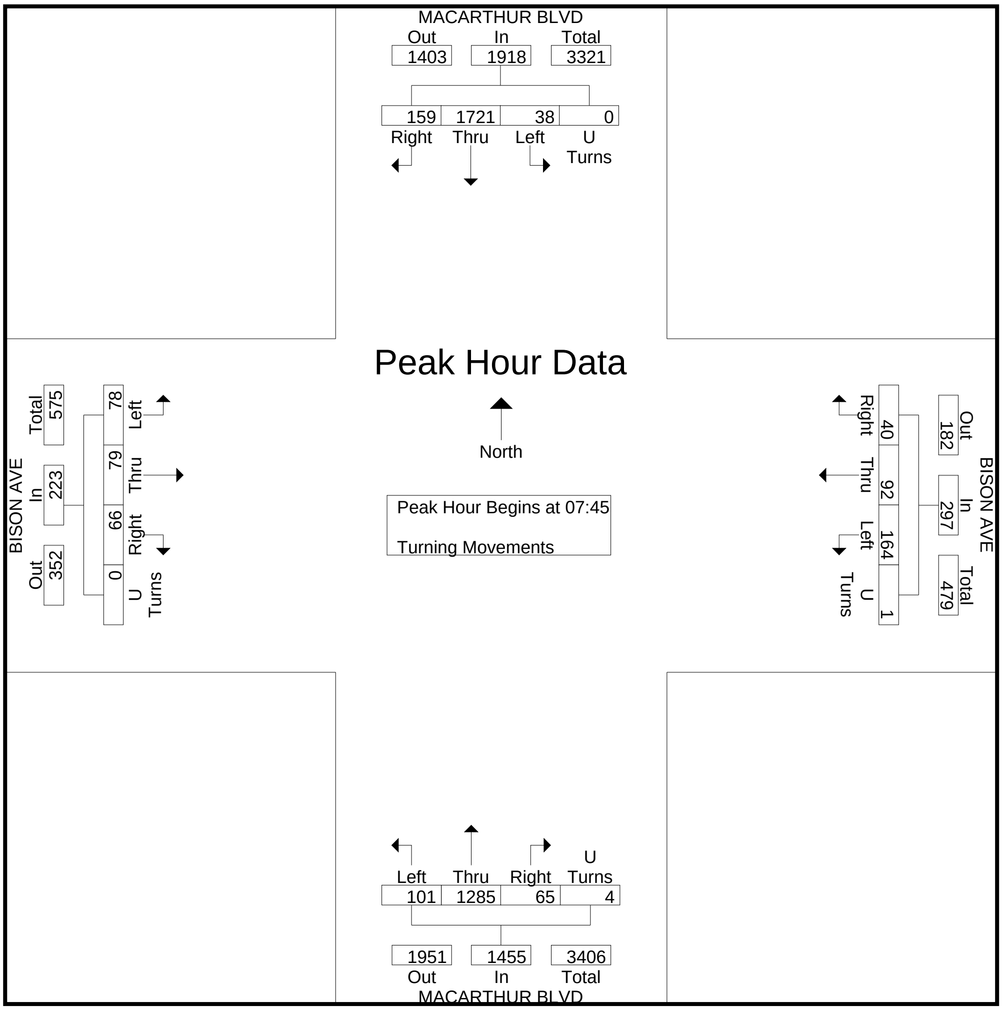
Groups Printed- Turning Movements

	MACARTHUR BLVD Southbound				BISON AVE Westbound				MACARTHUR BLVD Northbound				BISON AVE Eastbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	10	358	4	0	2	21	44	0	7	182	11	1	14	12	17	0	683
07:15	13	377	8	1	5	18	42	0	8	201	10	0	17	9	19	0	728
07:30	19	400	6	0	5	31	73	0	20	302	23	0	16	15	18	0	928
07:45	37	465	4	0	5	33	82	0	19	274	25	1	11	17	20	0	993
Total	79	1600	22	1	17	103	241	0	54	959	69	2	58	53	74	0	3332
08:00	33	399	9	0	8	24	39	0	16	318	25	1	20	23	19	0	934
08:15	44	416	8	0	11	12	15	0	17	362	28	0	16	16	21	0	966
08:30	45	441	17	0	16	23	28	1	13	331	23	2	19	23	18	0	1000
08:45	51	350	13	1	12	15	41	0	18	379	30	0	19	18	23	0	970
Total	173	1606	47	1	47	74	123	1	64	1390	106	3	74	80	81	0	3870
16:30	62	285	14	1	22	21	21	0	24	557	37	0	31	26	32	0	1133
16:45	43	330	21	1	24	40	25	0	22	515	31	0	28	23	39	0	1142
Total	105	615	35	2	46	61	46	0	46	1072	68	0	59	49	71	0	2275
17:00	36	325	14	0	15	24	33	0	18	520	35	0	23	25	42	0	1110
17:15	40	341	10	0	16	19	36	0	12	438	40	0	38	31	32	0	1053
17:30	48	374	14	0	21	35	38	0	18	496	29	0	40	16	37	0	1166
17:45	38	383	17	1	15	26	28	0	19	505	37	1	28	30	54	0	1182
Total	162	1423	55	1	67	104	135	0	67	1959	141	1	129	102	165	0	4511
18:00	40	373	11	0	16	29	37	0	16	454	22	2	37	28	30	0	1095
18:15	30	362	15	0	10	26	41	0	14	383	22	0	15	23	32	0	973
Grand Total	589	5979	185	5	203	397	623	1	261	6217	428	8	372	335	453	0	16056
Apprch %	8.7	88.5	2.7	0.1	16.6	32.4	50.9	0.1	3.8	89.9	6.2	0.1	32.1	28.9	39.1	0	
Total %	3.7	37.2	1.2	0	1.3	2.5	3.9	0	1.6	38.7	2.7	0	2.3	2.1	2.8	0	

City: NEWPORT BEACH
N-S Direction: MACARTHUR BLVD
E-W Direction: BISON AVE

File Name : MA 4995
Site Code : 00000000
Start Date : 3/16/2022
Page No : 2

	MACARTHUR BLVD Southbound					BISON AVE Westbound					MACARTHUR BLVD Northbound					BISON AVE Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	37	**465**	4	0	**506**	5	**33**	**82**		**120**	**19**										
08:00	**33**	**399**	**9**	**0**	**441**	**8**	**24**	**39**	**0**	**71**	**16**	**318**	**25**	**1**	**360**	**20**	**23**	19	0	**62**	934
08:15	44	416	8	0	468	11	12	15	0	38	17	**362**	**28**		**407**	16	16	**21**			
08:30	**45**	**441**	**17**	**0**	**503**	**16**	**23**	**28**	**1**	**68**	**13**	**331**	**23**	**2**	**369**	**19**	**23**	**18**	**0**	**60**	**1000**
Total Volume	159	1721	38	0	1918	40	92	164	1	297	65	1285	101	4	1455	66	79	78	0	223	3893
% App. Total	8.3	89.7	2	0		13.5	31	55.2	0.3		4.5	88.3	6.9	0.3		29.6	35.4	35	0		
PHF	.883	.925	.559	.000	.948	.625	.697	.500	.250	.619	.855	.887	.902	.500	.894	.825	.859	.929	.000	.899	.973

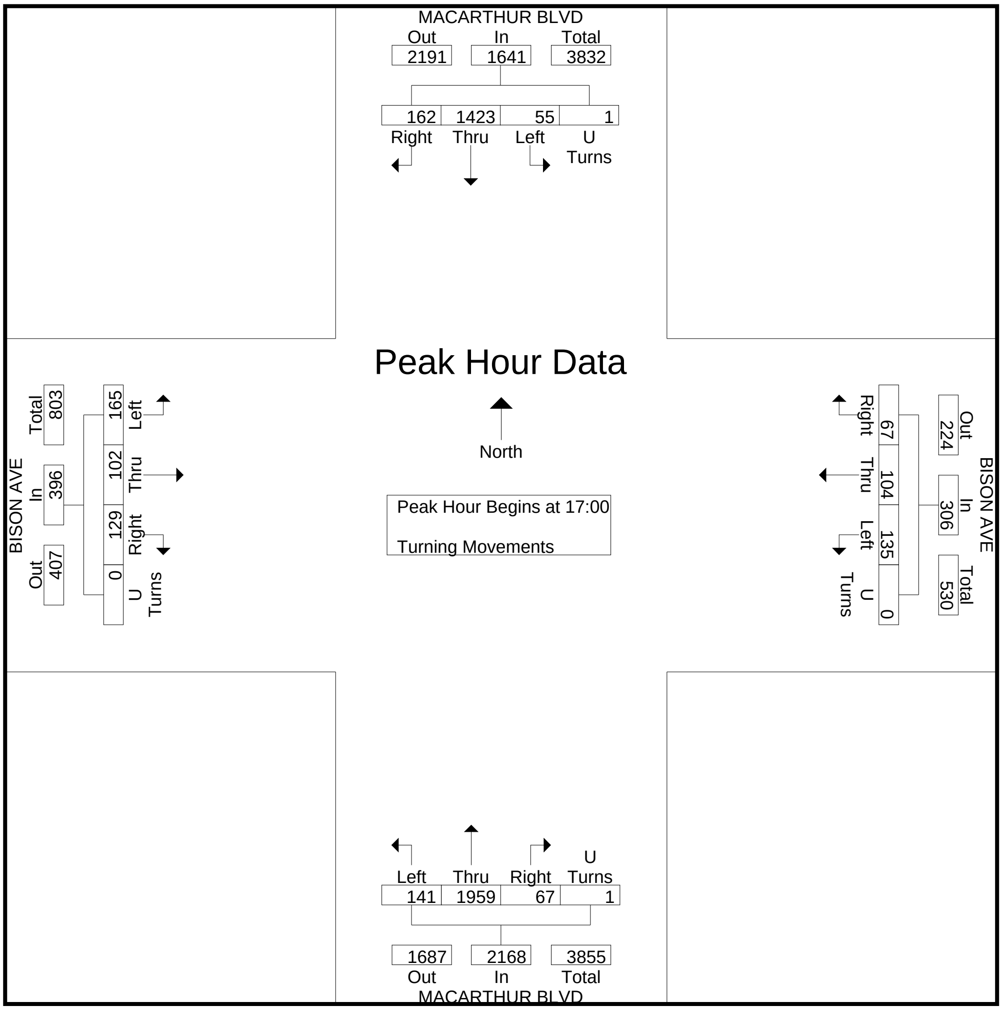


Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: MACARTHUR BLVD
E-W Direction: BISON AVE

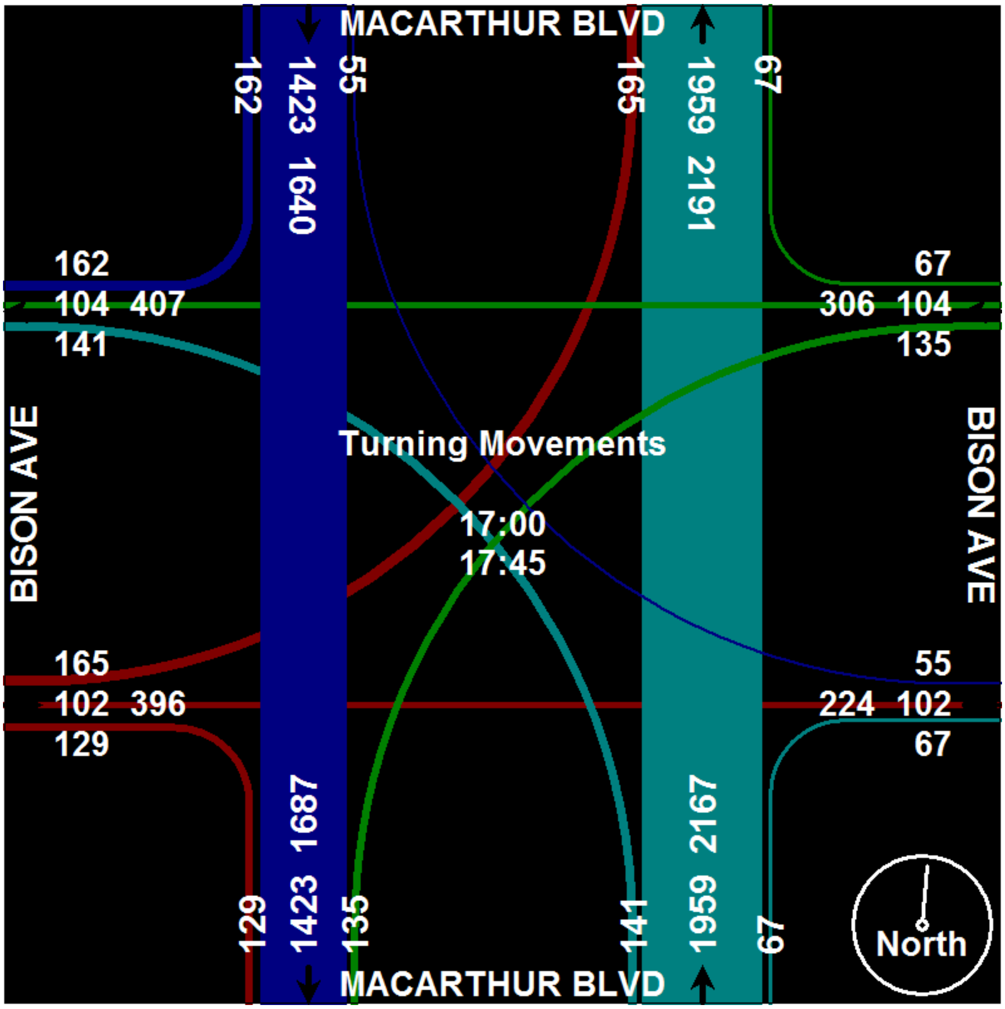
File Name : MA 4995
Site Code : 00000000
Start Date : 3/16/2022
Page No : 3

	MACARTHUR BLVD Southbound					BISON AVE Westbound					MACARTHUR BLVD Northbound					BISON AVE Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	36	325	14	0	375	15	24	33	0	72	18	**520**	35	0	**573**	23	25	42	0	90	1110
17:15	40	341	10	0	391	16	19	36	0	71	12	438	**40**				**31**	32	0	101	1053
17:30	**48**					**21**	**35**	**38**		**94**	18	496	29	0	543	**40**					
17:45	**38**	**383**	**17**	**1**	**439**	15	26	28	0	69	**19**	**505**	**37**	**1**	**562**	**28**	**30**	**54**	**0**	**112**	**1182**
Total Volume	162	1423	55	1	1641	67	104	135	0	306	67	1959	141	1	2168	129	102	165	0	396	4511
% App. Total	9.9	86.7	3.4	0.1		21.9	34	44.1	0		3.1	90.4	6.5	0		32.6	25.8	41.7	0		
PHF	.844	.929	.809	.250	.935	.798	.743	.888	.000	.814	.882	.942	.881	.250	.946	.806	.823	.764	.000	.884	.954



City: NEWPORT BEACH
N-S Direction: MACARTHUR BLVD
E-W Direction: BISON AVE

File Name : MA 4995
Site Code : 00000000
Start Date : 3/16/2022
Page No : 4



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City: NEWPORT BEACH
N-S Direction: JAMBOREE ROAD
E-W Direction: CAMPUS DRIVE

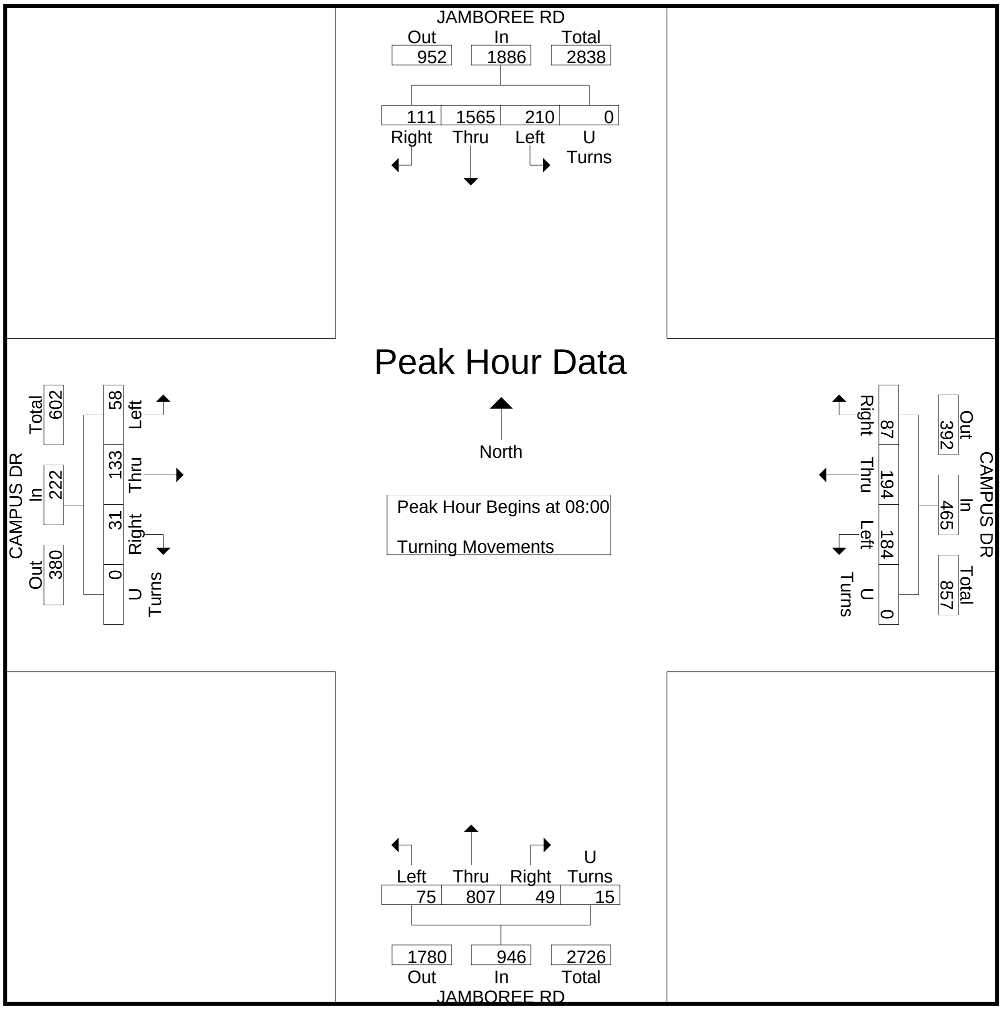
File Name : JA 4305
Site Code : 00000000
Start Date : 4/6/2022
Page No : 1

Groups Printed- Turning Movements

	JAMBOREE RD Southbound				CAMPUS DR Westbound				JAMBOREE RD Northbound				CAMPUS DR Eastbound				
Start Time	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Int. Total
07:00	22	256	31	0	13	19	7	0	11	115	9	1	3	16	6	0	509
07:15	30	325	30	0	13	15	24	0	15	130	12	1	13	14	9	0	631
07:30	20	400	38	0	22	28	29	0	9	128	11	4	9	27	10	1	736
07:45	21	429	38	0	15	41	62	0	9	156	11	1	5	26	11	0	825
Total	93	1410	137	0	63	103	122	0	44	529	43	7	30	83	36	1	2701
08:00	24	383	57	0	20	54	41	0	7	187	20	3	5	25	10	0	836
08:15	31	407	42	0	27	41	49	0	12	221	13	4	10	20	18	0	895
08:30	24	395	60	0	13	47	40	0	16	198	27	7	11	44	17	0	899
08:45	32	380	51	0	27	52	54	0	14	201	15	1	5	44	13	0	889
Total	111	1565	210	0	87	194	184	0	49	807	75	15	31	133	58	0	3519
16:30	8	162	27	1	46	51	28	0	27	324	8	1	24	71	49	0	827
16:45	13	220	29	2	57	47	26	0	37	355	14	2	17	50	23	0	892
Total	21	382	56	3	103	98	54	0	64	679	22	3	41	121	72	0	1719
17:00	20	196	24	0	79	73	30	0	44	323	8	1	20	79	65	0	962
17:15	35	190	36	2	65	71	32	0	51	414	20	2	26	52	31	0	1027
17:30	37	205	27	0	50	83	30	0	40	336	5	2	19	74	39	0	947
17:45	28	225	38	1	30	43	28	1	47	300	12	1	7	46	24	1	832
Total	120	816	125	3	224	270	120	1	182	1373	45	6	72	251	159	1	3768
18:00	17	175	15	2	46	40	25	0	34	252	11	2	14	58	25	0	716
18:15	20	194	31	0	37	43	21	0	45	232	8	1	14	42	23	1	712
Grand Total	382	4542	574	8	560	748	526	1	418	3872	204	34	202	688	373	3	13135
Apprch %	6.9	82.5	10.4	0.1	30.5	40.8	28.7	0.1	9.2	85.5	4.5	0.8	16	54.3	29.5	0.2	
Total %	2.9	34.6	4.4	0.1	4.3	5.7	4	0	3.2	29.5	1.6	0.3	1.5	5.2	2.8	0	

File Name : JA 4305
Site Code : 00000000
Start Date : 4/6/2022
Page No : 2

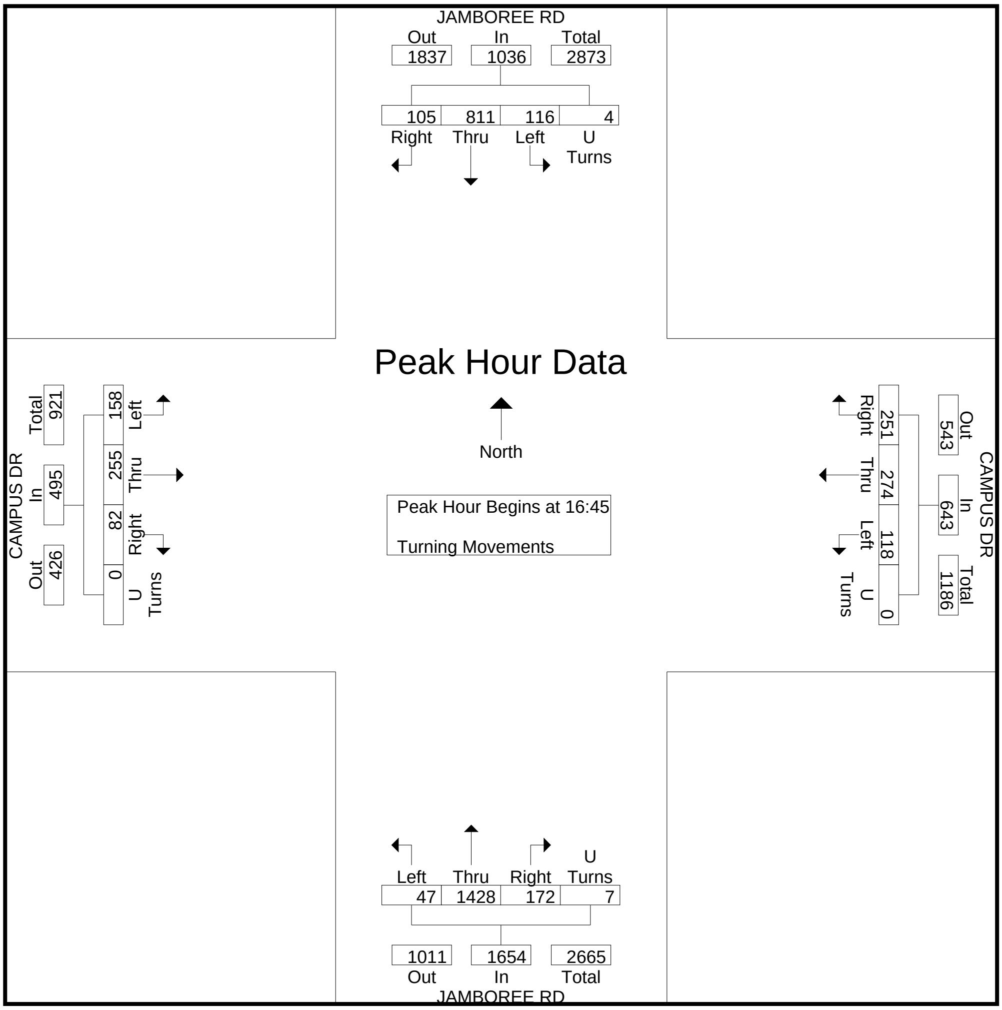
	JAMBOREE RD Southbound					CAMPUS DR Westbound					JAMBOREE RD Northbound					CAMPUS DR Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	24	383	57	0	464	20	**54**	41	0	115	7	187	20	3	217	5	25	10	0	40	836
08:15	31	**407**	42	0	**480**	**27**						**221**	13	4	**250**	10	20	**18**			
08:30	**24**	**395**	**60**	**0**	**479**	**13**	**47**	**40**	**0**	**100**	**16**	**198**	**27**	**7**	**248**	**11**	**44**	17	0	**72**	**899**
08:45	**32**							**54**		**133**	14	201	15	1	231	5	44	13	0	62	889
Total Volume	111	1565	210	0	1886	87	194	184	0	465	49	807	75	15	946	31	133	58	0	222	3519
% App. Total	5.9	83	11.1	0		18.7	41.7	39.6	0		5.2	85.3	7.9	1.6		14	59.9	26.1	0		
PHF	.867	.961	.875	.000	.982	.806	.898	.852	.000	.874	.766	.913	.694	.536	.946	.705	.756	.806	.000	.771	.979



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

File Name : JA 4305
Site Code : 00000000
Start Date : 4/6/2022
Page No : 3

	JAMBOREE RD Southbound					CAMPUS DR Westbound					JAMBOREE RD Northbound					CAMPUS DR Eastbound					
Start Time	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	13	**220**	29	**2**										**2**							
17:00	**20**	**196**	**24**	**0**	**240**	**79**	**73**	**30**	**0**	**182**	44	323	8	1	376	20	**79**	**65**	**0**	**164**	962
17:15	35	190	**36**					**32**			**51**	**414**	**20**		**487**	**26**					**1027**
17:30	**37**				**269**	50	**83**	30	0	163	40	336	5	2	383	19	74	39	0	132	947
Total Volume	105	811	116	4	1036	251	274	118	0	643	172	1428	47	7	1654	82	255	158	0	495	3828
% App. Total	10.1	78.3	11.2	0.4		39	42.6	18.4	0		10.4	86.3	2.8	0.4		16.6	51.5	31.9	0		
PHF	.709	.922	.806	.500	.963	.794	.825	.922	.000	.883	.843	.862	.588	.875	.849	.788	.807	.608	.000	.755	.932



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St N

File Name : BR 4190
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

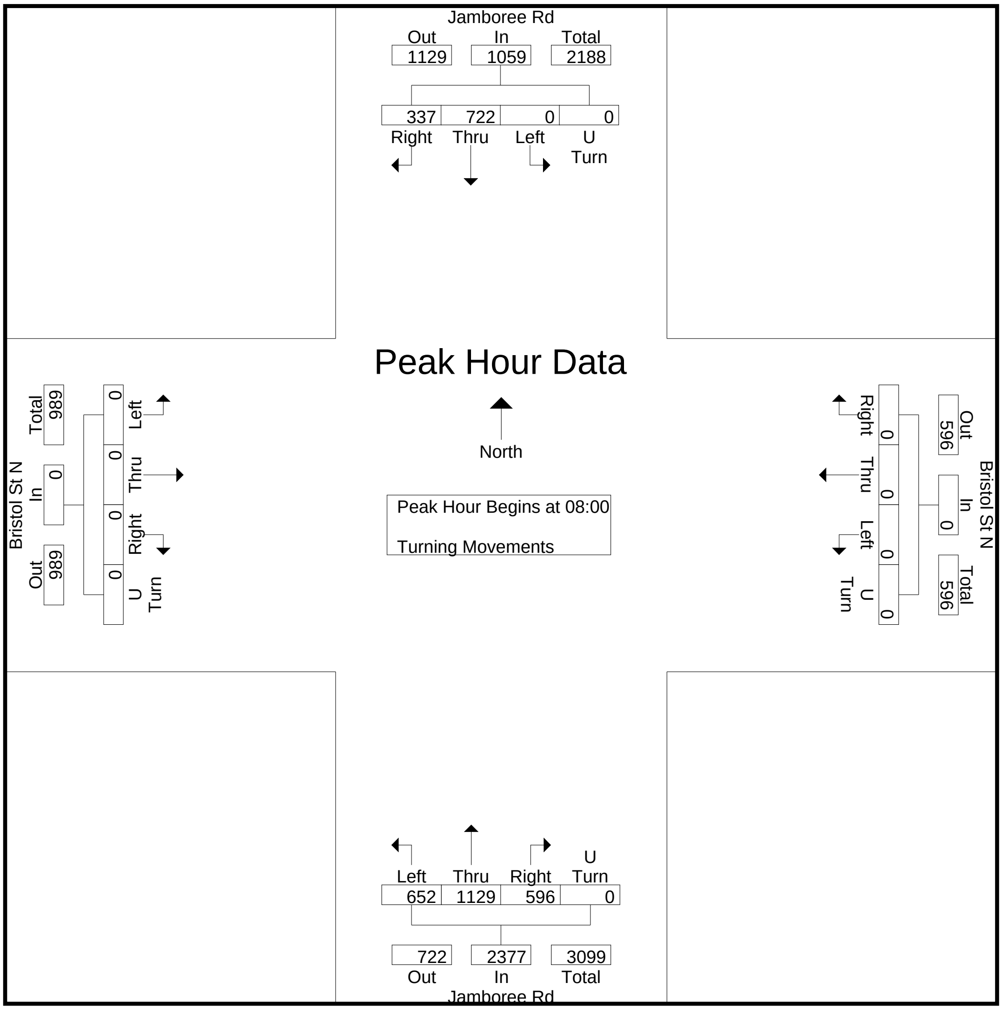
Groups Printed- Turning Movements

	Jamboree Rd Southbound				Bristol St N Westbound				Jamboree Rd Northbound				Bristol St N Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	54	108	0	0	0	0	0	0	101	140	68	0	0	0	0	0	471
07:15	42	113	0	0	0	0	0	0	125	146	81	0	0	0	0	0	507
07:30	67	176	0	0	0	0	0	0	170	228	103	0	0	0	0	0	744
07:45	88	162	0	0	0	0	0	0	165	278	113	0	0	0	0	0	806
Total	251	559	0	0	0	0	0	0	561	792	365	0	0	0	0	0	2528
08:00	84	179	0	0	0	0	0	0	143	287	133	0	0	0	0	0	826
08:15	96	174	0	0	0	0	0	0	145	275	153	0	0	0	0	0	843
08:30	86	188	0	0	0	0	0	0	152	275	175	0	0	0	0	0	876
08:45	71	181	0	0	0	0	0	0	156	292	191	0	0	0	0	0	891
Total	337	722	0	0	0	0	0	0	596	1129	652	0	0	0	0	0	3436
16:30	123	160	0	0	0	0	0	0	232	250	140	0	0	0	0	0	905
16:45	106	149	0	0	0	0	0	0	187	265	164	0	0	0	0	0	871
Total	229	309	0	0	0	0	0	0	419	515	304	0	0	0	0	0	1776
17:00	180	201	0	0	0	0	0	0	246	250	144	0	0	0	0	0	1021
17:15	132	212	0	0	0	0	0	0	215	262	131	0	0	0	0	0	952
17:30	148	160	0	0	0	0	0	0	178	213	151	0	0	0	0	0	850
17:45	142	168	0	0	0	0	0	0	206	257	109	0	0	0	0	0	882
Total	602	741	0	0	0	0	0	0	845	982	535	0	0	0	0	0	3705
18:00	136	144	0	0	0	0	0	0	189	188	93	0	0	0	0	0	750
18:15	82	143	0	0	0	0	0	0	165	167	98	0	0	0	0	0	655
Grand Total	1637	2618	0	0	0	0	0	0	2775	3773	2047	0	0	0	0	0	12850
Apprch %	38.5	61.5	0	0	0	0	0	0	32.3	43.9	23.8	0	0	0	0	0	
Total %	12.7	20.4	0	0	0	0	0	0	21.6	29.4	15.9	0	0	0	0	0	

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St N

File Name : BR 4190
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

	Jamboree Rd Southbound					Bristol St N Westbound					Jamboree Rd Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	84	179	0	0	263	0	0	0	0	0	143	287	133	0	563	0	0	0	0	0	826
08:15	**96**																				
08:30	**86**	**188**	0	0	**274**	0	0	0	0	0	152	275	175	0	602	0	0	0	0	0	876
08:45	71	181	0	0	252	0	0	0	0	0	**156**	**292**	**191**		**639**	0	0	0	0	0	**891**
Total Volume	337	722	0	0	1059	0	0	0	0	0	596	1129	652	0	2377	0	0	0	0	0	3436
% App. Total	31.8	68.2	0	0		0	0	0	0		25.1	47.5	27.4	0		0	0	0	0		
PHF	.878	.960	.000	.000	.966	.000	.000	.000	.000	.000	.955	.967	.853	.000	.930	.000	.000	.000	.000	.000	.964

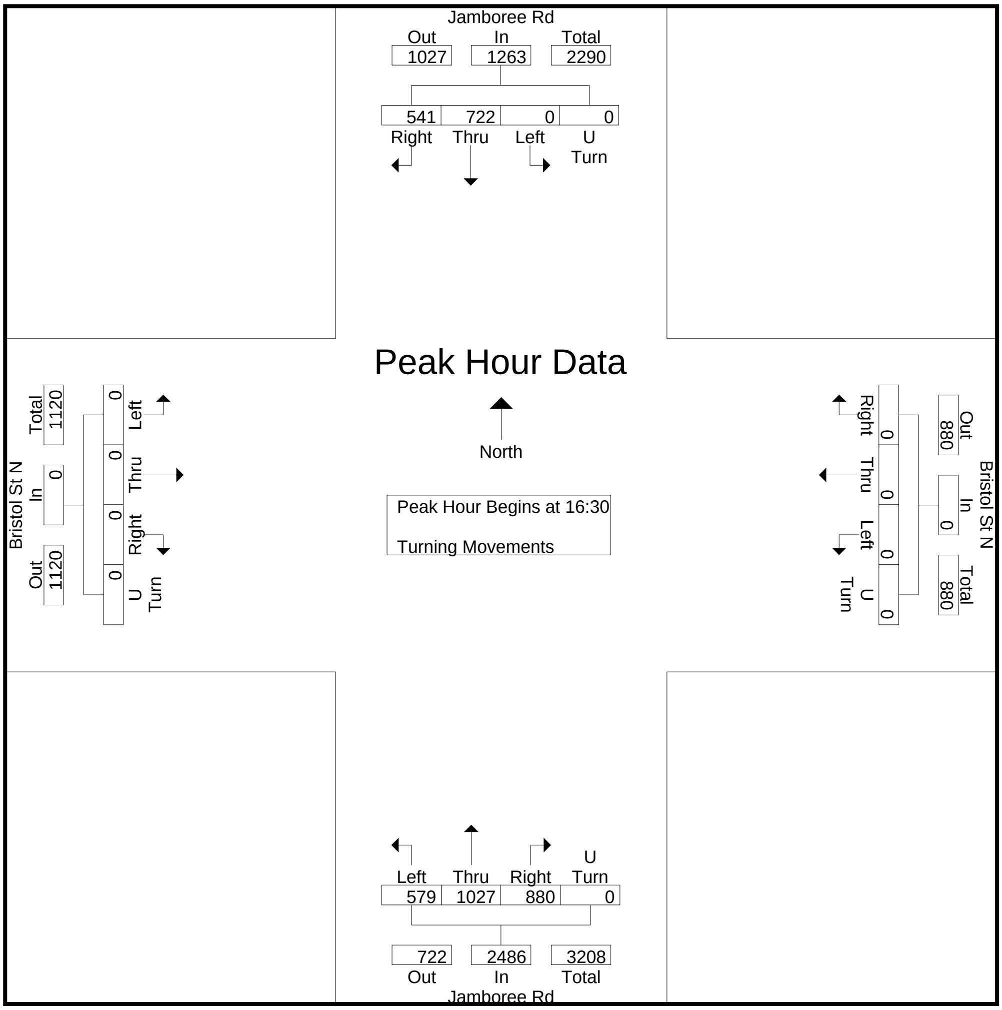


City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St N

File Name : BR 4190
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:30

	Jamboree Rd Southbound					Bristol St N Westbound					Jamboree Rd Northbound					Bristol St N Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
16:30	123	160	0	0	283	0	0	0	0	0	232	250	140	0	622	0	0	0	0	0	905
16:45	106	149	0	0	255	0	0	0	0	0	187	**265**	**164**								
17:00	**180**	**201**	**0**	**0**	**381**	0	0	0	0	0	**246**	**250**	**144**	**0**	**640**	0	0	0	0	0	**1021**
17:15	132	**212**	0	0	344	0	0	0	0	0	215	262	131	0	608	0	0	0	0	0	952
Total Volume	541	722	0	0	1263	0	0	0	0	0	880	1027	579	0	2486	0	0	0	0	0	3749
% App. Total	42.8	57.2	0	0		0	0	0	0		35.4	41.3	23.3	0		0	0	0	0		
PHF	.751	.851	.000	.000	.829	.000	.000	.000	.000	.000	.894	.969	.883	.000	.971	.000	.000	.000	.000	.000	.918



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St S

File Name : BR 4170
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

Groups Printed- Turning Movements

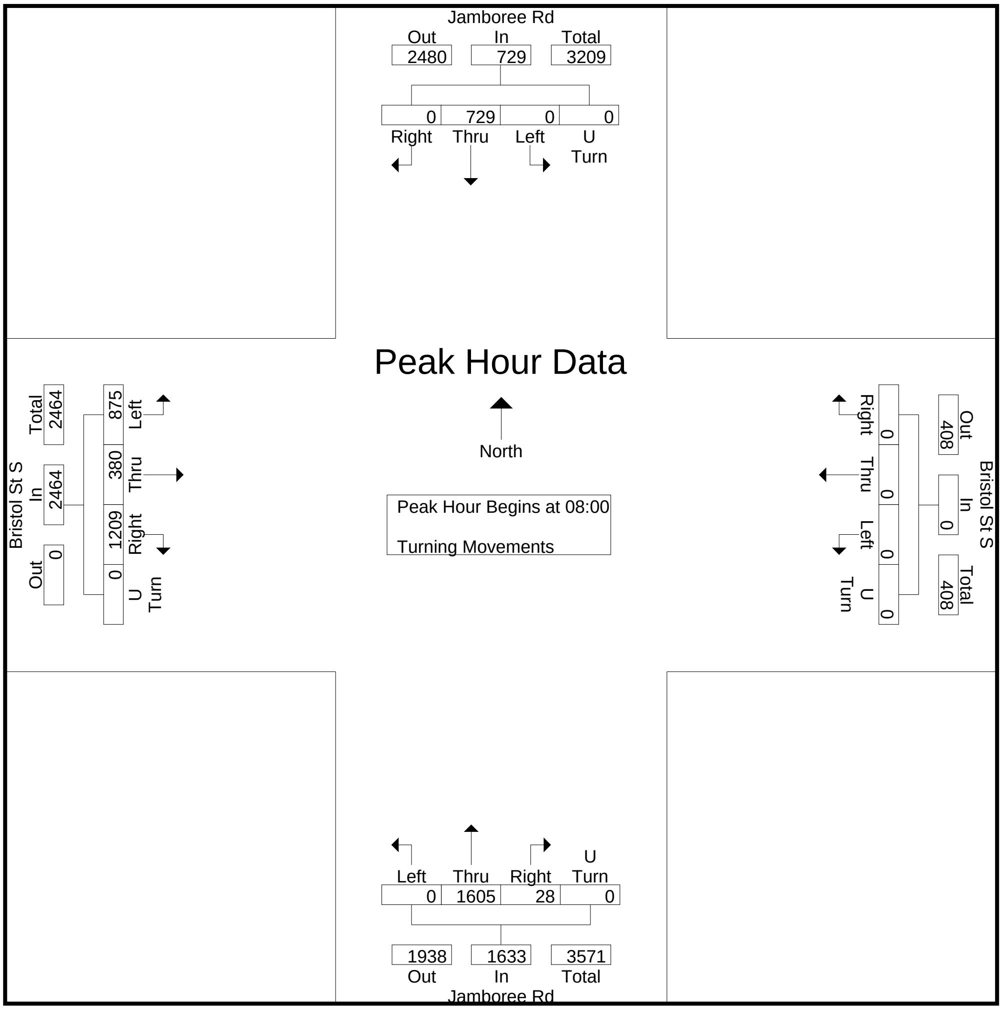
	Jamboree Rd Southbound				Bristol St S Westbound				Jamboree Rd Northbound				Bristol St S Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	0	104	0	0	0	0	0	0	5	192	0	0	267	56	91	0	715
07:15	0	152	0	0	0	0	0	0	4	252	0	0	265	68	128	0	869
07:30	0	155	0	0	0	0	0	0	5	325	0	0	325	89	174	0	1073
07:45	0	157	0	0	0	0	0	0	6	364	0	0	307	85	185	0	1104
Total	0	568	0	0	0	0	0	0	20	1133	0	0	1164	298	578	0	3761
08:00	0	200	0	0	0	0	0	0	6	358	0	0	266	81	238	0	1149
08:15	0	159	0	0	0	0	0	0	7	375	0	0	279	83	234	0	1137
08:30	0	210	0	0	0	0	0	0	9	505	0	0	331	98	175	0	1328
08:45	0	160	0	0	0	0	0	0	6	367	0	0	333	118	228	0	1212
Total	0	729	0	0	0	0	0	0	28	1605	0	0	1209	380	875	0	4826
16:30	0	159	0	0	0	0	0	0	18	507	0	0	290	178	143	0	1295
16:45	0	176	0	0	0	0	0	0	14	476	0	0	257	138	129	0	1190
Total	0	335	0	0	0	0	0	0	32	983	0	0	547	316	272	0	2485
17:00	0	181	0	0	0	0	0	0	21	470	0	0	264	188	127	0	1251
17:15	0	227	0	0	0	0	0	0	19	593	0	0	275	182	114	0	1410
17:30	0	158	0	0	0	0	0	0	13	470	0	0	231	160	114	0	1146
17:45	0	162	0	0	0	0	0	0	6	370	0	0	241	140	105	0	1024
Total	0	728	0	0	0	0	0	0	59	1903	0	0	1011	670	460	0	4831
18:00	0	149	0	0	0	0	0	0	14	393	0	0	218	108	125	0	1007
18:15	0	150	0	0	0	0	0	0	13	335	0	0	240	135	129	0	1002
Grand Total	0	2659	0	0	0	0	0	0	166	6352	0	0	4389	1907	2439	0	17912
Apprch %	0	100	0	0	0	0	0	0	2.5	97.5	0	0	50.2	21.8	27.9	0	
Total %	0	14.8	0	0	0	0	0	0	0.9	35.5	0	0	24.5	10.6	13.6	0	

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St S

File Name : BR 4170
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

	Jamboree Rd Southbound					Bristol St S Westbound					Jamboree Rd Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	200	0	0	200	0	0	0	0	0	6	358	0	0	364	266	81	**238**			
08:15	**0**	**159**	**0**	**0**	**159**	**0**	**0**	**0**	**0**	**0**	**7**	**375**	**0**	**0**	**382**	**279**	**83**	**234**	**0**	**596**	**1137**
08:30	**0**	**210**	0	0	**210**	0	0	0	0	0	**9**	**505**	0	0	**514**	331	98	175	0	604	**1328**
08:45	0	160	0	0	160	0	0	0	0	0	6	367	0	0	373	**333**	**118**	228	0	**679**	1212
Total Volume	0	729	0	0	729	0	0	0	0	0	28	1605	0	0	1633	1209	380	875	0	2464	4826
% App. Total												98.3				49.1	15.4	35.5			
PHF	.000	.868	.000	.000	.868	.000	.000	.000	.000	.000	.778	.795	.000	.000	.794	.908	.805	.919	.000	.907	.909



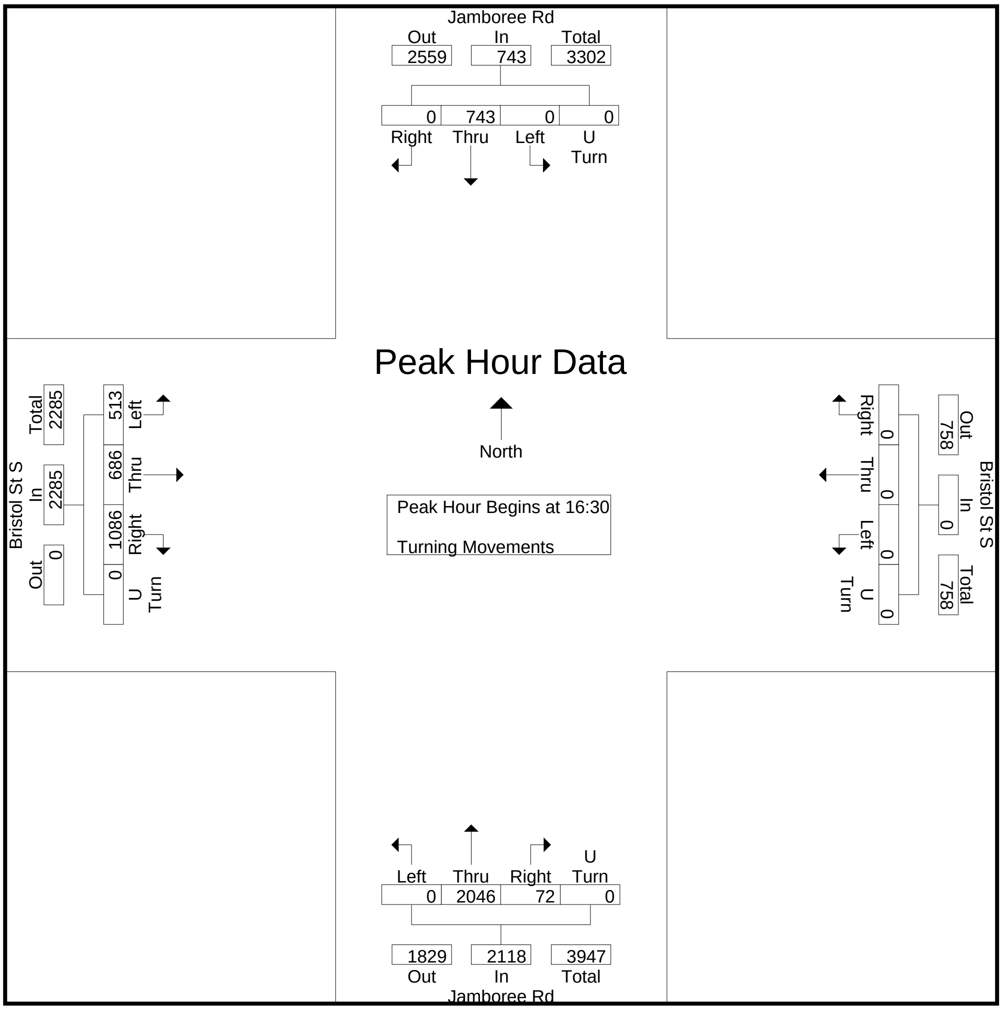
Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Bristol St S

File Name : BR 4170
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 16:30

	Jamboree Rd Southbound					Bristol St S Westbound					Jamboree Rd Northbound					Bristol St S Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
16:30	0	159	0	0	159	0	0	0	0	0	18	507	0	0	525	**290**		**143**		**611**	1295
16:45	0	176	0	0	176	0	0	0	0	0	14	476	0	0	490	257	138	129	0	524	1190
17:00	0	181	0	0	181	0	0	0	0	0	**21**						**188**	127	0	579	1251
17:15	0	**227**	0	0	**227**	0	0	0	0	0	19	**593**	0	0	**612**	275	182	114	0	571	**1410**
Total Volume	0	743	0	0	743	0	0	0	0	0	72	2046	0	0	2118	1086	686	513	0	2285	5146
% App. Total												96.6				47.5		22.5			
PHF	.000	.818	.000	.000	.818	.000	.000	.000	.000	.000	.857	.863	.000	.000	.865	.936	.912	.897	.000	.935	.912



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Eastbluff Dr N, Universit

File Name : JA 4765
Site Code : 00000000
Start Date : 3/31/2022
Page No : 1

Groups Printed- Turning Movements

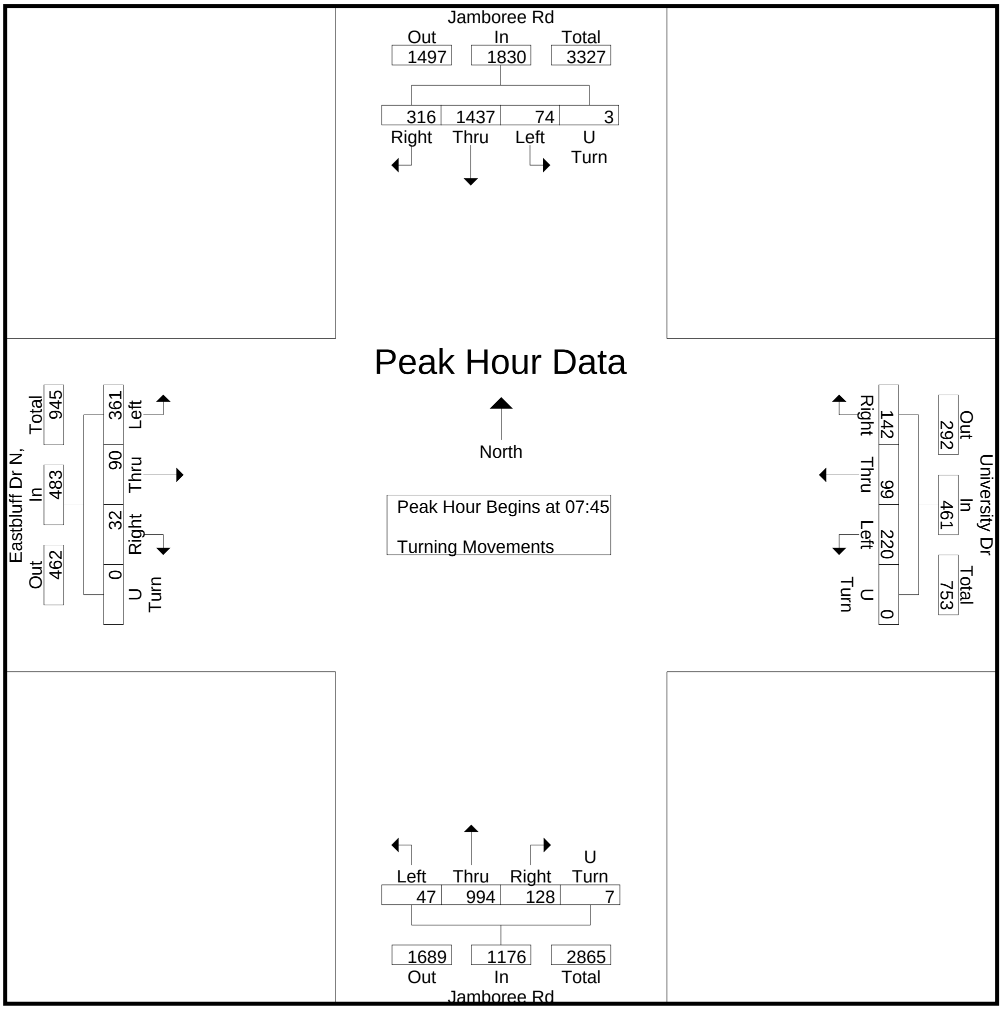
	Jamboree Rd Southbound				University Dr Westbound				Jamboree Rd Northbound				Eastbluff Dr N, Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	45	259	7	0	13	10	27	0	18	171	4	0	0	4	39	0	597
07:15	79	271	12	1	33	29	24	0	25	141	4	2	1	17	56	0	695
07:30	139	317	21	1	20	54	39	1	35	228	27	1	5	19	75	0	982
07:45	99	348	16	0	25	35	43	0	35	261	33	3	20	22	101	0	1041
Total	362	1195	56	2	91	128	133	1	113	801	68	6	26	62	271	0	3315
08:00	71	383	19	2	34	22	48	0	44	260	3	2	4	35	90	0	1017
08:15	78	326	25	1	32	21	61	0	20	229	5	1	2	12	88	0	901
08:30	68	380	14	0	51	21	68	0	29	244	6	1	6	21	82	0	991
08:45	44	407	21	0	44	9	76	1	21	238	11	4	6	18	73	0	973
Total	261	1496	79	3	161	73	253	1	114	971	25	8	18	86	333	0	3882
16:30	78	291	24	4	36	22	41	1	84	389	8	3	3	28	66	0	1078
16:45	90	310	35	4	20	26	46	0	77	361	8	2	4	25	54	1	1063
Total	168	601	59	8	56	48	87	1	161	750	16	5	7	53	120	1	2141
17:00	86	335	37	2	35	30	60	0	71	408	11	3	1	20	87	1	1187
17:15	96	285	48	1	31	28	80	0	90	428	7	1	4	27	62	0	1188
17:30	93	320	26	0	40	27	55	0	74	331	10	2	5	22	57	0	1062
17:45	77	302	20	2	19	30	35	1	61	343	9	1	3	19	44	0	966
Total	352	1242	131	5	125	115	230	1	296	1510	37	7	13	88	250	1	4403
18:00	65	270	19	2	37	22	44	0	53	290	9	1	5	23	67	0	907
18:15	79	201	33	0	14	25	37	0	42	261	11	5	4	25	62	0	799
Grand Total	1287	5005	377	20	484	411	784	4	779	4583	166	32	73	337	1103	2	15447
Apprch %	19.2	74.8	5.6	0.3	28.8	24.4	46.6	0.2	14	82.4	3	0.6	4.8	22.2	72.8	0.1	
Total %	8.3	32.4	2.4	0.1	3.1	2.7	5.1	0	5	29.7	1.1	0.2	0.5	2.2	7.1	0	

Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Eastbluff Dr N, Universit

File Name : JA 4765
Site Code : 00000000
Start Date : 3/31/2022
Page No : 2

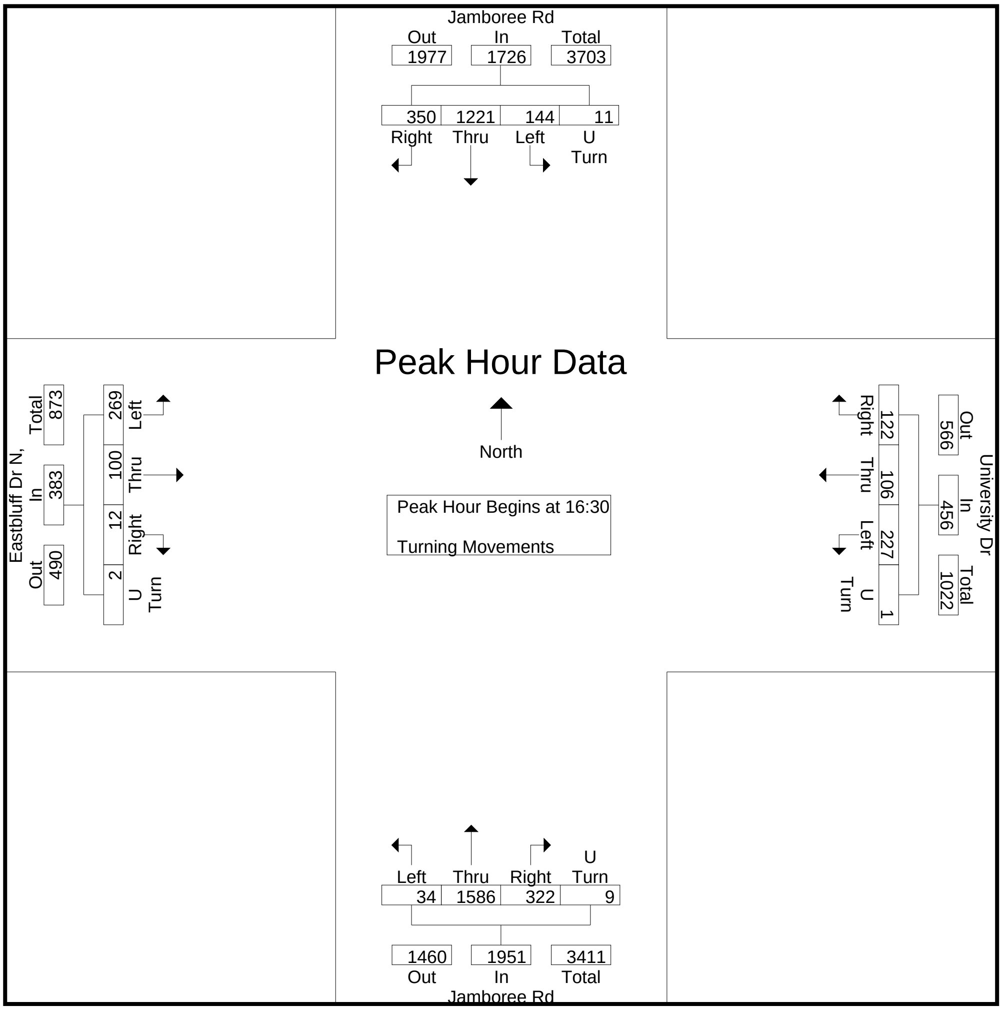
	Jamboree Rd Southbound					University Dr Westbound					Jamboree Rd Northbound					Eastbluff Dr N, Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	**99**						**35**	43	0	103	35	**261**	**33**	**3**	**332**	**20**		**101**		**143**	**1041**
08:00	71	**383**	19	**2**	**475**	34	22	48	0	104	**44**						**35**	90	0	129	1017
08:15	78	326	**25**																		
08:30	**68**	**380**	**14**	**0**	**462**	**51**	**21**	**68**	**0**	**140**	29	244	6	1	280	6	21	82	0	109	991
Total Volume	316	1437	74	3	1830	142	99	220	0	461	128	994	47	7	1176	32	90	361	0	483	3950
% App. Total	17.3	78.5	4	0.2		30.8	21.5	47.7	0		10.9	84.5	4	0.6		6.6	18.6	74.7	0		
PHF	.798	.938	.740	.375	.963	.696	.707	.809	.000	.823	.727	.952	.356	.583	.886	.400	.643	.894	.000	.844	.949



City : Newport Beach
N-S Direction : Jamboree Rd
E-W Direction: Eastbluff Dr N, Universit

File Name : JA 4765
Site Code : 00000000
Start Date : 3/31/2022
Page No : 3

	Jamboree Rd Southbound					University Dr Westbound					Jamboree Rd Northbound					Eastbluff Dr N, Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	78	291	24	**4**		**36**			**1**					**3**			**28**	66	0	97	1078
16:45	90	310	35	4	439	20	26	46	0	92	77	361	8	2	448	**4**			**1**		
17:00	**86**	**335**	37	2	**460**	35	**30**	60	0	125	71	408	**11**	**3**	**493**	**1**	**20**	**87**	**1**	**109**	1187
17:15	**96**		**48**					**80**		**139**	**90**	**428**	7	1	**526**	4	27	62	0	93	**1188**
Total Volume	350	1221	144	11	1726	122	106	227	1	456	322	1586	34	9	1951	12	100	269	2	383	4516
% App. Total	20.3	70.7	8.3	0.6		26.8	23.2	49.8	0.2		16.5	81.3	1.7	0.5		3.1	26.1	70.2	0.5		
PHF	.911	.911	.750	.688	.938	.847	.883	.709	.250	.820	.894	.926	.773	.750	.927	.750	.893	.773	.500	.878	.950



Transportation Studies, Inc
2640 Walnut Avenue, Suite L
Tustin, CA. 92780

City : Newport Beach
N-S Direction : Von Karman Ave
E-W Direction: Campus Dr

File Name : CA 4302
Site Code : 00000000
Start Date : 3/30/2022
Page No : 1

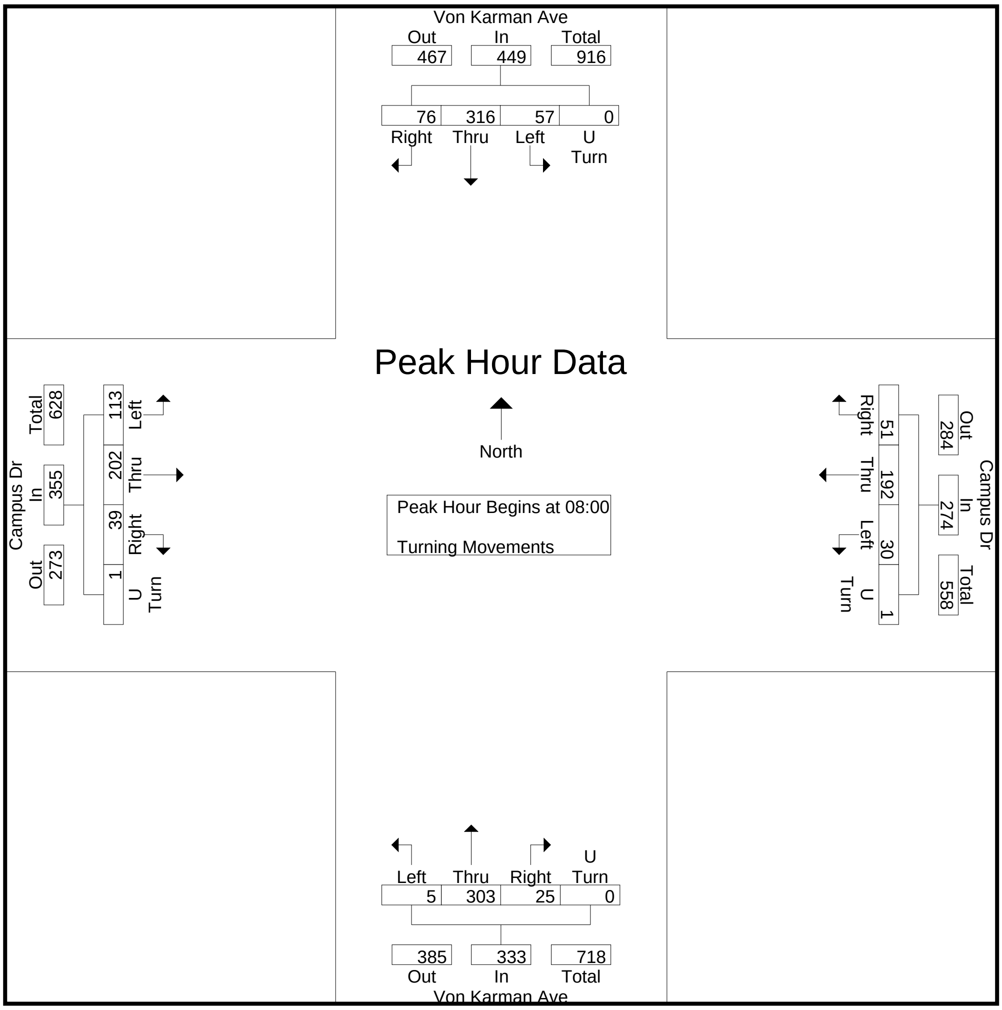
Groups Printed- Turning Movements

	Von Karman Ave				Campus Dr				Von Karman Ave				Campus Dr				
	Southbound				Westbound				Northbound				Eastbound				
Start Time	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Right	Thru	Left	U Turn	Int. Total
07:00	11	37	9	0	7	25	2	0	3	22	0	0	1	25	19	0	161
07:15	10	49	6	0	12	32	6	0	1	41	2	0	7	29	14	0	209
07:30	14	66	16	0	9	42	2	0	5	37	1	0	2	53	23	0	270
07:45	28	74	11	0	8	46	5	0	3	78	0	0	11	42	32	0	338
Total	63	226	42	0	36	145	15	0	12	178	3	0	21	149	88	0	978
08:00	18	89	13	0	6	35	6	0	3	69	0	0	9	39	39	0	326
08:15	23	56	16	0	14	64	7	1	6	85	3	0	10	47	33	1	366
08:30	15	92	17	0	10	44	14	0	6	68	1	0	15	52	18	0	352
08:45	20	79	11	0	21	49	3	0	10	81	1	0	5	64	23	0	367
Total	76	316	57	0	51	192	30	1	25	303	5	0	39	202	113	1	1411
16:30	51	86	25	0	28	79	5	0	8	113	4	0	9	45	26	0	479
16:45	44	92	18	0	17	70	4	0	11	84	7	0	6	54	30	0	437
Total	95	178	43	0	45	149	9	0	19	197	11	0	15	99	56	0	916
17:00	84	115	14	0	21	91	2	0	7	126	18	0	10	62	35	0	585
17:15	68	135	18	0	21	88	2	0	8	99	9	0	12	73	28	0	561
17:30	65	94	19	0	16	93	3	0	8	91	6	0	6	74	34	1	510
17:45	62	82	11	0	19	60	9	0	6	105	7	0	10	43	30	0	444
Total	279	426	62	0	77	332	16	0	29	421	40	0	38	252	127	1	2100
18:00	37	71	11	0	20	84	6	0	15	61	2	0	6	48	29	0	390
18:15	27	48	18	0	14	45	2	0	10	66	5	0	8	40	21	0	304
Grand Total	577	1265	233	0	243	947	78	1	110	1226	66	0	127	790	434	2	6099
Apprch %	27.8	61	11.2	0	19.1	74.6	6.1	0.1	7.8	87.4	4.7	0	9.4	58.4	32.1	0.1	
Total %	9.5	20.7	3.8	0	4	15.5	1.3	0	1.8	20.1	1.1	0	2.1	13	7.1	0	

City : Newport Beach
N-S Direction : Von Karman Ave
E-W Direction: Campus Dr

File Name : CA 4302
Site Code : 00000000
Start Date : 3/30/2022
Page No : 2

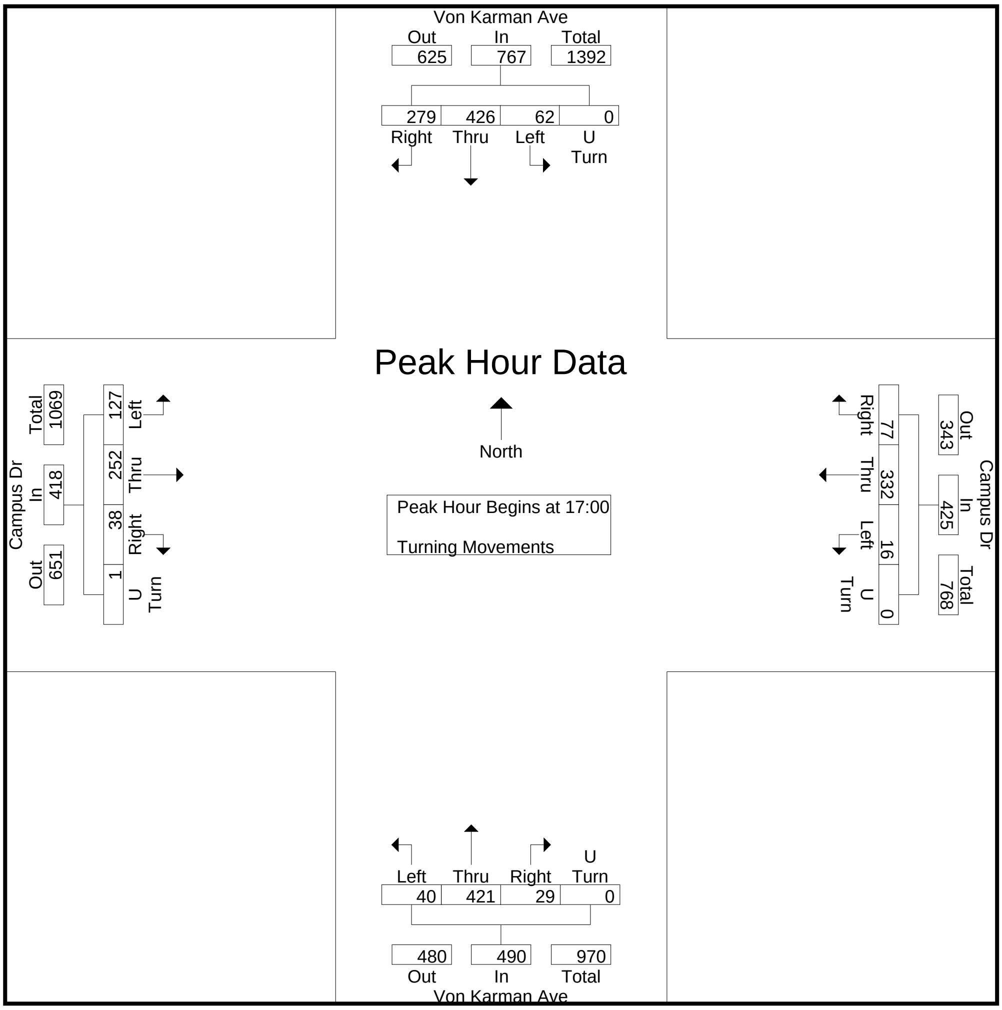
	Von Karman Ave Southbound					Campus Dr Westbound					Von Karman Ave Northbound					Campus Dr Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	18	89	13	0	120	6	35	6	0	47	3	69	0	0	72	9	39	**39**			
08:15	**23**	**56**	**16**	**0**	**95**	**14**	**64**	7	**1**	**86**	6	**85**	**3**	**0**	**94**	10	47	33	**1**	**91**	**366**
08:30	**15**	**92**	**17**	**0**	**124**	10	44	**14**	**0**	**68**	**6**	**68**	**1**	**0**	**75**	**15**	**52**	**18**	**0**	**85**	**352**
08:45	**20**	**79**	**11**	**0**	**110**	**21**	**49**	**3**	**0**	**73**	**10**	**81**	**1**	**0**	**92**	**5**	**64**	23	0	**92**	**367**
Total Volume	76	316	57	0	449	51	192	30	1	274	25	303	5	0	333	39	202	113	1	355	1411
% App. Total	16.9	70.4	12.7	0		18.6	70.1	10.9	0.4		7.5	91	1.5	0		11	56.9	31.8	0.3		
PHF	.826	.859	.838	.000	.905	.607	.750	.536	.250	.797	.625	.891	.417	.000	.886	.650	.789	.724	.250	.965	.961



City : Newport Beach
N-S Direction : Von Karman Ave
E-W Direction: Campus Dr

File Name : CA 4302
Site Code : 00000000
Start Date : 3/30/2022
Page No : 3

	Von Karman Ave Southbound					Campus Dr Westbound					Von Karman Ave Northbound					Campus Dr Eastbound					
Start Time	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Right	Thru	Left	U Turn	App. Total	Int. Total
Peak Hour Analysis From 16:30 to 18:15 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	**84**					**21**				**114**	7	**126**	**18**		**151**	10	62	**35**			**585**
17:15	68	**135**	18	0	**221**	21	88	2	0	111	**8**					**12**					
17:30	**65**	**94**	**19**	**0**	**178**	**16**	**93**	3	0	112	8	91	6	0	105	6	**74**	34	**1**	**115**	510
17:45	62	82	11	0	155	19	60	**9**													
Total Volume	279	426	62	0	767	77	332	16	0	425	29	421	40	0	490	38	252	127	1	418	2100
% App. Total	36.4	55.5	8.1	0		18.1	78.1	3.8	0		5.9	85.9	8.2	0		9.1	60.3	30.4	0.2		
PHF	.830	.789	.816	.000	.868	.917	.892	.444	.000	.932	.906	.835	.556	.000	.811	.792	.851	.907	.250	.909	.897



APPENDIX C

LEVEL OF SERVICE WORKSHEETS

EXISTING

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.358
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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         Permitted        Permitted        Permitted
Rights:           Include           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     418  961     0     0  254   226     0    0     0   252  858   167
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  418  961     0     0  254   226     0    0     0   252  858   167
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:   418  961     0     0  254   226     0    0     0   252  858   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  418  961     0     0  254   226     0    0     0   252  858   167
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:  418  961     0     0  254   226     0    0     0   252  858   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.35  0.65
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5357  1043
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.20  0.00  0.00 0.04  0.05  0.00 0.00  0.00  0.16 0.16  0.16
Crit Moves:       ****                                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.487
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  698   199    87  457     0   682 1292   453     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  698   199    87  457     0   682 1292   453     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:     0  698   199    87  457     0   682 1292   453     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  698   199    87  457     0   682 1292   453     0    0     0
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  698   199    87  457     0   682 1292   453     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.38 2.62  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2211 4189  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.12  0.05 0.10  0.00  0.31 0.31  0.14  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.468
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      78  624     0     0  119   110     0    0     0   360 1161   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   78  624     0     0  119   110     0    0     0   360 1161   149
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:    78  624     0     0  119   110     0    0     0   360 1161   149
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  624     0     0  119   110     0    0     0   360 1161   149
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:   78  624     0     0  119   110     0    0     0   360 1161   149
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 2.00  2.00  0.00 0.00  0.00  1.00 3.66  0.34
Final Sat.:  3200 3200     0     0 3200  3200     0    0     0  1600 5854   546
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.20  0.00  0.00 0.04  0.03  0.00 0.00  0.00  0.23 0.20  0.27
Crit Moves:       ****                                                     ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.344
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  211   240   129  341     0   496  905   194     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  211   240   129  341     0   496  905   194     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:     0  211   240   129  341     0   496  905   194     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  211   240   129  341     0   496  905   194     0    0     0
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  211   240   129  341     0   496  905   194     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.42 3.05  0.53  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  2266 4887   847     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.07  0.08  0.04 0.11  0.00  0.22 0.19  0.23  0.00 0.00  0.00
Crit Moves:             ****  ****                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.325
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      45  372    22   187  860   291   254  406    37    21  170    60
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   45  372    22   187  860   291   254  406    37    21  170    60
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    45  372    22   187  860   291   254  406    37    21  170     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   45  372    22   187  860   291   254  406    37    21  170     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   45  372    22   187  860   291   254  406    37    21  170     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.75  0.25  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4399   401  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.06  0.01  0.12 0.13  0.18  0.08 0.09  0.09  0.01 0.04  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

```
Default Scenario           Mon Aug 14, 2023 17:47:27                 Page 9-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.283
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21  363    47    49  608   245    59  179    39    16  113    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:   21  363    47    49  608   245    59  179    39    16  113    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:    21  363    47    49  608   245    59  179    39    16  113    34
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   21  363    47    49  608   245    59  179    39    16  113    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:   21  363    47    49  608   245    59  179    39    16  113    34
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.58  0.42  1.00 1.54  0.46
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2527   673  1600 2460   740
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.03  0.03 0.13  0.15  0.04 0.07  0.06  0.01 0.05  0.05
Crit Moves:  ****                        ****       ****                   ****
********************************************************************************

  Traffix 7.9.0215 (c) 2008 Dowling Assoc.
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.310
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      32  398   345    48  405   101    18   38    20   147   59    30
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   32  398   345    48  405   101    18   38    20   147   59    30
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:    32  398   345    48  405   101    18   38    20   147   59    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   32  398   345    48  405   101    18   38    20   147   59    30
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:   32  398   345    48  405   101    18   38    20   147   59    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.31  0.69  2.00 0.66  0.34
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2097  1103  3200 1061   539
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.08  0.22  0.03 0.08  0.06  0.01 0.02  0.02  0.05 0.06  0.06
Crit Moves:             ****  ****                  ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.368
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:            Ovl              Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      94  544   284    56  320   197   260  597   138   333  747   152
Growth Adj:  1.00 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  544   284    56  320   197   260  597   138   333  747   152
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:    94  544   284    56  320     0   260  597   138   333  747   152
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   94  544   284    56  320     0   260  597   138   333  747   152
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:   94  544   284    56  320     0   260  597   138   333  747   152
OvlAdjVol:               173
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.25  0.75  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5198  1202  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.11  0.18  0.02 0.07  0.00  0.08 0.11  0.11  0.07 0.16  0.10
OvlAdjV/S:              0.11
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.378
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     105 1285    65    38 1721   159    78   79    66   165   92    40
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  105 1285    65    38 1721   159    78   79    66   165   92    40
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   105 1285     0    38 1721   159    78   79     0   165   92    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  105 1285     0    38 1721   159    78   79     0   165   92    40
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  105 1285     0    38 1721   159    78   79     0   165   92    40
OvlAdjVol:                                120                                 21
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.20  0.00  0.01 0.27  0.10  0.02 0.02  0.00  0.05 0.03  0.03
OvlAdjV/S:                               0.08                              0.01
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

```
Default Scenario          Mon Aug 14, 2023 17:47:27             Page 13-1
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.476
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      90  807    49   210 1565   111    58  133    31   184  194    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:   90  807    49   210 1565   111    58  133    31   184  194    87
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:    90  807    49   210 1565   111    58  133     0   184  194    87
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   90  807    49   210 1565   111    58  133     0   184  194    87
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:   90  807    49   210 1565   111    58  133     0   184  194    87
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.77  0.23  2.00 2.80  0.20  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6034   366  3200 4482   318  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.13  0.13  0.07 0.35  0.35  0.02 0.04  0.00  0.06 0.06  0.05
Crit Moves:  ****                  ****              ****        ****
********************************************************************************









  Traffix 7.9.0215 (c) 2008 Dowling Assoc.
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.336
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     652 1129   596     0  722   337     0    0     0     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:  652 1129   596     0  722   337     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   652 1129     0     0  722   337     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  652 1129     0     0  722   337     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  652 1129     0     0  722   337     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.41  1.59  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 5454  2546     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.24  0.00  0.00 0.13  0.13  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):        0.582
Loss Time (sec):        0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100               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         Protected         Permitted
Rights:           Include          Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1605    28     0  729     0   875  380  1209     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 1605    28     0  729     0   875  380  1209     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:     0 1605    28     0  729     0   875  380  1209     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1605    28     0  729     0   875  380  1209     0    0     0
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 1605    28     0  729     0   875  380  1209     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.91  0.09  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7863   137     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.20  0.20  0.00 0.11  0.00  0.27 0.24  0.38  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.543
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  994   128    77 1437   316   361   90    32   220   99   142
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   54  994   128    77 1437   316   361   90    32   220   99   142
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    54  994   128    77 1437   316   361   90    32   220   99     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54  994   128    77 1437   316   361   90    32   220   99     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   54  994   128    77 1437   316   361   90    32   220   99     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.60 0.40  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2561  639  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.21  0.08  0.02 0.30  0.20  0.14 0.14  0.02  0.07 0.06  0.00
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.278
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5  303    25    57  316    76   114  202    39    31  192    51
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5  303    25    57  316    76   114  202    39    31  192    51
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     5  303     0    57  316    76   114  202    39    31  192    51
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    5  303     0    57  316    76   114  202    39    31  192    51
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    5  303     0    57  316    76   114  202    39    31  192    51
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.61  0.39  1.00 2.00  1.00  1.00 1.58  0.42
Final Sat.:  1600 3200  1600  1600 2580   620  1600 3200  1600  1600 2528   672
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.09  0.00  0.04 0.12  0.12  0.07 0.06  0.02  0.02 0.08  0.08
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.614
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     521  557     0     0  575   813     0    0     0   278 1697   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  521  557     0     0  575   813     0    0     0   278 1697   107
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:   521  557     0     0  575   813     0    0     0   278 1697   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  521  557     0     0  575   813     0    0     0   278 1697   107
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:  521  557     0     0  575   813     0    0     0   278 1697   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.76  0.24
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6020   380
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.12  0.00  0.00 0.09  0.17  0.00 0.00  0.00  0.17 0.28  0.28
Crit Moves:  ****                        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.437
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  692   262   123  694     0   435  822   485     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  692   262   123  694     0   435  822   485     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:     0  692   262   123  694     0   435  822   485     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  692   262   123  694     0   435  822   485     0    0     0
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  692   262   123  694     0   435  822   485     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.38 2.62  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2215 4185  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.11  0.16  0.08 0.14  0.00  0.20 0.20  0.15  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.510
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  266     0     0  259   506     0    0     0   370 1537   110
Growth Adj:  1.00 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  266     0     0  259   506     0    0     0   370 1537   110
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  266     0     0  259   506     0    0     0   370 1537   110
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  266     0     0  259   506     0    0     0   370 1537   110
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  266     0     0  259   506     0    0     0   370 1537   110
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.35  2.65  0.00 0.00  0.00  1.00 3.80  0.20
Final Sat.:  3200 3200     0     0 2167  4233     0    0     0  1600 6079   321
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.08  0.00  0.00 0.12  0.12  0.00 0.00  0.00  0.23 0.25  0.34
Crit Moves:  ****                  ****                                    ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.352
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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         Permitted        Permitted
Rights:          Include         Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  252   264   198  413     0   202  903   111     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  252   264   198  413     0   202  903   111     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:     0  252   264   198  413     0   202  903   111     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  252   264   198  413     0   202  903   111     0    0     0
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  252   264   198  413     0   202  903   111     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.00 3.67  0.33  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  1600 5875   525     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.06 0.13  0.00  0.13 0.15  0.21  0.00 0.00  0.00
Crit Moves:       ****        ****                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.527
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150  761    19    69  598   354   262  221    46    35  625   137
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  150  761    19    69  598   354   262  221    46    35  625   137
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   150  761    19    69  598   354   262  221    46    35  625     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  150  761    19    69  598   354   262  221    46    35  625     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  150  761    19    69  598   354   262  221    46    35  625     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.48  0.52  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3973   827  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.12  0.01  0.04 0.09  0.22  0.08 0.06  0.06  0.01 0.13  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.370
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  535    27    31  539   108   252  186    25    62  263   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69  535    27    31  539   108   252  186    25    62  263   149
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:    69  535    27    31  539   108   252  186    25    62  263   149
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   69  535    27    31  539   108   252  186    25    62  263   149
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:   69  535    27    31  539   108   252  186    25    62  263   149
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.33  0.67  1.64 1.20  0.16  1.00 1.28  0.72
Final Sat.:  1600 4800  1600  1600 5332  1068  2620 1922   258  1600 2043  1157
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.11  0.02  0.02 0.10  0.10  0.10 0.10  0.10  0.04 0.13  0.13
Crit Moves:  ****                  ****                   ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.352
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       8  420   201    31  528    31    64   87   127   409   36    81
Growth Adj:  1.00 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  420   201    31  528    31    64   87   127   409   36    81
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  420   201    31  528    31    64   87   127   409   36    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    8  420   201    31  528    31    64   87   127   409   36    81
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:    8  420   201    31  528    31    64   87   127   409   36    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.31  0.69
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200  492  1108
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.09  0.13  0.02 0.11  0.02  0.04 0.05  0.08  0.13 0.07  0.07
Crit Moves:             ****  ****                        ****  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.452
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     207  367   308   152  762   333   179  752    55   357  828    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:  207  367   308   152  762   333   179  752    55   357  828    88
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:   207  367   308   152  762     0   179  752    55   357  828    88
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  207  367   308   152  762     0   179  752    55   357  828    88
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:  207  367   308   152  762     0   179  752    55   357  828    88
OvlAdjVol:               189
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.73  0.27  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5964   436  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.08  0.19  0.05 0.16  0.00  0.06 0.13  0.13  0.07 0.17  0.06
OvlAdjV/S:              0.12
Crit Moves:  ****                  ****        ****                    ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.408
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     142 1959    67    56 1423   162   165  102   129   135  104    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:  142 1959    67    56 1423   162   165  102   129   135  104    67
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   142 1959     0    56 1423   162   165  102     0   135  104    67
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  142 1959     0    56 1423   162   165  102     0   135  104    67
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  142 1959     0    56 1423   162   165  102     0   135  104    67
OvlAdjVol:                                 80                                39
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.31  0.00  0.02 0.22  0.10  0.05 0.03  0.00  0.04 0.03  0.04
OvlAdjV/S:                               0.05                              0.02
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                                  Existing
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.494
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              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          Ignore           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54 1428   172   120  811   105   158  255    82   118  274   251
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   54 1428   172   120  811   105   158  255    82   118  274   251
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:    54 1428   172   120  811   105   158  255     0   118  274   251
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   54 1428   172   120  811   105   158  255     0   118  274   251
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:   54 1428   172   120  811   105   158  255     0   118  274   251
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.66  0.34  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5712   688  3200 4250   550  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.25  0.25  0.04 0.19  0.19  0.05 0.08  0.00  0.04 0.09  0.16
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.350
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     579 1027   880     0  722   541     0    0     0     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:  579 1027   880     0  722   541     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   579 1027     0     0  722   541     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  579 1027     0     0  722   541     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  579 1027     0     0  722   541     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18 0.21  0.00  0.00 0.15  0.17  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.604
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Protected        Protected        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2046    72     0  743     0   513  686  1086     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 2046    72     0  743     0   513  686  1086     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:     0 2046    72     0  743     0   513  686  1086     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2046    72     0  743     0   513  686  1086     0    0     0
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 2046    72     0  743     0   513  686  1086     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.83  0.17  0.00 4.00  0.00  1.28 1.72  2.00  0.00 0.00  0.00
Final Sat.:     0 7728   272     0 6400     0  2054 2746  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.26  0.26  0.00 0.12  0.00  0.25 0.25  0.34  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.566
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43 1586   322   155 1221   350   271  100    12   228  106   122
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   43 1586   322   155 1221   350   271  100    12   228  106   122
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    43 1586   322   155 1221   350   271  100    12   228  106     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   43 1586   322   155 1221   350   271  100    12   228  106     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   43 1586   322   155 1221   350   271  100    12   228  106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.46 0.54  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2337  863  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.33  0.20  0.05 0.25  0.22  0.12 0.12  0.01  0.07 0.07  0.00
Crit Moves:       ****        ****                   ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                                   Existing
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.453
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      40  421    29    62  426   279   128  252    38    16  332    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:   40  421    29    62  426   279   128  252    38    16  332    77
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    40  421     0    62  426   279   128  252    38    16  332    77
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   40  421     0    62  426   279   128  252    38    16  332    77
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   40  421     0    62  426   279   128  252    38    16  332    77
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.21  0.79  1.00 2.00  1.00  1.00 1.62  0.38
Final Sat.:  1600 3200  1600  1600 1934  1266  1600 3200  1600  1600 2598   602
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.13  0.00  0.04 0.22  0.22  0.08 0.08  0.02  0.01 0.13  0.13
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

TPO YEAR 2029 WITHOUT PROJECT

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.369
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     418  961     0     0  254   226     0    0     0   252  858   167
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  418  961     0     0  254   226     0    0     0   252  858   167
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    7     0     0    7     0     0    0     0    15   91     0
Initial Fut:  418  968     0     0  261   226     0    0     0   267  949   167
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:   418  968     0     0  261   226     0    0     0   267  949   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  418  968     0     0  261   226     0    0     0   267  949   167
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:  418  968     0     0  261   226     0    0     0   267  949   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.40  0.60
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5442   958
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.20  0.00  0.00 0.04  0.05  0.00 0.00  0.00  0.17 0.17  0.17
Crit Moves:       ****                                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.495
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  698   199    87  457     0   682 1292   453     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  747   213    87  457     0   682 1292   453     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    2    -2     0   22     0     5   -2     0     0    0     0
Initial Fut:    0  749   211    87  479     0   687 1290   453     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:     0  749   211    87  479     0   687 1290   453     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  749   211    87  479     0   687 1290   453     0    0     0
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  749   211    87  479     0   687 1290   453     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.39 2.61  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2224 4176  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.13  0.05 0.10  0.00  0.31 0.31  0.14  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.488
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     78  624     0     0  119   110     0    0     0   360 1161   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   78  624     0     0  119   110     0    0     0   360 1161   149
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    1     0     0    9    23     0    0     0    21   83    11
Initial Fut:   78  625     0     0  128   133     0    0     0   381 1244   160
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:    78  625     0     0  128   133     0    0     0   381 1244   160
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  625     0     0  128   133     0    0     0   381 1244   160
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:   78  625     0     0  128   133     0    0     0   381 1244   160
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.96  2.04  0.00 0.00  0.00  1.00 3.66  0.34
Final Sat.:  3200 3200     0     0 3139  3261     0    0     0  1600 5853   547
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.20  0.00  0.00 0.04  0.04  0.00 0.00  0.00  0.24 0.21  0.29
Crit Moves:       ****                                                     ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          TPO 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.352
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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         Permitted        Permitted
Rights:          Include         Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  211   240   129  341     0   496  905   194     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  211   240   129  341     0   496  905   194     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    1     0    29    1     0     0   -5     0     0    0     0
Initial Fut:    0  212   240   158  342     0   496  900   194     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:     0  212   240   158  342     0   496  900   194     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  212   240   158  342     0   496  900   194     0    0     0
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  212   240   158  342     0   496  900   194     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.42 3.05  0.53  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  2274 4875   851     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.07  0.08  0.05 0.11  0.00  0.22 0.18  0.23  0.00 0.00  0.00
Crit Moves:             ****  ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.339
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      45  372    22   187  860   291   254  406    37    21  170    60
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   48  398    24   200  920   311   254  406    37    21  170    60
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   87     0     2   34     0     0    0     0     0    0     5
Initial Fut:   48  485    24   202  954   311   254  406    37    21  170    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    48  485    24   202  954   311   254  406    37    21  170     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   48  485    24   202  954   311   254  406    37    21  170     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   48  485    24   202  954   311   254  406    37    21  170     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.75  0.25  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4399   401  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.08  0.01  0.13 0.15  0.19  0.08 0.09  0.09  0.01 0.04  0.00
Crit Moves:  ****                        ****  ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.316
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21  363    47    49  608   245    59  179    39    16  113    34
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   22  388    50    52  651   262    59  179    39    16  113    34
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   17     0    12   28     0    32   12     0     0   12    50
Initial Fut:   22  405    50    64  679   262    91  191    39    16  125    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:    22  405    50    64  679   262    91  191    39    16  125    84
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   22  405    50    64  679   262    91  191    39    16  125    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:   22  405    50    64  679   262    91  191    39    16  125    84
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.64  0.36  1.00 1.20  0.80
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2620   580  1600 1914  1286
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.08  0.03  0.04 0.14  0.16  0.06 0.07  0.07  0.01 0.07  0.07
Crit Moves:  ****                        ****       ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          TPO 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.335
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      32  398   345    48  405   101    18   38    20   147   59    30
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   34  426   369    51  433   108    18   38    20   147   59    30
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   22     6     0   35     0     0    0     0    15    0     0
Initial Fut:   34  448   375    51  468   108    18   38    20   162   59    30
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:    34  448   375    51  468   108    18   38    20   162   59    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   34  448   375    51  468   108    18   38    20   162   59    30
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:   34  448   375    51  468   108    18   38    20   162   59    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.31  0.69  2.00 0.66  0.34
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2097  1103  3200 1061   539
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.09  0.23  0.03 0.10  0.07  0.01 0.02  0.02  0.05 0.06  0.06
Crit Moves:             ****  ****                  ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.424
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      94  544   284    56  320   197   260  597   138   333  747   152
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  101  582   304    60  342   211   278  639   148   356  799   163
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   -2   12     5     4   30    16     9   35     4    41  116    11
Initial Fut:   99  594   309    64  372   227   287  674   152   397  915   174
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:    99  594   309    64  372     0   287  674   152   397  915   174
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   99  594   309    64  372     0   287  674   152   397  915   174
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:   99  594   309    64  372     0   287  674   152   397  915   174
OvlAdjVol:                 176
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.27  0.73  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5224  1176  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.12  0.19  0.02 0.08  0.00  0.09 0.13  0.13  0.08 0.19  0.11
OvlAdjV/S:                0.11
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.414
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     105 1285    65    38 1721   159    78    79    66   165    92    40
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  112 1375    70    41 1841   170    78    79    66   165    92    40
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    1   17     8     0   52     2     2    5     1    16    1     0
Initial Fut:  113 1392    78    41 1893   172    80    84    67   181    93    40
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   113 1392     0    41 1893   172    80    84     0   181    93    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  113 1392     0    41 1893   172    80    84     0   181    93    40
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  113 1392     0    41 1893   172    80    84     0   181    93    40
OvlAdjVol:                                132                                20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.22  0.00  0.01 0.30  0.11  0.03 0.03  0.00  0.06 0.03  0.03
OvlAdjV/S:                               0.08                              0.01
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.512
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      90  807    49   210 1565   111    58  133    31   184  194    87
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   96  863    52   225 1675   119    58  133    31   184  194    87
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   11  100     5     0   23     1     2    0     2     1    0     0
Initial Fut:  107  963    57   225 1698   120    60  133    33   185  194    87
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   107  963    57   225 1698   120    60  133     0   185  194    87
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  107  963    57   225 1698   120    60  133     0   185  194    87
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  107  963    57   225 1698   120    60  133     0   185  194    87
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.77  0.23  2.00 2.80  0.20  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6040   360  3200 4484   316  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.16  0.16  0.07 0.38  0.38  0.02 0.04  0.00  0.06 0.06  0.05
Crit Moves:  ****                  ****              ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.374
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted        Permitted
Rights:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     652 1129   596     0  722   337     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  698 1208   638     0  773   361     0    0     0     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   -7   40    17     0   59    71     0    0     0     0    0     0
Initial Fut:  691 1248   655     0  832   432     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   691 1248     0     0  832   432     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  691 1248     0     0  832   432     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  691 1248     0     0  832   432     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.29  1.71  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 5267  2733     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.22 0.26  0.00  0.00 0.16  0.16  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.609
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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        Protected        Protected         Permitted
Rights:          Include          Include          Include           Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 1605    28    0  729     0   875  380  1209    0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 1717    30    0  780     0   875  380  1209    0    0     0
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0   27     0    0   59     0   22   12    30    0    0     0
Initial Fut:   0 1744    30    0  839     0   897  392  1239    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:    0 1744    30    0  839     0   897  392  1239    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 1744    30    0  839     0   897  392  1239    0    0     0
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 1744    30    0  839     0   897  392  1239    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.92  0.08  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:    0 7865   135    0 6400     0  3200 1600  3200    0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22  0.22  0.00 0.13  0.00  0.28 0.25  0.39  0.00 0.00  0.00
Crit Moves:       ****        ****                           ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.585
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  994   128    77 1437   316   361   90    32   220   99   142
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1064   137    82 1538   338   361   90    32   220   99   142
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   38     4     0   90     0     0    0     0     0    0     0
Initial Fut:   58 1102   141    82 1628   338   361   90    32   220   99   142
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    58 1102   141    82 1628   338   361   90    32   220   99     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   58 1102   141    82 1628   338   361   90    32   220   99     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   58 1102   141    82 1628   338   361   90    32   220   99     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.60 0.40  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2561  639  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.23  0.09  0.03 0.34  0.21  0.14 0.14  0.02  0.07 0.06  0.00
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.287
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5  303    25    57  316    76   114  202    39    31  192    51
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5  303    25    57  316    76   114  202    39    31  192    51
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   15     0     2    2     0     0    2     0     0    5     7
Initial Fut:    5  318    25    59  318    76   114  204    39    31  197    58
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     5  318     0    59  318    76   114  204    39    31  197    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    5  318     0    59  318    76   114  204    39    31  197    58
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    5  318     0    59  318    76   114  204    39    31  197    58
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.61  0.39  1.00 2.00  1.00  1.00 1.55  0.45
Final Sat.:  1600 3200  1600  1600 2583   617  1600 3200  1600  1600 2472   728
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10  0.00  0.04 0.12  0.12  0.07 0.06  0.02  0.02 0.08  0.08
Crit Moves:       ****        ****              ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.620
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     521  557     0     0  575   813     0    0     0   278 1697   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  521  557     0     0  575   813     0    0     0   278 1697   107
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   14     0     0    4     0     0    0     0     3   37     0
Initial Fut:  521  571     0     0  579   813     0    0     0   281 1734   107
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:   521  571     0     0  579   813     0    0     0   281 1734   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  521  571     0     0  579   813     0    0     0   281 1734   107
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:  521  571     0     0  579   813     0    0     0   281 1734   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.77  0.23
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6028   372
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.12  0.00  0.00 0.09  0.17  0.00 0.00  0.00  0.18 0.29  0.29
Crit Moves:  ****                        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.461
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  692   262   123  694     0   435  822   485     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  740   280   123  694     0   435  822   485     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    4    16     0    6     0    10    8     0     0    0     0
Initial Fut:    0  744   296   123  700     0   445  830   485     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:     0  744   296   123  700     0   445  830   485     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  744   296   123  700     0   445  830   485     0    0     0
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  744   296   123  700     0   445  830   485     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.40 2.60  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2234 4166  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.19  0.08 0.15  0.00  0.20 0.20  0.15  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
```

```
Default Scenario           Sat Jul 15, 2023 17:44:44                 Page 6-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.521
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  266     0     0  259   506     0    0     0   370 1537   110
Growth Adj:  1.00 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  266     0     0  259   506     0    0     0   370 1537   110
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    1     0     0    4    10     0    0     0     2   33     5
Initial Fut:  153  267     0     0  263   516     0    0     0   372 1570   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:   153  267     0     0  263   516     0    0     0   372 1570   115
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  267     0     0  263   516     0    0     0   372 1570   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:  153  267     0     0  263   516     0    0     0   372 1570   115
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.35  2.65  0.00 0.00  0.00  1.00 3.80  0.20
Final Sat.:  3200 3200     0     0 2161  4239     0    0     0  1600 6072   328
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.08  0.00  0.00 0.12  0.12  0.00 0.00  0.00  0.23 0.26  0.35
Crit Moves:  ****                  ****                                    ****
********************************************************************************








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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.358
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:           Include         Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  252   264   198  413     0   202  903   111     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  252   264   198  413     0   202  903   111     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    1     4     4    1     0     0   24     0     0    0     0
Initial Fut:    0  253   268   202  414     0   202  927   111     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:     0  253   268   202  414     0   202  927   111     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  253   268   202  414     0   202  927   111     0    0     0
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  253   268   202  414     0   202  927   111     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.00 3.68  0.32  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  1600 5887   513     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.06 0.13  0.00  0.13 0.16  0.22  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.549
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150  761    19    69  598   354   262  221    46    35  625   137
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  161  814    20    74  640   379   262  221    46    35  625   137
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   53     0     6   71     0     0    0     0     0    0     3
Initial Fut:  161  867    20    80  711   379   262  221    46    35  625   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  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   161  867    20    80  711   379   262  221    46    35  625     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  161  867    20    80  711   379   262  221    46    35  625     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  161  867    20    80  711   379   262  221    46    35  625     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.48  0.52  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3973   827  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.14  0.01  0.05 0.11  0.24  0.08 0.06  0.06  0.01 0.13  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.419
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  535    27    31  539   108   252  186    25    62  263   149
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   74  572    29    33  577   116   252  186    25    62  263   149
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   24     0    52   34     0    12    9     0     0   12    27
Initial Fut:   74  596    29    85  611   116   264  195    25    62  275   176
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  596    29    85  611   116   264  195    25    62  275   176
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   74  596    29    85  611   116   264  195    25    62  275   176
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  596    29    85  611   116   264  195    25    62  275   176
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.36  0.64  1.64 1.21  0.15  1.00 1.22  0.78
Final Sat.:  1600 4800  1600  1600 5382  1018  2620 1933   248  1600 1951  1249
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.12  0.02  0.05 0.11  0.11  0.10 0.10  0.10  0.04 0.14  0.14
Crit Moves:       ****        ****                          ****       ****
********************************************************************************





  Traffix 7.9.0215 (c) 2008 Dowling Assoc.
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.376
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       8  420   201    31  528    31    64   87   127   409   36    81
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  449   215    33  565    33    64   87   127   409   36    81
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   30    16     0   27     0     0    0     0    12    0     0
Initial Fut:    9  479   231    33  592    33    64   87   127   421   36    81
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  479   231    33  592    33    64   87   127   421   36    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  479   231    33  592    33    64   87   127   421   36    81
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:    9  479   231    33  592    33    64   87   127   421   36    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.31  0.69
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200  492  1108
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.10  0.14  0.02 0.12  0.02  0.04 0.05  0.08  0.13 0.07  0.07
Crit Moves:             ****  ****                        ****  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.506
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              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:           Ovl             Ignore           Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     207  367   308   152  762   333   179  752    55   357  828    88
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  221  393   330   163  815   356   192  805    59   382  886    94
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    8   27    42    12   12    20    14  128    -2    18   62     7
Initial Fut:  229  420   372   175  827   376   206  933    57   400  948   101
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:   229  420   372   175  827     0   206  933    57   400  948   101
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  229  420   372   175  827     0   206  933    57   400  948   101
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:  229  420   372   175  827     0   206  933    57   400  948   101
OvlAdjVol:               238
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.77  0.23  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6032   368  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.09  0.23  0.05 0.17  0.00  0.06 0.15  0.15  0.08 0.20  0.06
OvlAdjV/S:              0.15
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.444
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore           Ovl             Ignore           Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     142 1959    67    56 1423   162   165  102   129   135  104    67
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  152 2096    72    60 1523   173   165  102   129   135  104    67
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    4   67    18     0   27    11     5    3     2     6    4     0
Initial Fut:  156 2163    90    60 1550   184   170  105   131   141  108    67
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   156 2163     0    60 1550   184   170  105     0   141  108    67
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  156 2163     0    60 1550   184   170  105     0   141  108    67
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  156 2163     0    60 1550   184   170  105     0   141  108    67
OvlAdjVol:                                 99                                37
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.34  0.00  0.02 0.24  0.12  0.05 0.03  0.00  0.04 0.03  0.04
OvlAdjV/S:                                0.06                              0.02
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.522
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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           Ignore          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54 1428   172   120  811   105   158  255    82   118  274   251
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1528   184   128  868   112   158  255    82   118  274   251
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    6   47     3     0   97     2     1    0    12     5    0     0
Initial Fut:   64 1575   187   128  965   114   159  255    94   123  274   251
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:    64 1575   187   128  965   114   159  255     0   123  274   251
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   64 1575   187   128  965   114   159  255     0   123  274   251
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:   64 1575   187   128  965   114   159  255     0   123  274   251
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.68  0.32  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5721   679  3200 4291   509  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.28  0.28  0.04 0.22  0.22  0.05 0.08  0.00  0.04 0.09  0.16
Crit Moves:       ****        ****             ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.398
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     579 1027   880     0  722   541     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  620 1099   942     0  773   579     0    0     0     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   15  139    30     0   27    60     0    0     0     0    0     0
Initial Fut:  635 1238   972     0  800   639     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   635 1238     0     0  800   639     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  635 1238     0     0  800   639     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  635 1238     0     0  800   639     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.26  0.00  0.00 0.17  0.20  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          TPO 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.641
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Protected         Protected        Permitted
Rights:          Include          Include           Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      0 2046    72    0  743     0  513  686  1086    0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   0 2189    77    0  795     0  513  686  1086    0    0     0
Added Vol:     0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:   0   80     0    0   26     0   90    5    26    0    0     0
Initial Fut:   0 2269    77    0  821     0  603  691  1112    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:    0 2269    77    0  821     0  603  691  1112    0    0     0
Reduct Vol:    0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   0 2269    77    0  821     0  603  691  1112    0    0     0
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 2269    77    0  821     0  603  691  1112    0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.84  0.16  0.00 4.00  0.00  1.40 1.60  2.00  0.00 0.00  0.00
Final Sat.:     0 7737   263     0 6400     0  2237 2563  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.29  0.29  0.00 0.13  0.00  0.27 0.27  0.35  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           TPO 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.617
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include           Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43 1586   322   155 1221   350   271  100    12   228  106   122
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   46 1697   345   166 1306   375   271  100    12   228  106   122
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  106     7     0   60     0     0    0     0     7    0     0
Initial Fut:   46 1803   352   166 1366   375   271  100    12   235  106   122
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    46 1803   352   166 1366   375   271  100    12   235  106     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   46 1803   352   166 1366   375   271  100    12   235  106     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   46 1803   352   166 1366   375   271  100    12   235  106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.46 0.54  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2337  863  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.38  0.22  0.05 0.28  0.23  0.12 0.12  0.01  0.07 0.07  0.00
Crit Moves:       ****        ****                   ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          TPO 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.460
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      40  421    29    62  426   279   128  252    38    16  332    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:   40  421    29    62  426   279   128  252    38    16  332    77
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    7     0     7   14     0     0    6     0     0    3     4
Initial Fut:   40  428    29    69  440   279   128  258    38    16  335    81
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    40  428     0    69  440   279   128  258    38    16  335    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   40  428     0    69  440   279   128  258    38    16  335    81
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   40  428     0    69  440   279   128  258    38    16  335    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.22  0.78  1.00 2.00  1.00  1.00 1.61  0.39
Final Sat.:  1600 3200  1600  1600 1958  1242  1600 3200  1600  1600 2577   623
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.13  0.00  0.04 0.22  0.22  0.08 0.08  0.02  0.01 0.13  0.13
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
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TPO YEAR 2029 WITH PROJECT

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.378
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     418  961     0     0  254   226     0    0     0   252  858   167
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  418  961     0     0  254   226     0    0     0   252  858   167
Added Vol:      0    0     0     0    0     0     0    0     0     0   14     0
PasserByVol:    0    7     0     0    7     0     0    0     0    15   91     0
Initial Fut:  418  968     0     0  261   226     0    0     0   267  963   167
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:   418  968     0     0  261   226     0    0     0   267  963   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  418  968     0     0  261   226     0    0     0   267  963   167
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:  418  968     0     0  261   226     0    0     0   267  963   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.41  0.59
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5454   946
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.20  0.00  0.00 0.04  0.05  0.00 0.00  0.00  0.17 0.18  0.18
Crit Moves:       ****                                               ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.493
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  698   199    87  457     0   682 1292   453     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  747   213    87  457     0   682 1292   453     0    0     0
Added Vol:      0    0     0     0    0     0     0  -11     0     0    0     0
PasserByVol:    0    2    -2     0   22     0     5   -2     0     0    0     0
Initial Fut:    0  749   211    87  479     0   687 1279   453     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:     0  749   211    87  479     0   687 1279   453     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  749   211    87  479     0   687 1279   453     0    0     0
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  749   211    87  479     0   687 1279   453     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.40 2.60  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2236 4164  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.13  0.05 0.10  0.00  0.31 0.31  0.14  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.481
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      78  624     0     0  119   110     0    0     0   360 1161   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   78  624     0     0  119   110     0    0     0   360 1161   149
Added Vol:      0  -22     0     0   10    14     0    0     0     0    0    -2
PasserByVol:    0    1     0     0    9    23     0    0     0    21   83    11
Initial Fut:   78  603     0     0  138   147     0    0     0   381 1244   158
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:    78  603     0     0  138   147     0    0     0   381 1244   158
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  603     0     0  138   147     0    0     0   381 1244   158
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:   78  603     0     0  138   147     0    0     0   381 1244   158
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.94  2.06  0.00 0.00  0.00  1.00 3.66  0.34
Final Sat.:  3200 3200     0     0 3099  3301     0    0     0  1600 5859   541
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.19  0.00  0.00 0.04  0.04  0.00 0.00  0.00  0.24 0.21  0.29
Crit Moves:       ****                                                     ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.354
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  211   240   129  341     0   496  905   194     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  211   240   129  341     0   496  905   194     0    0     0
Added Vol:      0  -11     0     7    2     0   -11    0     0     0    0     0
PasserByVol:    0    1     0    29    1     0     0   -5     0     0    0     0
Initial Fut:    0  201   240   165  344     0   485  900   194     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:     0  201   240   165  344     0   485  900   194     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  201   240   165  344     0   485  900   194     0    0     0
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  201   240   165  344     0   485  900   194     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.40 3.07  0.53  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  2241 4908   851     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.06  0.08  0.05 0.11  0.00  0.22 0.18  0.23  0.00 0.00  0.00
Crit Moves:             ****  ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.339
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      45  372    22   187  860   291   254  406    37    21  170    60
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   48  398    24   200  920   311   254  406    37    21  170    60
Added Vol:      0   11     0     0   -4     0     0    0     0     0    0     0
PasserByVol:    0   87     0     2   34     0     0    0     0     0    0     5
Initial Fut:   48  496    24   202  950   311   254  406    37    21  170    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    48  496    24   202  950   311   254  406    37    21  170     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   48  496    24   202  950   311   254  406    37    21  170     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   48  496    24   202  950   311   254  406    37    21  170     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.75  0.25  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4399   401  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.08  0.01  0.13 0.15  0.19  0.08 0.09  0.09  0.01 0.04  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.315
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21  363    47    49  608   245    59  179    39    16  113    34
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   22  388    50    52  651   262    59  179    39    16  113    34
Added Vol:      0    3     0     0   -3    -2     7    0     0     0    0     0
PasserByVol:    0   17     0    12   28     0    32   12     0     0   12    50
Initial Fut:   22  408    50    64  676   260    98  191    39    16  125    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:    22  408    50    64  676   260    98  191    39    16  125    84
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   22  408    50    64  676   260    98  191    39    16  125    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:   22  408    50    64  676   260    98  191    39    16  125    84
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.64  0.36  1.00 1.20  0.80
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2631   569  1600 1914  1286
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.09  0.03  0.04 0.14  0.16  0.06 0.07  0.07  0.01 0.07  0.07
Crit Moves:  ****                        ****       ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.343
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      32  398   345    48  405   101    18   38    20   147   59    30
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   34  426   369    51  433   108    18   38    20   147   59    30
Added Vol:    -25    0     0     0    0    -3     3    3    31     0   -3     0
PasserByVol:    0   22     6     0   35     0     0    0     0    15    0     0
Initial Fut:    9  448   375    51  468   105    21   41    51   162   56    30
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  448   375    51  468   105    21   41    51   162   56    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  448   375    51  468   105    21   41    51   162   56    30
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:    9  448   375    51  468   105    21   41    51   162   56    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.65  0.35
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200 1042   558
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.09  0.23  0.03 0.10  0.07  0.01 0.03  0.03  0.05 0.05  0.05
Crit Moves:             ****  ****                  ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                            TPO 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.425
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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:            Ovl             Ignore          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      94  544   284    56  320   197   260  597   138   333  747   152
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  101  582   304    60  342   211   278  639   148   356  799   163
Added Vol:      0  -12     0    18   10     3    -7    0     0     0    0    -6
PasserByVol:   -2   12     5     4   30    16     9   35     4    41  116    11
Initial Fut:   99  582   309    82  382   230   280  674   152   397  915   168
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:    99  582   309    82  382     0   280  674   152   397  915   168
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   99  582   309    82  382     0   280  674   152   397  915   168
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:   99  582   309    82  382     0   280  674   152   397  915   168
OvlAdjVol:               176
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.27  0.73  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5224  1176  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.12  0.19  0.03 0.08  0.00  0.09 0.13  0.13  0.08 0.19  0.10
OvlAdjV/S:              0.11
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.415
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl            Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     105 1285    65    38 1721   159    78   79    66   165   92    40
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  112 1375    70    41 1841   170    78   79    66   165   92    40
Added Vol:      0  -14     0     0    6     0     0    0     0     0    0     0
PasserByVol:    1   17     8     0   52     2     2    5     1    16    1     0
Initial Fut:  113 1378    78    41 1899   172    80   84    67   181   93    40
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   113 1378     0    41 1899   172    80   84     0   181   93    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  113 1378     0    41 1899   172    80   84     0   181   93    40
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  113 1378     0    41 1899   172    80   84     0   181   93    40
OvlAdjVol:                               132                                  20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.22  0.00  0.01 0.30  0.11  0.03 0.03  0.00  0.06 0.03  0.03
OvlAdjV/S:                              0.08                                0.01
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.510
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      90  807    49   210 1565   111    58  133    31   184  194    87
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   96  863    52   225 1675   119    58  133    31   184  194    87
Added Vol:      0   18     0     0   -6     0     0    0     0     0    0     0
PasserByVol:   11  100     5     0   23     1     2    0     2     1    0     0
Initial Fut:  107  981    57   225 1692   120    60  133    33   185  194    87
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   107  981    57   225 1692   120    60  133     0   185  194    87
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  107  981    57   225 1692   120    60  133     0   185  194    87
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  107  981    57   225 1692   120    60  133     0   185  194    87
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.78  0.22  2.00 2.80  0.20  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6046   354  3200 4483   317  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.16  0.16  0.07 0.38  0.38  0.02 0.04  0.00  0.06 0.06  0.05
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.373
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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         Permitted         Permitted         Permitted
Rights:           Ignore           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     652 1129   596     0  722   337     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  698 1208   638     0  773   361     0    0     0     0    0     0
Added Vol:     -3   -7     0     0    3     0     0    0     0     0    0     0
PasserByVol:   -7   40    17     0   59    71     0    0     0     0    0     0
Initial Fut:  688 1241   655     0  835   432     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   688 1241     0     0  835   432     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  688 1241     0     0  835   432     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  688 1241     0     0  835   432     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.30  1.70  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 5273  2727     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.21 0.26  0.00  0.00 0.16  0.16  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.609
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Protected        Protected         Permitted
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1605    28     0  729     0   875  380  1209     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1717    30     0  780     0   875  380  1209     0    0     0
Added Vol:      0  -10     0     0    3     0     0    4     3     0    0     0
PasserByVol:    0   27     0     0   59     0    22   12    30     0    0     0
Initial Fut:    0 1734    30     0  842     0   897  396  1242     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:     0 1734    30     0  842     0   897  396  1242     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1734    30     0  842     0   897  396  1242     0    0     0
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 1734    30     0  842     0   897  396  1242     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.92  0.08  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7864   136     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.22  0.22  0.00 0.13  0.00  0.28 0.25  0.39  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                            TPO 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.586
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  994   128    77 1437   316   361   90    32   220   99   142
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1064   137    82 1538   338   361   90    32   220   99   142
Added Vol:      0  -10     0     0    6     0     0    0     0     0    0     0
PasserByVol:    0   38     4     0   90     0     0    0     0     0    0     0
Initial Fut:   58 1092   141    82 1634   338   361   90    32   220   99   142
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    58 1092   141    82 1634   338   361   90    32   220   99     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   58 1092   141    82 1634   338   361   90    32   220   99     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   58 1092   141    82 1634   338   361   90    32   220   99     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.60 0.40  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2561  639  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.23  0.09  0.03 0.34  0.21  0.14 0.14  0.02  0.07 0.06  0.00
Crit Moves:  ****                    ****             ****        ****
********************************************************************************




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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.288
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5  303    25    57  316    76   114  202    39    31  192    51
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5  303    25    57  316    76   114  202    39    31  192    51
Added Vol:      0    3     0     0   -3     0     0    0     0     0    0     0
PasserByVol:    0   15     0     2    2     0     0    2     0     0    5     7
Initial Fut:    5  321    25    59  315    76   114  204    39    31  197    58
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     5  321     0    59  315    76   114  204    39    31  197    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    5  321     0    59  315    76   114  204    39    31  197    58
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:    5  321     0    59  315    76   114  204    39    31  197    58
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.61  0.39  1.00 2.00  1.00  1.00 1.55  0.45
Final Sat.:  1600 3200  1600  1600 2578   622  1600 3200  1600  1600 2472   728
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10  0.00  0.04 0.12  0.12  0.07 0.06  0.02  0.02 0.08  0.08
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.619
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     521  557     0     0  575   813     0    0     0   278 1697   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  521  557     0     0  575   813     0    0     0   278 1697   107
Added Vol:      0    0     0     0    0     0     0    0     0     0   -6     0
PasserByVol:    0   14     0     0    4     0     0    0     0     3   37     0
Initial Fut:  521  571     0     0  579   813     0    0     0   281 1728   107
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:   521  571     0     0  579   813     0    0     0   281 1728   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  521  571     0     0  579   813     0    0     0   281 1728   107
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:  521  571     0     0  579   813     0    0     0   281 1728   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.77  0.23
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6027   373
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.12  0.00  0.00 0.09  0.17  0.00 0.00  0.00  0.18 0.29  0.29
Crit Moves:  ****                        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.463
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  692   262   123  694     0   435  822   485     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  740   280   123  694     0   435  822   485     0    0     0
Added Vol:      0    0     0     0    0     0     0   11     0     0    0     0
PasserByVol:    0    4    16     0    6     0    10    8     0     0    0     0
Initial Fut:    0  744   296   123  700     0   445  841   485     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:     0  744   296   123  700     0   445  841   485     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  744   296   123  700     0   445  841   485     0    0     0
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  744   296   123  700     0   445  841   485     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.38 2.62  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2215 4185  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.12  0.19  0.08 0.15  0.00  0.20 0.20  0.15  0.00 0.00  0.00
Crit Moves:             ****  ****              ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.520
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:         2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  266     0     0  259   506     0    0     0   370 1537   110
Growth Adj:  1.00 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  266     0     0  259   506     0    0     0   370 1537   110
Added Vol:      0   12     0     0   -8    -6     0    0     0     0    0     6
PasserByVol:    0    1     0     0    4    10     0    0     0     2   33     5
Initial Fut:  153  279     0     0  255   510     0    0     0   372 1570   121
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  279     0     0  255   510     0    0     0   372 1570   121
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  279     0     0  255   510     0    0     0   372 1570   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:  153  279     0     0  255   510     0    0     0   372 1570   121
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.33  2.67  0.00 0.00  0.00  1.00 3.79  0.21
Final Sat.:  3200 3200     0     0 2133  4267     0    0     0  1600 6057   343
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.09  0.00  0.00 0.12  0.12  0.00 0.00  0.00  0.23 0.26  0.35
Crit Moves:  ****                  ****                                    ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.359
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  252   264   198  413     0   202  903   111     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  252   264   198  413     0   202  903   111     0    0     0
Added Vol:      0    1     0     1   -9     0    11    0     0     0    0     0
PasserByVol:    0    1     4     4    1     0     0   24     0     0    0     0
Initial Fut:    0  254   268   203  405     0   213  927   111     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:     0  254   268   203  405     0   213  927   111     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  254   268   203  405     0   213  927   111     0    0     0
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  254   268   203  405     0   213  927   111     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.00 3.68  0.32  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  1600 5887   513     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.06 0.13  0.00  0.13 0.16  0.22  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.549
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:    0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150  761    19    69  598   354   262  221    46    35  625   137
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  161  814    20    74  640   379   262  221    46    35  625   137
Added Vol:      0   -1     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0   53     0     6   71     0     0    0     0     0    0     3
Initial Fut:  161  866    20    80  720   379   262  221    46    35  625   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  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   161  866    20    80  720   379   262  221    46    35  625     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  161  866    20    80  720   379   262  221    46    35  625     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  161  866    20    80  720   379   262  221    46    35  625     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.48  0.52  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3973   827  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.14  0.01  0.05 0.11  0.24  0.08 0.06  0.06  0.01 0.13  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.419
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  535    27    31  539   108   252  186    25    62  263   149
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   74  572    29    33  577   116   252  186    25    62  263   149
Added Vol:      0   -2     0     0    3     6     1    0     0     0    0     0
PasserByVol:    0   24     0    52   34     0    12    9     0     0   12    27
Initial Fut:   74  594    29    85  614   122   265  195    25    62  275   176
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  594    29    85  614   122   265  195    25    62  275   176
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   74  594    29    85  614   122   265  195    25    62  275   176
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  594    29    85  614   122   265  195    25    62  275   176
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.34  0.66  1.64 1.21  0.15  1.00 1.22  0.78
Final Sat.:  1600 4800  1600  1600 5342  1058  2621 1931   248  1600 1951  1249
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.12  0.02  0.05 0.11  0.11  0.10 0.10  0.10  0.04 0.14  0.14
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.367
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       8  420   201    31  528    31    64   87   127   409   36    81
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  449   215    33  565    33    64   87   127   409   36    81
Added Vol:     24    0     0     0    0     3    -2   -2   -14     0    3     0
PasserByVol:    0   30    16     0   27     0     0    0     0    12    0     0
Initial Fut:   33  479   231    33  592    36    62   85   113   421   39    81
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:    33  479   231    33  592    36    62   85   113   421   39    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   33  479   231    33  592    36    62   85   113   421   39    81
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:   33  479   231    33  592    36    62   85   113   421   39    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.32  0.68
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200  520  1080
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.10  0.14  0.02 0.12  0.02  0.04 0.05  0.07  0.13 0.08  0.08
Crit Moves:             ****  ****                        ****  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                            TPO 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.505
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:            Ovl            Ignore           Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     207  367   308   152  762   333   179  752    55   357  828    88
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  221  393   330   163  815   356   192  805    59   382  886    94
Added Vol:      0    7     0     0   -8    -5     2    0     0     0    0    15
PasserByVol:    8   27    42    12   12    20    14  128    -2    18   62     7
Initial Fut:  229  427   372   175  819   371   208  933    57   400  948   116
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:   229  427   372   175  819     0   208  933    57   400  948   116
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  229  427   372   175  819     0   208  933    57   400  948   116
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:  229  427   372   175  819     0   208  933    57   400  948   116
OvlAdjVol:               238
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.77  0.23  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6032   368  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.09  0.23  0.05 0.17  0.00  0.06 0.15  0.15  0.08 0.20  0.07
OvlAdjV/S:              0.15
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.444
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     142 1959    67    56 1423   162   165  102   129   135  104    67
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  152 2096    72    60 1523   173   165  102   129   135  104    67
Added Vol:      0    4     0     0  -10     0     0    0     0     0    0     0
PasserByVol:    4   67    18     0   27    11     5    3     2     6    4     0
Initial Fut:  156 2167    90    60 1540   184   170  105   131   141  108    67
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   156 2167     0    60 1540   184   170  105     0   141  108    67
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  156 2167     0    60 1540   184   170  105     0   141  108    67
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  156 2167     0    60 1540   184   170  105     0   141  108    67
OvlAdjVol:                                 99                                37
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.34  0.00  0.02 0.24  0.12  0.05 0.03  0.00  0.04 0.03  0.04
OvlAdjV/S:                               0.06                              0.02
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.522
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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           Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54 1428   172   120  811   105   158  255    82   118  274   251
Growth Adj: 1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1528   184   128  868   112   158  255    82   118  274   251
Added Vol:      0    0     0     0   15     0     0    0     0     0    0     0
PasserByVol:    6   47     3     0   97     2     1    0    12     5    0     0
Initial Fut:   64 1575   187   128  980   114   159  255    94   123  274   251
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:    64 1575   187   128  980   114   159  255     0   123  274   251
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   64 1575   187   128  980   114   159  255     0   123  274   251
PCE Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:   64 1575   187   128  980   114   159  255     0   123  274   251
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:   1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.69  0.31  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.: 3200 5721   679  3200 4298   502  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:    0.02 0.28  0.28  0.04 0.23  0.23  0.05 0.08  0.00  0.04 0.09  0.16
Crit Moves:       ****        ****              ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.399
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     579 1027   880     0  722   541     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  620 1099   942     0  773   579     0    0     0     0    0     0
Added Vol:      3    2     0     0   -5     0     0    0     0     0    0     0
PasserByVol:   15  139    30     0   27    60     0    0     0     0    0     0
Initial Fut:  638 1240   972     0  795   639     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   638 1240     0     0  795   639     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  638 1240     0     0  795   639     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  638 1240     0     0  795   639     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.26  0.00  0.00 0.17  0.20  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.641
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Protected        Protected         Permitted
Rights:          Include         Include          Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2046    72     0  743     0   513  686  1086     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 2189    77     0  795     0   513  686  1086     0    0     0
Added Vol:      0    5     0     0   -5     0     0    2    -2     0    0     0
PasserByVol:    0   80     0     0   26     0    90    5    26     0    0     0
Initial Fut:    0 2274    77     0  816     0   603  693  1110     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:     0 2274    77     0  816     0   603  693  1110     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2274    77     0  816     0   603  693  1110     0    0     0
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 2274    77     0  816     0   603  693  1110     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.84  0.16  0.00 4.00  0.00  1.40 1.60  2.00  0.00 0.00  0.00
Final Sat.:     0 7738   262     0 6400     0  2233 2567  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.29  0.29  0.00 0.13  0.00  0.27 0.27  0.35  0.00 0.00  0.00
Crit Moves:       ****        ****                            ****
********************************************************************************
```

```
Default Scenario           Sat Jul 15, 2023 17:45:52                Page 18-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.618
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include           Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43 1586   322   155 1221   350   271  100    12   228  106   122
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   46 1697   345   166 1306   375   271  100    12   228  106   122
Added Vol:      0    5     0     0   -7     0     0    0     0     0    0     0
PasserByVol:    0  106     7     0   60     0     0    0     0     7    0     0
Initial Fut:   46 1808   352   166 1359   375   271  100    12   235  106   122
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    46 1808   352   166 1359   375   271  100    12   235  106     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   46 1808   352   166 1359   375   271  100    12   235  106     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   46 1808   352   166 1359   375   271  100    12   235  106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.46 0.54  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2337  863  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.38  0.22  0.05 0.28  0.23  0.12 0.12  0.01  0.07 0.07  0.00
Crit Moves:       ****        ****                    ****        ****
********************************************************************************






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```
Default Scenario           Sat Jul 15, 2023 17:45:52                  Page 19-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                             TPO 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.461
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      40  421    29    62  426   279   128  252    38    16  332    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:   40  421    29    62  426   279   128  252    38    16  332    77
Added Vol:      0   -2     0     0    3     0     0    0     0     0    0     0
PasserByVol:    0    7     0     7   14     0     0    6     0     0    3     4
Initial Fut:   40  426    29    69  443   279   128  258    38    16  335    81
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    40  426     0    69  443   279   128  258    38    16  335    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   40  426     0    69  443   279   128  258    38    16  335    81
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   40  426     0    69  443   279   128  258    38    16  335    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.23  0.77  1.00 2.00  1.00  1.00 1.61  0.39
Final Sat.:  1600 3200  1600  1600 1963  1237  1600 3200  1600  1600 2577   623
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.13  0.00  0.04 0.23  0.23  0.08 0.08  0.02  0.01 0.13  0.13
Crit Moves:  ****                  ****        ****                  ****
********************************************************************************




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CEQA YEAR 2029 WITHOUT PROJECT

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.458
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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        Permitted         Permitted         Permitted
Rights:           Include          Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     418  961     0     0  254   226     0    0     0   252  858   167
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  418  961     0     0  254   226     0    0     0   252  858   167
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  376     0     0   87   203     0    0     0    17  122     0
Initial Fut:  418 1337     0     0  341   429     0    0     0   269  980   167
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:   418 1337     0     0  341   429     0    0     0   269  980   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  418 1337     0     0  341   429     0    0     0   269  980   167
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:  418 1337     0     0  341   429     0    0     0   269  980   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.42  0.58
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5468   932
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.28  0.00  0.00 0.05  0.09  0.00 0.00  0.00  0.17 0.18  0.18
Crit Moves:       ****                                                ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.545
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  698   199    87  457     0   682 1292   453     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  747   213    87  457     0   682 1292   453     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  149    -9     0  104     0   227   61     0     0    0     0
Initial Fut:    0  896   204    87  561     0   909 1353   453     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:     0  896   204    87  561     0   909 1353   453     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  896   204    87  561     0   909 1353   453     0    0     0
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  896   204    87  561     0   909 1353   453     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.07  0.93  1.00 3.00  0.00  1.61 2.39  2.00  0.00 0.00  0.00
Final Sat.:     0 6517  1483  1600 4800     0  2572 3828  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.05 0.12  0.00  0.35 0.35  0.14  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

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Default Scenario          Sat Jul 15, 2023 17:46:34              Page 6-1
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):        0.514
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100               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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      78  624     0     0  119   110     0    0     0   360 1161   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   78  624     0     0  119   110     0    0     0   360 1161   149
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   53     0     0   14    33     0    0     0    52  107    33
Initial Fut:   78  677     0     0  133   143     0    0     0   412 1268   182
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:    78  677     0     0  133   143     0    0     0   412 1268   182
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  677     0     0  133   143     0    0     0   412 1268   182
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:   78  677     0     0  133   143     0    0     0   412 1268   182
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.93  2.07  0.00 0.00  0.00  1.00 3.62  0.38
Final Sat.:  3200 3200     0     0 3084  3316     0    0     0  1600 5798   602
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.21  0.00  0.00 0.04  0.04  0.00 0.00  0.00  0.26 0.22  0.30
Crit Moves:       ****                                                      ****
********************************************************************************



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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.361
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted
Rights:          Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  211   240   129  341     0   496  905   194     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  211   240   129  341     0   496  905   194     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   18     0    60    6     0    35   17     0     0    0     0
Initial Fut:    0  229   240   189  347     0   531  922   194     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:     0  229   240   189  347     0   531  922   194     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  229   240   189  347     0   531  922   194     0    0     0
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  229   240   189  347     0   531  922   194     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.46 3.02  0.52  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  2339 4827   834     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.07  0.08  0.06 0.11  0.00  0.23 0.19  0.23  0.00 0.00  0.00
Crit Moves:             ****  ****              ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):         0.445
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      45  372    22   187  860   291   254  406    37    21  170    60
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   48  398    24   200  920   311   254  406    37    21  170    60
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  333    53     2  127    25   115  254     0    43  258     5
Initial Fut:   48  731    77   202 1047   336   369  660    37    64  428    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    48  731    77   202 1047   336   369  660    37    64  428     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   48  731    77   202 1047   336   369  660    37    64  428     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   48  731    77   202 1047   336   369  660    37    64  428     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.84  0.16  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4545   255  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.11  0.05  0.13 0.16  0.21  0.12 0.15  0.15  0.02 0.09  0.00
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.357
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21  363    47    49  608   245    59  179    39    16  113    34
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   22  388    50    52  651   262    59  179    39    16  113    34
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  302     0    29  147     0    41   67     0     0   27    55
Initial Fut:   22  690    50    81  798   262   100  246    39    16  140    89
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:    22  690    50    81  798   262   100  246    39    16  140    89
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   22  690    50    81  798   262   100  246    39    16  140    89
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:   22  690    50    81  798   262   100  246    39    16  140    89
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.01  0.99  1.00 1.69  0.31  1.00 1.22  0.78
Final Sat.:  1600 4800  1600  1600 4817  1583  1600 2711   489  1600 1956  1244
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.14  0.03  0.05 0.17  0.17  0.06 0.09  0.08  0.01 0.07  0.07
Crit Moves:       ****        ****                  ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.401
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      32  398   345    48  405   101    18   38    20   147   59    30
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   34  426   369    51  433   108    18   38    20   147   59    30
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  307    86     0  154     0     0    0     0    64    0     0
Initial Fut:   34  733   455    51  587   108    18   38    20   211   59    30
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:    34  733   455    51  587   108    18   38    20   211   59    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   34  733   455    51  587   108    18   38    20   211   59    30
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:   34  733   455    51  587   108    18   38    20   211   59    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.31  0.69  2.00 0.66  0.34
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2097  1103  3200 1061   539
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.15  0.28  0.03 0.12  0.07  0.01 0.02  0.02  0.07 0.06  0.06
Crit Moves:             ****  ****                  ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.561
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:            Ovl            Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      94  544   284    56  320   197   260  597   138   333  747   152
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  101  582   304    60  342   211   278  639   148   356  799   163
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   -8  232   181     4  131    83   154  311     8   208  261    11
Initial Fut:   93  814   485    64  473   294   432  950   156   564 1060   174
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:    93  814   485    64  473     0   432  950   156   564 1060   174
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   93  814   485    64  473     0   432  950   156   564 1060   174
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:   93  814   485    64  473     0   432  950   156   564 1060   174
OvlAdjVol:               297
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.44  0.56  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5499   901  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.17  0.30  0.02 0.10  0.00  0.14 0.17  0.17  0.12 0.22  0.11
OvlAdjV/S:              0.19
Crit Moves:             ****  ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.453
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     105 1285    65    38 1721   159    78   79    66   165   92    40
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  112 1375    70    41 1841   170    78   79    66   165   92    40
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    1  361    12     0  253     2     2   22     1    22   55     0
Initial Fut:  113 1736    82    41 2094   172    80  101    67   187  147    40
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   113 1736     0    41 2094   172    80  101     0   187  147    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  113 1736     0    41 2094   172    80  101     0   187  147    40
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  113 1736     0    41 2094   172    80  101     0   187  147    40
OvlAdjVol:                                132                                20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.27  0.00  0.01 0.33  0.11  0.03 0.03  0.00  0.06 0.05  0.03
OvlAdjV/S:                               0.08                              0.01
Crit Moves:  ****                 ****              ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.582
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      90  807    49   210 1565   111    58  133    31   184  194    87
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   96  863    52   225 1675   119    58  133    31   184  194    87
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:  106  261     5    86  205    17    34    0   195     1    0    24
Initial Fut:  202 1124    57   311 1880   136    92  133   226   185  194   111
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   202 1124    57   311 1880   136    92  133     0   185  194   111
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  202 1124    57   311 1880   136    92  133     0   185  194   111
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  202 1124    57   311 1880   136    92  133     0   185  194   111
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.81  0.19  2.00 2.80  0.20  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6089   311  3200 4477   323  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.18  0.18  0.10 0.42  0.42  0.03 0.04  0.00  0.06 0.06  0.07
Crit Moves:  ****                  ****              ****        ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.394
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     652 1129   596     0  722   337     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  698 1208   638     0  773   361     0    0     0     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:  -26  465    17     0  268    68     0    0     0     0    0     0
Initial Fut:  672 1673   655     0 1041   429     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   672 1673     0     0 1041   429     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  672 1673     0     0 1041   429     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  672 1673     0     0 1041   429     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.54  1.46  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 5666  2334     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.21 0.35  0.00  0.00 0.18  0.18  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                 ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.656
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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       Protected        Protected        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1605    28     0  729     0   875  380  1209     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1717    30     0  780     0   875  380  1209     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  391     0     0  268     0    64   18    35     0    0     0
Initial Fut:    0 2108    30     0 1048     0   939  398  1244     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:     0 2108    30     0 1048     0   939  398  1244     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2108    30     0 1048     0   939  398  1244     0    0     0
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 2108    30     0 1048     0   939  398  1244     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.93  0.07  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7888   112     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.00 0.16  0.00  0.29 0.25  0.39  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.643
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  994   128    77 1437   316   361   90    32   220   99   142
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1064   137    82 1538   338   361   90    32   220   99   142
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  385    65     0  299     5    17    0     0    30    0     0
Initial Fut:   58 1449   202    82 1837   343   378   90    32   250   99   142
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    58 1449   202    82 1837   343   378   90    32   250   99     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   58 1449   202    82 1837   343   378   90    32   250   99     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   58 1449   202    82 1837   343   378   90    32   250   99     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.62 0.38  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2585  615  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.30  0.13  0.03 0.38  0.21  0.15 0.15  0.02  0.08 0.06  0.00
Crit Moves:  ****                  ****        ****              ****
********************************************************************************
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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.375
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5  303    25    57  316    76   114  202    39    31  192    51
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5  303    25    57  316    76   114  202    39    31  192    51
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   80   18     0     2    0     0     0  133    51     0  161     7
Initial Fut:   85  321    25    59  316    76   114  335    90    31  353    58
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    85  321     0    59  316    76   114  335    90    31  353    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   85  321     0    59  316    76   114  335    90    31  353    58
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   85  321     0    59  316    76   114  335    90    31  353    58
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.61  0.39  1.00 2.00  1.00  1.00 1.72  0.28
Final Sat.:  1600 3200  1600  1600 2580   620  1600 3200  1600  1600 2748   452
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.10  0.00  0.04 0.12  0.12  0.07 0.10  0.06  0.02 0.13  0.13
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.676
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     521  557     0     0  575   813     0    0     0   278 1697   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  521  557     0     0  575   813     0    0     0   278 1697   107
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  269     0     0  134   223     0    0     0    -2  100     0
Initial Fut:  521  826     0     0  709  1036     0    0     0   276 1797   107
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:   521  826     0     0  709  1036     0    0     0   276 1797   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  521  826     0     0  709  1036     0    0     0   276 1797   107
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:  521  826     0     0  709  1036     0    0     0   276 1797   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.78  0.22
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6040   360
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.17  0.00  0.00 0.11  0.22  0.00 0.00  0.00  0.17 0.30  0.30
Crit Moves:  ****                        ****                          ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.496
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  692   262   123  694     0   435  822   485     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  740   280   123  694     0   435  822   485     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   80    18     0  131     0   189   46     0     0    0     0
Initial Fut:    0  820   298   123  825     0   624  868   485     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:     0  820   298   123  825     0   624  868   485     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  820   298   123  825     0   624  868   485     0    0     0
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  820   298   123  825     0   624  868   485     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.67 2.33  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2677 3723  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.19  0.08 0.17  0.00  0.23 0.23  0.15  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.536
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0   1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  266     0     0  259   506     0    0     0   370 1537   110
Growth Adj:  1.00 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  266     0     0  259   506     0    0     0   370 1537   110
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0   23     0     0   23    48     0    0     0    -4   64     5
Initial Fut:  153  289     0     0  282   554     0    0     0   366 1601   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:   153  289     0     0  282   554     0    0     0   366 1601   115
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  289     0     0  282   554     0    0     0   366 1601   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:  153  289     0     0  282   554     0    0     0   366 1601   115
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.35  2.65  0.00 0.00  0.00  1.00 3.80  0.20
Final Sat.:  3200 3200     0     0 2159  4241     0    0     0  1600 6078   322
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.09  0.00  0.00 0.13  0.13  0.00 0.00  0.00  0.23 0.26  0.36
Crit Moves:  ****                  ****                                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.364
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  252   264   198  413     0   202  903   111     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  252   264   198  413     0   202  903   111     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    8     4    -2   20     0    15   50     0     0    0     0
Initial Fut:    0  260   268   196  433     0   217  953   111     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:     0  260   268   196  433     0   217  953   111     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  260   268   196  433     0   217  953   111     0    0     0
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  260   268   196  433     0   217  953   111     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.00 3.69  0.31  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  1600 5899   501     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.06 0.14  0.00  0.14 0.16  0.22  0.00 0.00  0.00
Crit Moves:       ****        ****                          ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.676
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:         1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150  761    19    69  598   354   262  221    46    35  625   137
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  161  814    20    74  640   379   262  221    46    35  625   137
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  172    40     6  297   101    35  220     0    51  252     3
Initial Fut:  161  986    60    80  937   480   297  441    46    86  877   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  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   161  986    60    80  937   480   297  441    46    86  877     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  161  986    60    80  937   480   297  441    46    86  877     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  161  986    60    80  937   480   297  441    46    86  877     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.72  0.28  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4347   453  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.15  0.04  0.05 0.15  0.30  0.09 0.10  0.10  0.03 0.18  0.00
Crit Moves:  ****                        ****  ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.472
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  535    27    31  539   108   252  186    25    62  263   149
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   74  572    29    33  577   116   252  186    25    62  263   149
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  164     0    59  304     0    12   31     0     0   69    46
Initial Fut:   74  736    29    92  881   116   264  217    25    62  332   195
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  736    29    92  881   116   264  217    25    62  332   195
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   74  736    29    92  881   116   264  217    25    62  332   195
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  736    29    92  881   116   264  217    25    62  332   195
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.54  0.46  1.56 1.29  0.15  1.00 1.26  0.74
Final Sat.:  1600 4800  1600  1600 5658   742  2501 2061   238  1600 2016  1184
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.15  0.02  0.06 0.16  0.16  0.11 0.11  0.11  0.04 0.16  0.16
Crit Moves:  ****                  ****        ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.436
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       8  420   201    31  528    31    64   87   127   409   36    81
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  449   215    33  565    33    64   87   127   409   36    81
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  170    68     0  297     0     0    0     0    99    0     0
Initial Fut:    9  619   283    33  862    33    64   87   127   508   36    81
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  619   283    33  862    33    64   87   127   508   36    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  619   283    33  862    33    64   87   127   508   36    81
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:    9  619   283    33  862    33    64   87   127   508   36    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.31  0.69
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200  492  1108
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.13  0.18  0.02 0.18  0.02  0.04 0.05  0.08  0.16 0.07  0.07
Crit Moves:             ****  ****                        ****  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.636
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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:            Ovl              Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     207  367   308   152  762   333   179  752    55   357  828    88
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  221  393   330   163  815   356   192  805    59   382  886    94
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   18  154   181    12  230   160    80  309    -9   207  356     7
Initial Fut:  239  547   511   175 1045   516   272 1114    50   589 1242   101
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:   239  547   511   175 1045     0   272 1114    50   589 1242   101
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  239  547   511   175 1045     0   272 1114    50   589 1242   101
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:  239  547   511   175 1045     0   272 1114    50   589 1242   101
OvlAdjVol:               314
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.83  0.17  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6126   274  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.11  0.32  0.05 0.22  0.00  0.08 0.18  0.18  0.12 0.26  0.06
OvlAdjV/S:              0.20
Crit Moves:  ****                    ****        ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):          0.483
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     142 1959    67    56 1423   162   165  102   129   135  104    67
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  152 2096    72    60 1523   173   165  102   129   135  104    67
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    4  268    24     0  356    11     5   56     2    11   37     0
Initial Fut:  156 2364    96    60 1879   184   170  158   131   146  141    67
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   156 2364     0    60 1879   184   170  158     0   146  141    67
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  156 2364     0    60 1879   184   170  158     0   146  141    67
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  156 2364     0    60 1879   184   170  158     0   146  141    67
OvlAdjVol:                                 99                                37
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.37  0.00  0.02 0.29  0.12  0.05 0.05  0.00  0.05 0.04  0.04
OvlAdjV/S:                               0.06                              0.02
Crit Moves:       ****        ****                  ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.628
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54 1428   172   120  811   105   158  255    82   118  274   251
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1528   184   128  868   112   158  255    82   118  274   251
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:  154  261     3    36  276    13    10    0   117     5    0    94
Initial Fut:  212 1789   187   164 1144   125   168  255   199   123  274   345
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   212 1789   187   164 1144   125   168  255     0   123  274   345
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  212 1789   187   164 1144   125   168  255     0   123  274   345
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  212 1789   187   164 1144   125   168  255     0   123  274   345
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.62  0.38  2.00 2.70  0.30  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5794   606  3200 4326   474  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.31  0.31  0.05 0.26  0.26  0.05 0.08  0.00  0.04 0.09  0.22
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```

```
Default Scenario           Sat Jul 15, 2023 17:47:03                Page 14-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.439
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     579 1027   880     0  722   541     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  620 1099   942     0  773   579     0    0     0     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   31  379    30     0  400   131     0    0     0     0    0     0
Initial Fut:  651 1478   972     0 1173   710     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   651 1478     0     0 1173   710     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  651 1478     0     0 1173   710     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  651 1478     0     0 1173   710     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.11  1.89  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4983  3017     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.31  0.00  0.00 0.24  0.24  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                  ****
********************************************************************************










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```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.669
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Protected        Protected         Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2046    72     0  743     0   513  686  1086     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 2189    77     0  795     0   513  686  1086     0    0     0
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  315     0     0  399     0   111    8    22     0    0     0
Initial Fut:    0 2504    77     0 1194     0   624  694  1108     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:     0 2504    77     0 1194     0   624  694  1108     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2504    77     0 1194     0   624  694  1108     0    0     0
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 2504    77     0 1194     0   624  694  1108     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.85  0.15  0.00 4.00  0.00  1.42 1.58  2.00  0.00 0.00  0.00
Final Sat.:     0 7761   239     0 6400     0  2273 2527  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.32  0.32  0.00 0.19  0.00  0.27 0.27  0.35  0.00 0.00  0.00
Crit Moves:       ****        ****                            ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          CEQA 2029 Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.686
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43 1586   322   155 1221   350   271  100    12   228  106   122
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   46 1697   345   166 1306   375   271  100    12   228  106   122
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0  334    46     0  410    19     7    0     0    70    0     0
Initial Fut:   46 2031   391   166 1716   394   278  100    12   298  106   122
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    46 2031   391   166 1716   394   278  100    12   298  106     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   46 2031   391   166 1716   394   278  100    12   298  106     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   46 2031   391   166 1716   394   278  100    12   298  106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.47 0.53  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2353  847  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.42  0.24  0.05 0.36  0.25  0.12 0.12  0.01  0.09 0.07  0.00
Crit Moves:       ****        ****             ****              ****
********************************************************************************




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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           CEQA 2029 Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.526
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:           Ignore           Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      40  421    29    62  426   279   128  252    38    16  332    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:   40  421    29    62  426   279   128  252    38    16  332    77
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:   52    7     0     7   17     0     0  121    84     0  107     4
Initial Fut:   92  428    29    69  443   279   128  373   122    16  439    81
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    92  428     0    69  443   279   128  373   122    16  439    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   92  428     0    69  443   279   128  373   122    16  439    81
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   92  428     0    69  443   279   128  373   122    16  439    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.23  0.77  1.00 2.00  1.00  1.00 1.69  0.31
Final Sat.:  1600 3200  1600  1600 1963  1237  1600 3200  1600  1600 2702   498
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.13  0.00  0.04 0.23  0.23  0.08 0.12  0.08  0.01 0.16  0.16
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

CEQA YEAR 2029 WITH PROJECT

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Default Scenario           Sat Jul 15, 2023 17:47:30                 Page 6-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.460
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     418  961     0     0  254   226     0    0     0   252  858   167
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  418  961     0     0  254   226     0    0     0   252  858   167
Added Vol:      0    0     0     0    0     0     0    0     0     0   14     0
PasserByVol:    0  376     0     0   87   203     0    0     0    17  122     0
Initial Fut:  418 1337     0     0  341   429     0    0     0   269  994   167
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:   418 1337     0     0  341   429     0    0     0   269  994   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  418 1337     0     0  341   429     0    0     0   269  994   167
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:  418 1337     0     0  341   429     0    0     0   269  994   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.42  0.58
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5479   921
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.13 0.28  0.00  0.00 0.05  0.09  0.00 0.00  0.00  0.17 0.18  0.18
Crit Moves:       ****                                               ****
********************************************************************************


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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.544
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  698   199    87  457     0   682 1292   453     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  747   213    87  457     0   682 1292   453     0    0     0
Added Vol:      0    0     0     0    0     0     0  -11     0     0    0     0
PasserByVol:    0  149    -9     0  104     0   227   61     0     0    0     0
Initial Fut:    0  896   204    87  561     0   909 1342   453     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:     0  896   204    87  561     0   909 1342   453     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  896   204    87  561     0   909 1342   453     0    0     0
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  896   204    87  561     0   909 1342   453     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.07  0.93  1.00 3.00  0.00  1.62 2.38  2.00  0.00 0.00  0.00
Final Sat.:     0 6517  1483  1600 4800     0  2584 3816  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.05 0.12  0.00  0.35 0.35  0.14  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.506
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      78  624     0     0  119   110     0    0     0   360 1161   149
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   78  624     0     0  119   110     0    0     0   360 1161   149
Added Vol:      0  -22     0     0   10    14     0    0     0     0    0    -2
PasserByVol:    0   53     0     0   14    33     0    0     0    52  107    33
Initial Fut:   78  655     0     0  143   157     0    0     0   412 1268   180
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:    78  655     0     0  143   157     0    0     0   412 1268   180
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   78  655     0     0  143   157     0    0     0   412 1268   180
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:   78  655     0     0  143   157     0    0     0   412 1268   180
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.91  2.09  0.00 0.00  0.00  1.00 3.63  0.37
Final Sat.:  3200 3200     0     0 3051  3349     0    0     0  1600 5803   597
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.20  0.00  0.00 0.05  0.05  0.00 0.00  0.00  0.26 0.22  0.30
Crit Moves:       ****                                                     ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.362
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:         Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  211   240   129  341     0   496  905   194     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  211   240   129  341     0   496  905   194     0    0     0
Added Vol:      0  -11     0     7    2     0   -11    0     0     0    0     0
PasserByVol:    0   18     0    60    6     0    35   17     0     0    0     0
Initial Fut:    0  218   240   196  349     0   520  922   194     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:     0  218   240   196  349     0   520  922   194     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  218   240   196  349     0   520  922   194     0    0     0
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  218   240   196  349     0   520  922   194     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.44 3.04  0.52  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  2308 4858   834     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.07  0.08  0.06 0.11  0.00  0.23 0.19  0.23  0.00 0.00  0.00
Crit Moves:            ****  ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.447
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      45  372    22   187  860   291   254  406    37    21  170    60
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   48  398    24   200  920   311   254  406    37    21  170    60
Added Vol:      0   11     0     0   -4     0     0    0     0     0    0     0
PasserByVol:    0  333    53     2  127    25   115  254     0    43  258     5
Initial Fut:   48  742    77   202 1043   336   369  660    37    64  428    65
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    48  742    77   202 1043   336   369  660    37    64  428     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   48  742    77   202 1043   336   369  660    37    64  428     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   48  742    77   202 1043   336   369  660    37    64  428     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.84  0.16  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4545   255  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.12  0.05  0.13 0.16  0.21  0.12 0.15  0.15  0.02 0.09  0.00
Crit Moves:       ****        ****            ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.357
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21  363    47    49  608   245    59  179    39    16  113    34
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   22  388    50    52  651   262    59  179    39    16  113    34
Added Vol:      0    3     0     0   -3    -2     7    0     0     0    0     0
PasserByVol:    0  302     0    29  147     0    41   67     0     0   27    55
Initial Fut:   22  693    50    81  795   260   107  246    39    16  140    89
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:    22  693    50    81  795   260   107  246    39    16  140    89
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   22  693    50    81  795   260   107  246    39    16  140    89
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:   22  693    50    81  795   260   107  246    39    16  140    89
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.01  0.99  1.00 1.70  0.30  1.00 1.22  0.78
Final Sat.:  1600 4800  1600  1600 4821  1579  1600 2720   480  1600 1956  1244
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.14  0.03  0.05 0.16  0.16  0.07 0.09  0.08  0.01 0.07  0.07
Crit Moves:       ****        ****                   ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.408
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      32  398   345    48  405   101    18   38    20   147   59    30
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   34  426   369    51  433   108    18   38    20   147   59    30
Added Vol:    -25    0     0     0    0    -3     3    3    31     0   -3     0
PasserByVol:    0  307    86     0  154     0     0    0     0    64    0     0
Initial Fut:    9  733   455    51  587   105    21   41    51   211   56    30
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  733   455    51  587   105    21   41    51   211   56    30
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    9  733   455    51  587   105    21   41    51   211   56    30
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:    9  733   455    51  587   105    21   41    51   211   56    30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.65  0.35
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200 1042   558
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.15  0.28  0.03 0.12  0.07  0.01 0.03  0.03  0.07 0.05  0.05
Crit Moves:             ****  ****                  ****        ****
********************************************************************************
```

```
Default Scenario          Sat Jul 15, 2023 17:47:30              Page 13-1
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.565
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:            Ovl             Ignore          Include          Include
Min. Green:     0    0    0     0    0    0     0    0    0     0    0    0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      94  544   284    56  320   197   260  597   138   333  747   152
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  101  582   304    60  342   211   278  639   148   356  799   163
Added Vol:      0  -12     0    18   10     3    -7    0     0     0    0    -6
PasserByVol:   -8  232   181     4  131    83   154  311     8   208  261    11
Initial Fut:   93  802   485    82  483   297   425  950   156   564 1060   168
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:    93  802   485    82  483     0   425  950   156   564 1060   168
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   93  802   485    82  483     0   425  950   156   564 1060   168
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:   93  802   485    82  483     0   425  950   156   564 1060   168
OvlAdjVol:               297
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.44  0.56  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5499   901  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.17  0.30  0.03 0.10  0.00  0.13 0.17  0.17  0.12 0.22  0.10
OvlAdjV/S:              0.19
Crit Moves:             ****  ****             ****                  ****
********************************************************************************








  Traffix 7.9.0215 (c) 2008 Dowling Assoc.
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.454
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     105 1285    65    38 1721   159    78   79    66   165   92    40
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  112 1375    70    41 1841   170    78   79    66   165   92    40
Added Vol:      0  -14     0     0    6     0     0    0     0     0    0     0
PasserByVol:    1  361    12     0  253     2     2   22     1    22   55     0
Initial Fut:  113 1722    82    41 2100   172    80  101    67   187  147    40
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   113 1722     0    41 2100   172    80  101     0   187  147    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  113 1722     0    41 2100   172    80  101     0   187  147    40
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  113 1722     0    41 2100   172    80  101     0   187  147    40
OvlAdjVol:                                132                                 20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.27  0.00  0.01 0.33  0.11  0.03 0.03  0.00  0.06 0.05  0.03
OvlAdjV/S:                               0.08                               0.01
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.581
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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           Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      90  807    49   210 1565   111    58  133    31   184  194    87
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   96  863    52   225 1675   119    58  133    31   184  194    87
Added Vol:      0   18     0     0   -6     0     0    0     0     0    0     0
PasserByVol:  106  261     5    86  205    17    34    0   195     1    0    24
Initial Fut:  202 1142    57   311 1874   136    92  133   226   185  194   111
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   202 1142    57   311 1874   136    92  133     0   185  194   111
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  202 1142    57   311 1874   136    92  133     0   185  194   111
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  202 1142    57   311 1874   136    92  133     0   185  194   111
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.81  0.19  2.00 2.80  0.20  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6094   306  3200 4476   324  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19  0.19  0.10 0.42  0.42  0.03 0.04  0.00  0.06 0.06  0.07
Crit Moves:  ****                 ****             ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.393
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                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        Permitted        Permitted        Permitted
Rights:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     652 1129   596     0  722   337     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  698 1208   638     0  773   361     0    0     0     0    0     0
Added Vol:     -3   -7     0     0    3     0     0    0     0     0    0     0
PasserByVol:  -26  465    17     0  268    68     0    0     0     0    0     0
Initial Fut:  669 1666   655     0 1044   429     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   669 1666     0     0 1044   429     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  669 1666     0     0 1044   429     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  669 1666     0     0 1044   429     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.54  1.46  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 5671  2329     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.21 0.35  0.00  0.00 0.18  0.18  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.656
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Protected        Protected         Permitted
Rights:          Include          Include          Include           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1605    28     0  729     0   875  380  1209     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 1717    30     0  780     0   875  380  1209     0    0     0
Added Vol:      0  -10     0     0    3     0     0    4     3     0    0     0
PasserByVol:    0  391     0     0  268     0    64   18    35     0    0     0
Initial Fut:    0 2098    30     0 1051     0   939  402  1247     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:     0 2098    30     0 1051     0   939  402  1247     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2098    30     0 1051     0   939  402  1247     0    0     0
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 2098    30     0 1051     0   939  402  1247     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.93  0.07  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7887   113     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.00 0.16  0.00  0.29 0.25  0.39  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.644
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include           Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54  994   128    77 1437   316   361   90    32   220   99   142
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1064   137    82 1538   338   361   90    32   220   99   142
Added Vol:      0  -10     0     0    6     0     0    0     0     0    0     0
PasserByVol:    0  385    65     0  299     5    17    0     0    30    0     0
Initial Fut:   58 1439   202    82 1843   343   378   90    32   250   99   142
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    58 1439   202    82 1843   343   378   90    32   250   99     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   58 1439   202    82 1843   343   378   90    32   250   99     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   58 1439   202    82 1843   343   378   90    32   250   99     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.62 0.38  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2585  615  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.30  0.13  0.03 0.38  0.21  0.15 0.15  0.02  0.08 0.06  0.00
Crit Moves:  ****                  ****        ****             ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.374
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       5  303    25    57  316    76   114  202    39    31  192    51
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    5  303    25    57  316    76   114  202    39    31  192    51
Added Vol:      0    3     0     0   -3     0     0    0     0     0    0     0
PasserByVol:   80   18     0     2    0     0     0  133    51     0  161     7
Initial Fut:   85  324    25    59  313    76   114  335    90    31  353    58
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    85  324     0    59  313    76   114  335    90    31  353    58
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   85  324     0    59  313    76   114  335    90    31  353    58
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   85  324     0    59  313    76   114  335    90    31  353    58
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.61  0.39  1.00 2.00  1.00  1.00 1.72  0.28
Final Sat.:  1600 3200  1600  1600 2575   625  1600 3200  1600  1600 2748   452
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.10  0.00  0.04 0.12  0.12  0.07 0.10  0.06  0.02 0.13  0.13
Crit Moves:  ****                  ****        ****                  ****
********************************************************************************



  Traffix 7.9.0215 (c) 2008 Dowling Assoc.
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                 Critical Vol./Cap.(X):          0.675
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):       xxxxxx
Optimal Cycle:       100                 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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     521  557     0     0  575   813     0    0     0   278 1697   107
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  521  557     0     0  575   813     0    0     0   278 1697   107
Added Vol:      0    0     0     0    0     0     0    0     0     0   -6     0
PasserByVol:    0  269     0     0  134   223     0    0     0    -2  100     0
Initial Fut:  521  826     0     0  709  1036     0    0     0   276 1791   107
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:   521  826     0     0  709  1036     0    0     0   276 1791   107
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  521  826     0     0  709  1036     0    0     0   276 1791   107
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:  521  826     0     0  709  1036     0    0     0   276 1791   107
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.77  0.23
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6039   361
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.16 0.17  0.00  0.00 0.11  0.22  0.00 0.00  0.00  0.17 0.30  0.30
Crit Moves:  ****                        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.498
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  692   262   123  694     0   435  822   485     0    0     0
Growth Adj:  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  740   280   123  694     0   435  822   485     0    0     0
Added Vol:      0    0     0     0    0     0     0   11     0     0    0     0
PasserByVol:    0   80    18     0  131     0   189   46     0     0    0     0
Initial Fut:    0  820   298   123  825     0   624  879   485     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:     0  820   298   123  825     0   624  879   485     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  820   298   123  825     0   624  879   485     0    0     0
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  820   298   123  825     0   624  879   485     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  1.00  1.00 3.00  0.00  1.66 2.34  2.00  0.00 0.00  0.00
Final Sat.:     0 6400  1600  1600 4800     0  2657 3743  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.13  0.19  0.08 0.17  0.00  0.23 0.23  0.15  0.00 0.00  0.00
Crit Moves:             ****  ****             ****
********************************************************************************
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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.535
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     153  266     0     0  259   506     0    0     0   370 1537   110
Growth Adj:  1.00 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  266     0     0  259   506     0    0     0   370 1537   110
Added Vol:      0   12     0     0   -8    -6     0    0     0     0    0     6
PasserByVol:    0   23     0     0   23    48     0    0     0    -4   64     5
Initial Fut:  153  301     0     0  274   548     0    0     0   366 1601   121
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  301     0     0  274   548     0    0     0   366 1601   121
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  153  301     0     0  274   548     0    0     0   366 1601   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:  153  301     0     0  274   548     0    0     0   366 1601   121
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.33  2.67  0.00 0.00  0.00  1.00 3.79  0.21
Final Sat.:  3200 3200     0     0 2133  4267     0    0     0  1600 6063   337
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.09  0.00  0.00 0.13  0.13  0.00 0.00  0.00  0.23 0.26  0.36
Crit Moves:  ****                    ****                                    ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.365
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  252   264   198  413     0   202  903   111     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  252   264   198  413     0   202  903   111     0    0     0
Added Vol:      0    1     0     1   -9     0    11    0     0     0    0     0
PasserByVol:    0    8     4    -2   20     0    15   50     0     0    0     0
Initial Fut:    0  261   268   197  424     0   228  953   111     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:     0  261   268   197  424     0   228  953   111     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  261   268   197  424     0   228  953   111     0    0     0
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  261   268   197  424     0   228  953   111     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  2.00  2.00 2.00  0.00  1.00 3.69  0.31  0.00 0.00  0.00
Final Sat.:     0 3200  3200  3200 3200     0  1600 5899   501     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.08  0.08  0.06 0.13  0.00  0.14 0.16  0.22  0.00 0.00  0.00
Crit Moves:       ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.676
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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           Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150  761    19    69  598   354   262  221    46    35  625   137
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  161  814    20    74  640   379   262  221    46    35  625   137
Added Vol:      0   -1     0     0    9     0     0    0     0     0    0     0
PasserByVol:    0  172    40     6  297   101    35  220     0    51  252     3
Initial Fut:  161  985    60    80  946   480   297  441    46    86  877   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  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   161  985    60    80  946   480   297  441    46    86  877     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  161  985    60    80  946   480   297  441    46    86  877     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  161  985    60    80  946   480   297  441    46    86  877     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.72  0.28  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 4347   453  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.10 0.15  0.04  0.05 0.15  0.30  0.09 0.10  0.10  0.03 0.18  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.474
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69  535    27    31  539   108   252  186    25    62  263   149
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   74  572    29    33  577   116   252  186    25    62  263   149
Added Vol:      0   -2     0     0    3     6     1    0     0     0    0     0
PasserByVol:    0  164     0    59  304     0    12   31     0     0   69    46
Initial Fut:   74  734    29    92  884   122   265  217    25    62  332   195
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  734    29    92  884   122   265  217    25    62  332   195
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   74  734    29    92  884   122   265  217    25    62  332   195
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  734    29    92  884   122   265  217    25    62  332   195
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.52  0.48  1.56 1.29  0.15  1.00 1.26  0.74
Final Sat.:  1600 4800  1600  1600 5626   774  2503 2059   238  1600 2016  1184
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.15  0.02  0.06 0.16  0.16  0.11 0.11  0.11  0.04 0.16  0.16
Crit Moves:  ****                  ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.429
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       8  420   201    31  528    31    64   87   127   409   36    81
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    9  449   215    33  565    33    64   87   127   409   36    81
Added Vol:     24    0     0     0    0     3    -2   -2   -14     0    3     0
PasserByVol:    0  170    68     0  297     0     0    0     0    99    0     0
Initial Fut:   33  619   283    33  862    36    62   85   113   508   39    81
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:    33  619   283    33  862    36    62   85   113   508   39    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   33  619   283    33  862    36    62   85   113   508   39    81
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:   33  619   283    33  862    36    62   85   113   508   39    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.00  1.00  2.00 0.32  0.68
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 1600  1600  3200  520  1080
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02 0.13  0.18  0.02 0.18  0.02  0.04 0.05  0.07  0.16 0.08  0.08
Crit Moves:  ****                  ****                    ****  ****
********************************************************************************
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--------------------------------------------------------------------------------
                        1600 Dove Street Residences
                          CEQA 2029 With Project
                               PM Peak Hour
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.635
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     207  367   308   152  762   333   179  752    55   357  828    88
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07  1.07 1.07  1.07
Initial Bse:  221  393   330   163  815   356   192  805    59   382  886    94
Added Vol:      0    7     0     0   -8    -5     2    0     0     0    0    15
PasserByVol:   18  154   181    12  230   160    80  309    -9   207  356     7
Initial Fut:  239  554   511   175 1037   511   274 1114    50   589 1242   116
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:   239  554   511   175 1037     0   274 1114    50   589 1242   116
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  239  554   511   175 1037     0   274 1114    50   589 1242   116
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:  239  554   511   175 1037     0   274 1114    50   589 1242   116
OvlAdjVol:               314
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.83  0.17  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6126   274  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.12  0.32  0.05 0.22  0.00  0.09 0.18  0.18  0.12 0.26  0.07
OvlAdjV/S:              0.20
Crit Moves:  ****                    ****        ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.484
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     142 1959    67    56 1423   162   165  102   129   135  104    67
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  152 2096    72    60 1523   173   165  102   129   135  104    67
Added Vol:      0    4     0     0  -10     0     0    0     0     0    0     0
PasserByVol:    4  268    24     0  356    11     5   56     2    11   37     0
Initial Fut:  156 2368    96    60 1869   184   170  158   131   146  141    67
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   156 2368     0    60 1869   184   170  158     0   146  141    67
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  156 2368     0    60 1869   184   170  158     0   146  141    67
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  156 2368     0    60 1869   184   170  158     0   146  141    67
OvlAdjVol:                                 99                                37
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.37  0.00  0.02 0.29  0.12  0.05 0.05  0.00  0.05 0.04  0.04
OvlAdjV/S:                               0.06                              0.02
Crit Moves:       ****        ****                   ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.628
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      54 1428   172   120  811   105   158  255    82   118  274   251
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   58 1528   184   128  868   112   158  255    82   118  274   251
Added Vol:      0    0     0     0   15     0     0    0     0     0    0     0
PasserByVol:  154  261     3    36  276    13    10    0   117     5    0    94
Initial Fut:  212 1789   187   164 1159   125   168  255   199   123  274   345
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   212 1789   187   164 1159   125   168  255     0   123  274   345
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  212 1789   187   164 1159   125   168  255     0   123  274   345
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  212 1789   187   164 1159   125   168  255     0   123  274   345
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.62  0.38  2.00 2.71  0.29  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5794   606  3200 4331   469  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.31  0.31  0.05 0.27  0.27  0.05 0.08  0.00  0.04 0.09  0.22
Crit Moves:       ****        ****             ****                         ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.439
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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        Permitted        Permitted        Permitted
Rights:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     579 1027   880     0  722   541     0    0     0     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  620 1099   942     0  773   579     0    0     0     0    0     0
Added Vol:      3    2     0     0   -5     0     0    0     0     0    0     0
PasserByVol:   31  379    30     0  400   131     0    0     0     0    0     0
Initial Fut:  654 1480   972     0 1168   710     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   654 1480     0     0 1168   710     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  654 1480     0     0 1168   710     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  654 1480     0     0 1168   710     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.11  1.89  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4975  3025     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.31  0.00  0.00 0.23  0.23  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                            CEQA 2029 With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.598
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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        Protected         Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2046    72     0  743     0   513  686  1086     0    0     0
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0 2189    77     0  795     0   513  686  1086     0    0     0
Added Vol:      0    5     0     0   -5     0     0    2    -2     0    0     0
PasserByVol:    0  315     0     0  399     0   111    8    22     0    0     0
Initial Fut:    0 2509    77     0 1189     0   624  696  1106     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:     0 2509    77     0 1189     0   624  696  1106     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2509    77     0 1189     0   624  696  1106     0    0     0
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 2509    77     0 1189     0   624  696  1106     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.85  0.15  0.00 4.00  0.00  1.42 1.58  2.00  0.00 0.00  0.00
Final Sat.:     0 7762   238     0 6400     0  2269 2531  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.32  0.32  0.00 0.19  0.00  0.27 0.28  0.35  0.00 0.00  0.00
Crit Moves:       ****        ****                 ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.687
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      43 1586   322   155 1221   350   271  100    12   228  106   122
Growth Adj:  1.07 1.07  1.07  1.07 1.07  1.07  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   46 1697   345   166 1306   375   271  100    12   228  106   122
Added Vol:      0    5     0     0   -7     0     0    0     0     0    0     0
PasserByVol:    0  334    46     0  410    19     7    0     0    70    0     0
Initial Fut:   46 2036   391   166 1709   394   278  100    12   298  106   122
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    46 2036   391   166 1709   394   278  100    12   298  106     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   46 2036   391   166 1709   394   278  100    12   298  106     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   46 2036   391   166 1709   394   278  100    12   298  106     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.47 0.53  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2353  847  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.42  0.24  0.05 0.36  0.25  0.12 0.12  0.01  0.09 0.07  0.00
Crit Moves:       ****        ****             ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                           CEQA 2029 With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.527
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                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:          Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      40  421    29    62  426   279   128  252    38    16  332    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:   40  421    29    62  426   279   128  252    38    16  332    77
Added Vol:      0   -2     0     0    3     0     0    0     0     0    0     0
PasserByVol:   52    7     0     7   17     0     0  121    84     0  107     4
Initial Fut:   92  426    29    69  446   279   128  373   122    16  439    81
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    92  426     0    69  446   279   128  373   122    16  439    81
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   92  426     0    69  446   279   128  373   122    16  439    81
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   92  426     0    69  446   279   128  373   122    16  439    81
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.23  0.77  1.00 2.00  1.00  1.00 1.69  0.31
Final Sat.:  1600 3200  1600  1600 1969  1231  1600 3200  1600  1600 2702   498
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.13  0.00  0.04 0.23  0.23  0.08 0.12  0.08  0.01 0.16  0.16
Crit Moves:  ****                   ****        ****                   ****
********************************************************************************
```

POST 2030 GENERAL PLAN BUILDOUT WITHOUT PROJECT

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         1.024
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     540 3220     0     0  510   410     0    0     0   310 2010   250
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  540 3220     0     0  510   410     0    0     0   310 2010   250
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:   540 3220     0     0  510   410     0    0     0   310 2010   250
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  540 3220     0     0  510   410     0    0     0   310 2010   250
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:  540 3220     0     0  510   410     0    0     0   310 2010   250
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.56  0.44
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5692   708
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 0.67  0.00  0.00 0.08  0.09  0.00 0.00  0.00  0.19 0.35  0.35
Crit Moves:       ****                                               ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.893
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2380   510   110  730     0  1370 1590   670     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 2380   510   110  730     0  1370 1590   670     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:     0 2380   510   110  730     0  1370 1590   670     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2380   510   110  730     0  1370 1590   670     0    0     0
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 2380   510   110  730     0  1370 1590   670     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.12  0.88  1.00 3.00  0.00  1.85 2.15  2.00  0.00 0.00  0.00
Final Sat.:     0 6588  1412  1600 4800     0  2962 3438  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.36  0.36  0.07 0.15  0.00  0.46 0.46  0.21  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.916
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     110 1230     0     0  270   400     0    0     0   480 1730   820
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  110 1230     0     0  270   400     0    0     0   480 1730   820
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:   110 1230     0     0  270   400     0    0     0   480 1730   820
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  110 1230     0     0  270   400     0    0     0   480 1730   820
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:  110 1230     0     0  270   400     0    0     0   480 1730   820
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.61  2.39  0.00 0.00  0.00  1.00 3.04  0.96
Final Sat.:  3200 3200     0     0 2579  3821     0    0     0  1600 4856  1544
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.38  0.00  0.00 0.10  0.10  0.00 0.00  0.00  0.30 0.36  0.53
Crit Moves:       ****                                                      ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.547
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  500   390   280  450     0   850 1200   210     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  500   390   280  450     0   850 1200   210     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:     0  500   390   280  450     0   850 1200   210     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  500   390   280  450     0   850 1200   210     0    0     0
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  500   390   280  450     0   850 1200   210     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.25  1.75  2.00 2.00  0.00  1.66 2.89  0.45  0.00 0.00  0.00
Final Sat.:     0 3596  2804  3200 3200     0  2654 4631   715     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.09 0.14  0.00  0.32 0.26  0.29  0.00 0.00  0.00
Crit Moves:       ****        ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.809
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150 1660   120   240  990   550   770  990   200    40  630    60
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  150 1660   120   240  990   550   770  990   200    40  630    60
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   150 1660   120   240  990   550   770  990   200    40  630     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  150 1660   120   240  990   550   770  990   200    40  630     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  150 1660   120   240  990   550   770  990   200    40  630     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.50  0.50  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3993   807  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.26  0.08  0.15 0.15  0.34  0.24 0.25  0.25  0.01 0.13  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.796
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50 1340   140   180  810   230   710  670    60    50  310    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:   50 1340   140   180  810   230   710  670    60    50  310    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:    50 1340   140   180  810   230   710  670    60    50  310    20
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50 1340   140   180  810   230   710  670    60    50  310    20
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 1340   140   180  810   230   710  670    60    50  310    20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.12  0.88  1.49 1.39  0.12  1.00 1.88  0.12
Final Sat.:  1600 4800  1600  1600 4985  1415  2372 2229   199  1600 3006   194
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.28  0.09  0.11 0.16  0.16  0.30 0.30  0.30  0.03 0.10  0.10
Crit Moves:       ****        ****                            ****             ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.562
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     130 1460   580    60  670   190    40  170    60   170  180    40
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  130 1460   580    60  670   190    40  170    60   170  180    40
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:   130 1460   580    60  670   190    40  170    60   170  180    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  130 1460   580    60  670   190    40  170    60   170  180    40
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:  130 1460   580    60  670   190    40  170    60   170  180    40
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.48  0.52  2.00 0.82  0.18
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2365   835  3200 1309   291
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.30  0.36  0.04 0.14  0.12  0.03 0.07  0.07  0.05 0.14  0.14
Crit Moves:             ****  ****             ****                   ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.877
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     210 1890   600   130  570   130   670 1760   160   420 1120   170
Growth Adj:  1.00 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 1890   600   130  570   130   670 1760   160   420 1120   170
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:   210 1890   600   130  570     0   670 1760   160   420 1120   170
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  210 1890   600   130  570     0   670 1760   160   420 1120   170
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:  210 1890   600   130  570     0   670 1760   160   420 1120   170
OvlAdjVol:               460
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.67  0.33  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5867   533  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.39  0.38  0.04 0.12  0.00  0.21 0.30  0.30  0.09 0.23  0.11
OvlAdjV/S:              0.29
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.775
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl            Ignore             Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     390 3680   210    60 2710   390   330  270   210   160  250    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:  390 3680   210    60 2710   390   330  270   210   160  250    10
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   390 3680     0    60 2710   390   330  270     0   160  250    10
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  390 3680     0    60 2710   390   330  270     0   160  250    10
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  390 3680     0    60 2710   390   330  270     0   160  250    10
OvlAdjVol:                                225                                 0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.57  0.00  0.02 0.42  0.24  0.10 0.08  0.00  0.05 0.08  0.01
OvlAdjV/S:                               0.14                              0.00
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.930
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     100 2030   320   700 1710   360   260  280    30   800  840   170
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  100 2030   320   700 1710   360   260  280    30   800  840   170
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   100 2030   320   700 1710   360   260  280     0   800  840   170
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  100 2030   320   700 1710   360   260  280     0   800  840   170
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  100 2030   320   700 1710   360   260  280     0   800  840   170
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.46  0.54  2.00 2.48  0.52  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5529   871  3200 3965   835  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.37  0.37  0.22 0.43  0.43  0.08 0.09  0.00  0.25 0.26  0.11
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.681
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    1140 3270     0     0  730   740     0    0     0     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: 1140 3270     0     0  730   740     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:  1140 3270     0     0  730   740     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol: 1140 3270     0     0  730   740     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume: 1140 3270     0     0  730   740     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.36 0.68  0.00  0.00 0.15  0.23  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:       ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.942
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Protected        Protected         Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2100    60     0  700     0  2150  570  1020     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 2100    60     0  700     0  2150  570  1020     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:     0 2100    60     0  700     0  2150  570  1020     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2100    60     0  700     0  2150  570  1020     0    0     0
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 2100    60     0  700     0  2150  570  1020     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.86  0.14  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7778   222     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.00 0.11  0.00  0.67 0.36  0.32  0.00 0.00  0.00
Crit Moves:       ****        ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):        0.681
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:        100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      60 1620   240   130 1090   270   510  120    10   340  110   170
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   60 1620   240   130 1090   270   510  120    10   340  110   170
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    60 1620   240   130 1090   270   510  120    10   340  110     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   60 1620   240   130 1090   270   510  120    10   340  110     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   60 1620   240   130 1090   270   510  120    10   340  110     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.62 0.38  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2590  610  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.34  0.15  0.04 0.23  0.17  0.20 0.20  0.01  0.11 0.07  0.00
Crit Moves:       ****        ****              ****              ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.731
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20  940    30    40  580    90   370  750    50    60  480   100
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   20  940    30    40  580    90   370  750    50    60  480   100
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    20  940     0    40  580    90   370  750    50    60  480   100
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   20  940     0    40  580    90   370  750    50    60  480   100
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   20  940     0    40  580    90   370  750    50    60  480   100
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.73  0.27  1.00 2.00  1.00  1.00 1.66  0.34
Final Sat.:  1600 3200  1600  1600 2770   430  1600 3200  1600  1600 2648   552
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.29  0.00  0.03 0.21  0.21  0.23 0.23  0.03  0.04 0.18  0.18
Crit Moves:       ****        ****             ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.948
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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        Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     600 1700     0     0 1850  1270     0    0     0   540 2880   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:  600 1700     0     0 1850  1270     0    0     0   540 2880   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:   600 1700     0     0 1850  1270     0    0     0   540 2880   140
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  600 1700     0     0 1850  1270     0    0     0   540 2880   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:  600 1700     0     0 1850  1270     0    0     0   540 2880   140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.81  0.19
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6103   297
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.19 0.35  0.00  0.00 0.29  0.26  0.00 0.00  0.00  0.34 0.47  0.47
Crit Moves:  ****                 ****                                 ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):          100                 Critical Vol./Cap.(X):         0.774
Loss Time (sec):        0 (Y+R=4.0 sec)   Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                 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         Permitted         Permitted
Rights:           Include          Include           Include           Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1770   410   310 2060     0   550 1420   630     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 1770   410   310 2060     0   550 1420   630     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:     0 1770   410   310 2060     0   550 1420   630     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1770   410   310 2060     0   550 1420   630     0    0     0
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 1770   410   310 2060     0   550 1420   630     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.06  0.94  1.00 3.00  0.00  1.12 2.88  2.00  0.00 0.00  0.00
Final Sat.:     0 6495  1505  1600 4800     0  1787 4613  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.19 0.43  0.00  0.31 0.31  0.20  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
         ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.811
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
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        Permitted         Permitted        Permitted
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     180  600     0     0  830  1480     0    0     0   530 1730   160
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  180  600     0     0  830  1480     0    0     0   530 1730   160
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:   180  600     0     0  830  1480     0    0     0   530 1730   160
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  180  600     0     0  830  1480     0    0     0   530 1730   160
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:  180  600     0     0  830  1480     0    0     0   530 1730   160
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.44  2.56  0.00 0.00  0.00  1.00 3.75  0.25
Final Sat.:  3200 3200     0     0 2300  4100     0    0     0  1600 5994   406
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19  0.00  0.00 0.36  0.36  0.00 0.00  0.00  0.33 0.29  0.39
Crit Moves:  ****                  ****                                     ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.625
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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       Protected         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  330   300   440  920     0   380 1490   130     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  330   300   440  920     0   380 1490   130     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:     0  330   300   440  920     0   380 1490   130     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  330   300   440  920     0   380 1490   130     0    0     0
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  330   300   440  920     0   380 1490   130     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.10  1.90  2.00 2.00  0.00  1.00 3.76  0.24  0.00 0.00  0.00
Final Sat.:     0 3352  3048  3200 3200     0  1600 6015   385     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10  0.10  0.14 0.29  0.00  0.24 0.25  0.34  0.00 0.00  0.00
Crit Moves:                        ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
            ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100              Critical Vol./Cap.(X):        1.241
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100              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          Include           Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     320 1520    80   150 1510   910   530  700   160   160 1470   190
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  320 1520    80   150 1510   910   530  700   160   160 1470   190
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   320 1520    80   150 1510   910   530  700   160   160 1470     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  320 1520    80   150 1510   910   530  700   160   160 1470     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  320 1520    80   150 1510   910   530  700   160   160 1470     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.44  0.56  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3907   893  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.24  0.05  0.09 0.24  0.57  0.17 0.18  0.18  0.05 0.31  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         1.016
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     180 1030    60   130 1280   390   460  480    70   150 1020   360
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  180 1030    60   130 1280   390   460  480    70   150 1020   360
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:   180 1030    60   130 1280   390   460  480    70   150 1020   360
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  180 1030    60   130 1280   390   460  480    70   150 1020   360
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:  180 1030    60   130 1280   390   460  480    70   150 1020   360
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.07  0.93  1.37 1.42  0.21  1.00 1.48  0.52
Final Sat.:  1600 4800  1600  1600 4905  1495  2193 2276   331  1600 2365   835
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.11 0.21  0.04  0.08 0.26  0.26  0.21 0.21  0.21  0.09 0.43  0.43
Crit Moves:  ****                  ****                   ****       ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.682
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50  960   180   110 1280   110   140  270   100   860  210   110
Growth Adj:  1.00 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  960   180   110 1280   110   140  270   100   860  210   110
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  960   180   110 1280   110   140  270   100   860  210   110
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50  960   180   110 1280   110   140  270   100   860  210   110
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  960   180   110 1280   110   140  270   100   860  210   110
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.46  0.54  2.00 0.66  0.34
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2335   865  3200 1050   550
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.20  0.11  0.07 0.27  0.07  0.09 0.12  0.12  0.27 0.20  0.20
Crit Moves:  ****                  ****              ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.858
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     290  870   620   260 1600   560   240 1480    70   920 1570   180
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  290  870   620   260 1600   560   240 1480    70   920 1570   180
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:   290  870   620   260 1600     0   240 1480    70   920 1570   180
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  290  870   620   260 1600     0   240 1480    70   920 1570   180
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:  290  870   620   260 1600     0   240 1480    70   920 1570   180
OvlAdjVol:               313
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.82  0.18  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6111   289  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.18  0.39  0.08 0.33  0.00  0.08 0.24  0.24  0.19 0.33  0.11
OvlAdjV/S:              0.20
Crit Moves:  ****                  ****             ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.792
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:           Ignore            Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     260 2710   140    40 3090   480   330  210   100   220  400    50
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  260 2710   140    40 3090   480   330  210   100   220  400    50
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   260 2710     0    40 3090   480   330  210     0   220  400    50
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  260 2710     0    40 3090   480   330  210     0   220  400    50
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  260 2710     0    40 3090   480   330  210     0   220  400    50
OvlAdjVol:                                315                                30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.42  0.00  0.01 0.48  0.30  0.10 0.07  0.00  0.07 0.13  0.03
OvlAdjV/S:                               0.20                              0.02
Crit Moves:  ****                 ****        ****                   ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         1.180
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Include          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     160 1950   720    470 2660   260    610  850    30    360  650   530
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  160 1950   720    470 2660   260    610  850    30    360  650   530
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   160 1950   720    470 2660   260    610  850     0    360  650   530
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  160 1950   720    470 2660   260    610  850     0    360  650   530
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  160 1950   720    470 2660   260    610  850     0    360  650   530
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.73  0.27  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 4800  1600  3200 4373   427  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.41  0.45  0.15 0.61  0.61  0.19 0.27  0.00  0.11 0.20  0.33
Crit Moves:  ****                  ****        ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.606
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     900 2620     0     0 1460  1040     0    0     0     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:  900 2620     0     0 1460  1040     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   900 2620     0     0 1460  1040     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  900 2620     0     0 1460  1040     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  900 2620     0     0 1460  1040     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.28 0.55  0.00  0.00 0.30  0.33  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.867
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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:         Permitted        Protected        Protected         Permitted
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2360   110     0 1490     0  1180 1500  1010     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 2360   110     0 1490     0  1180 1500  1010     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:     0 2360   110     0 1490     0  1180 1500  1010     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2360   110     0 1490     0  1180 1500  1010     0    0     0
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 2360   110     0 1490     0  1180 1500  1010     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.78  0.22  0.00 4.00  0.00  1.32 1.68  2.00  0.00 0.00  0.00
Final Sat.:     0 7644   356     0 6400     0  2113 2687  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.31  0.31  0.00 0.23  0.00  0.56 0.56  0.32  0.00 0.00  0.00
Crit Moves:       ****        ****                    ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                         General Plan Without Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
        ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         0.667
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):    xxxxxx
Optimal Cycle:       100              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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50 1940   360   190 1920   390   200  110    10   340  110   210
Growth Adj:  1.00 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 1940   360   190 1920   390   200  110    10   340  110   210
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    50 1940   360   190 1920   390   200  110    10   340  110     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50 1940   360   190 1920   390   200  110    10   340  110     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   50 1940   360   190 1920   390   200  110    10   340  110     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.29 0.71  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2065 1135  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.40  0.23  0.06 0.40  0.24  0.10 0.10  0.01  0.11 0.07  0.00
Crit Moves:       ****        ****                  ****        ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                        General Plan Without Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
             ICU 1(Loss as Cycle Length %) Method (Base Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):        0.972
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100               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:           Ignore           Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20  570    20   160 1140   270   240 1020    70    40 1040   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:   20  570    20   160 1140   270   240 1020    70    40 1040   140
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    20  570     0   160 1140   270   240 1020    70    40 1040   140
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   20  570     0   160 1140   270   240 1020    70    40 1040   140
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   20  570     0   160 1140   270   240 1020    70    40 1040   140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.62  0.38  1.00 2.00  1.00  1.00 1.76  0.24
Final Sat.:  1600 3200  1600  1600 2587   613  1600 3200  1600  1600 2820   380
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.18  0.00  0.10 0.44  0.44  0.15 0.32  0.04  0.03 0.37  0.37
Crit Moves:  ****                  ****        ****                   ****
********************************************************************************
```

POST 2030 GENERAL PLAN BUILDOUT WITH PROJECT

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):         1.026
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100              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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     540 3220     0     0  510   410     0    0     0   310 2010   250
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  540 3220     0     0  510   410     0    0     0   310 2010   250
Added Vol:      0    0     0     0    0     0     0    0     0     0   16     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  540 3220     0     0  510   410     0    0     0   310 2026   250
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:   540 3220     0     0  510   410     0    0     0   310 2026   250
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  540 3220     0     0  510   410     0    0     0   310 2026   250
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:  540 3220     0     0  510   410     0    0     0   310 2026   250
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.56  0.44
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 5697   703
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.17 0.67  0.00  0.00 0.08  0.09  0.00 0.00  0.00  0.19 0.36  0.36
Crit Moves:       ****                                               ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.893
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
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         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2380   510   110  730     0  1370 1590   670     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 2380   510   110  730     0  1370 1590   670     0    0     0
Added Vol:      0    0     0     0    0     0     0    5     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 2380   510   110  730     0  1370 1595   670     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:     0 2380   510   110  730     0  1370 1595   670     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2380   510   110  730     0  1370 1595   670     0    0     0
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 2380   510   110  730     0  1370 1595   670     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.12  0.88  1.00 3.00  0.00  1.85 2.15  2.00  0.00 0.00  0.00
Final Sat.:     0 6588  1412  1600 4800     0  2957 3443  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.36  0.36  0.07 0.15  0.00  0.46 0.46  0.21  0.00 0.00  0.00
Crit Moves:       ****        ****             ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.918
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted         Permitted         Permitted
Rights:           Include           Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     110 1230     0     0  270   400     0    0     0   480 1730   820
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  110 1230     0     0  270   400     0    0     0   480 1730   820
Added Vol:      0    6     0     0   12    16     0    0     0     0    0     3
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  110 1236     0     0  282   416     0    0     0   480 1730   823
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:   110 1236     0     0  282   416     0    0     0   480 1730   823
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  110 1236     0     0  282   416     0    0     0   480 1730   823
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:  110 1236     0     0  282   416     0    0     0   480 1730   823
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.62  2.38  0.00 0.00  0.00  1.00 3.03  0.97
Final Sat.:  3200 3200     0     0 2586  3814     0    0     0  1600 4853  1547
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.39  0.00  0.00 0.11  0.11  0.00 0.00  0.00  0.30 0.36  0.53
Crit Moves:       ****                                                     ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.550
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:          Include          Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  500   390   280  450     0   850 1200   210     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  500   390   280  450     0   850 1200   210     0    0     0
Added Vol:      0    1     0     8    4     0     5    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  501   390   288  454     0   855 1200   210     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:     0  501   390   288  454     0   855 1200   210     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  501   390   288  454     0   855 1200   210     0    0     0
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  501   390   288  454     0   855 1200   210     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.25  1.75  2.00 2.00  0.00  1.66 2.89  0.45  0.00 0.00  0.00
Final Sat.:     0 3599  2801  3200 3200     0  2663 4622   715     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.14  0.14  0.09 0.14  0.00  0.32 0.26  0.29  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

```
--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.809
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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          Ignore
Min. Green:      0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     150 1660   120   240  990   550   770  990   200    40  630    60
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  150 1660   120   240  990   550   770  990   200    40  630    60
Added Vol:      0   12     0     0    4     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  150 1672   120   240  994   550   770  990   200    40  630    60
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   150 1672   120   240  994   550   770  990   200    40  630     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  150 1672   120   240  994   550   770  990   200    40  630     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  150 1672   120   240  994   550   770  990   200    40  630     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.50  0.50  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3993   807  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.26  0.08  0.15 0.16  0.34  0.24 0.25  0.25  0.01 0.13  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.797
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50 1340   140   180  810   230   710  670    60    50  310    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:   50 1340   140   180  810   230   710  670    60    50  310    20
Added Vol:      0    4     0     0    1     3     8    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   50 1344   140   180  811   233   718  670    60    50  310    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:    50 1344   140   180  811   233   718  670    60    50  310    20
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50 1344   140   180  811   233   718  670    60    50  310    20
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 1344   140   180  811   233   718  670    60    50  310    20
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.11  0.89  1.49 1.39  0.12  1.00 1.88  0.12
Final Sat.:  1600 4800  1600  1600 4972  1428  2379 2222   199  1600 3006   194
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.28  0.09  0.11 0.16  0.16  0.30 0.30  0.30  0.03 0.10  0.10
Crit Moves:       ****        ****             ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.566
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     130 1460   580    60  670   190    40  170    60   170  180    40
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  130 1460   580    60  670   190    40  170    60   170  180    40
Added Vol:     11    0     0     0    0     1     4    4    36     0    1     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  141 1460   580    60  670   191    44  174    96   170  181    40
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:   141 1460   580    60  670   191    44  174    96   170  181    40
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  141 1460   580    60  670   191    44  174    96   170  181    40
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:  141 1460   580    60  670   191    44  174    96   170  181    40
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.29  0.71  2.00 0.82  0.18
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2062  1138  3200 1310   290
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.30  0.36  0.04 0.14  0.12  0.03 0.08  0.08  0.05 0.14  0.14
Crit Moves:             ****  ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.884
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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:            Ovl             Ignore           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     210 1890   600   130  570   130   670 1760   160   420 1120   170
Growth Adj:  1.00 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 1890   600   130  570   130   670 1760   160   420 1120   170
Added Vol:      0    4     0    20   12     4     1    0     0     0    0     6
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  210 1894   600   150  582   134   671 1760   160   420 1120   176
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:   210 1894   600   150  582     0   671 1760   160   420 1120   176
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  210 1894   600   150  582     0   671 1760   160   420 1120   176
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:  210 1894   600   150  582     0   671 1760   160   420 1120   176
OvlAdjVol:               460
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.67  0.33  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 5867   533  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.39  0.38  0.05 0.12  0.00  0.21 0.30  0.30  0.09 0.23  0.11
OvlAdjV/S:              0.29
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100               Critical Vol./Cap.(X):         0.775
Loss Time (sec):       0 (Y+R=4.0 sec) Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100               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:           Ignore            Ovl            Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     390 3680   210    60 2710   390   330  270   210   160  250    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:  390 3680   210    60 2710   390   330  270   210   160  250    10
Added Vol:      0    3     0     0    8     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  390 3683   210    60 2718   390   330  270   210   160  250    10
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   390 3683     0    60 2718   390   330  270     0   160  250    10
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  390 3683     0    60 2718   390   330  270     0   160  250    10
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  390 3683     0    60 2718   390   330  270     0   160  250    10
OvlAdjVol:                               225                                   0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.12 0.58  0.00  0.02 0.42  0.24  0.10 0.08  0.00  0.05 0.08  0.01
OvlAdjV/S:                               0.14                              0.00
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.933
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     100 2030   320   700 1710   360   260  280    30   800  840   170
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  100 2030   320   700 1710   360   260  280    30   800  840   170
Added Vol:      0   20     0     0    6     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  100 2050   320   700 1716   360   260  280    30   800  840   170
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   100 2050   320   700 1716   360   260  280     0   800  840   170
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  100 2050   320   700 1716   360   260  280     0   800  840   170
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  100 2050   320   700 1716   360   260  280     0   800  840   170
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.46  0.54  2.00 2.48  0.52  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 5536   864  3200 3968   832  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.37  0.37  0.22 0.43  0.43  0.08 0.09  0.00  0.25 0.26  0.11
Crit Moves:       ****        ****             ****                  ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.681
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:    1140 3270     0     0  730   740     0    0     0     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: 1140 3270     0     0  730   740     0    0     0     0    0     0
Added Vol:      1    1     0     0    4     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut: 1141 3271     0     0  734   740     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:  1141 3271     0     0  734   740     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol: 1141 3271     0     0  734   740     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume: 1141 3271     0     0  734   740     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.36 0.68  0.00  0.00 0.15  0.23  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:       ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100              Critical Vol./Cap.(X):        0.942
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100              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       Protected         Protected         Permitted
Rights:           Include          Include          Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2100    60     0  700     0  2150  570  1020     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 2100    60     0  700     0  2150  570  1020     0    0     0
Added Vol:      0    3     0     0    4     0     0    4     4     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 2103    60     0  704     0  2150  574  1024     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:     0 2103    60     0  704     0  2150  574  1024     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2103    60     0  704     0  2150  574  1024     0    0     0
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 2103    60     0  704     0  2150  574  1024     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.86  0.14  0.00 4.00  0.00  2.00 1.00  2.00  0.00 0.00  0.00
Final Sat.:     0 7778   222     0 6400     0  3200 1600  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.00 0.11  0.00  0.67 0.36  0.32  0.00 0.00  0.00
Crit Moves:       ****        ****             ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):          100                Critical Vol./Cap.(X):         0.682
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100                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       Split Phase      Split Phase
Rights:           Include          Include          Include           Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      60 1620   240   130 1090   270   510  120    10   340  110   170
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   60 1620   240   130 1090   270   510  120    10   340  110   170
Added Vol:      0    3     0     0    8     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   60 1623   240   130 1098   270   510  120    10   340  110   170
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    60 1623   240   130 1098   270   510  120    10   340  110     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   60 1623   240   130 1098   270   510  120    10   340  110     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   60 1623   240   130 1098   270   510  120    10   340  110     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.62 0.38  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2590  610  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.34  0.15  0.04 0.23  0.17  0.20 0.20  0.01  0.11 0.07  0.00
Crit Moves:       ****        ****             ****              ****
********************************************************************************
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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                AM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.733
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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:           Ignore          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20  940    30    40  580    90   370  750    50    60  480   100
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   20  940    30    40  580    90   370  750    50    60  480   100
Added Vol:      0    4     0     0    1     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   20  944    30    40  581    90   370  750    50    60  480   100
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    20  944     0    40  581    90   370  750    50    60  480   100
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   20  944     0    40  581    90   370  750    50    60  480   100
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   20  944     0    40  581    90   370  750    50    60  480   100
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.73  0.27  1.00 2.00  1.00  1.00 1.66  0.34
Final Sat.:  1600 3200  1600  1600 2771   429  1600 3200  1600  1600 2648   552
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.30  0.00  0.03 0.21  0.21  0.23 0.23  0.03  0.04 0.18  0.18
Crit Moves:       ****        ****              ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #1 Campus Dr (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.950
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  0  0    0  0  4  0  3    0  0  0  0  0    1  0  3  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     600 1700     0     0 1850  1270     0    0     0   540 2880   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:  600 1700     0     0 1850  1270     0    0     0   540 2880   140
Added Vol:      0    0     0     0    0     0     0    0     0     0    8     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  600 1700     0     0 1850  1270     0    0     0   540 2888   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:   600 1700     0     0 1850  1270     0    0     0   540 2888   140
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  600 1700     0     0 1850  1270     0    0     0   540 2888   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:  600 1700     0     0 1850  1270     0    0     0   540 2888   140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00  0.00 4.00  3.00  0.00 0.00  0.00  1.00 3.82  0.18
Final Sat.:  3200 4800     0     0 6400  4800     0    0     0  1600 6104   296
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.19 0.35  0.00  0.00 0.29  0.26  0.00 0.00  0.00  0.34 0.47  0.47
Crit Moves:  ****                  ****                              ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #2 Campus Dr/Irvine Ave (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.776
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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         Permitted        Permitted
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  4  1  0    1  0  3  0  0    1  1  2  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 1770   410   310 2060     0   550 1420   630     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 1770   410   310 2060     0   550 1420   630     0    0     0
Added Vol:      0    0     0     0    0     0     0   14     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 1770   410   310 2060     0   550 1434   630     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:     0 1770   410   310 2060     0   550 1434   630     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 1770   410   310 2060     0   550 1434   630     0    0     0
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 1770   410   310 2060     0   550 1434   630     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.06  0.94  1.00 3.00  0.00  1.11 2.89  2.00  0.00 0.00  0.00
Final Sat.:     0 6495  1505  1600 4800     0  1774 4626  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.27  0.27  0.19 0.43  0.00  0.31 0.31  0.20  0.00 0.00  0.00
Crit Moves:       ****        ****              ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #3 Birch St (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.815
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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         Permitted         Permitted         Permitted
Rights:           Include          Include           Include           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  0  0    0  0  1  1  2    0  0  0  0  0    1  1  2  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     180  600     0     0  830  1480     0    0     0   530 1730   160
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  180  600     0     0  830  1480     0    0     0   530 1730   160
Added Vol:      0   17     0     0    6     8     0    0     0     0    0     7
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  180  617     0     0  836  1488     0    0     0   530 1730   167
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:   180  617     0     0  836  1488     0    0     0   530 1730   167
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  180  617     0     0  836  1488     0    0     0   530 1730   167
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:  180  617     0     0  836  1488     0    0     0   530 1730   167
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.00  0.00  0.00 1.44  2.56  0.00 0.00  0.00  1.00 3.74  0.26
Final Sat.:  3200 3200     0     0 2302  4098     0    0     0  1600 5977   423
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.06 0.19  0.00  0.00 0.36  0.36  0.00 0.00  0.00  0.33 0.29  0.40
Crit Moves:  ****                  ****                                    ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #4 Birch St (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.626
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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        Protected         Permitted        Permitted
Rights:           Include          Include           Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  2  1  1    2  0  2  0  0    1  1  2  1  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  330   300   440  920     0   380 1490   130     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  330   300   440  920     0   380 1490   130     0    0     0
Added Vol:      0    3     0     4    2     0    14    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0  333   300   444  922     0   394 1490   130     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:     0  333   300   444  922     0   394 1490   130     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0  333   300   444  922     0   394 1490   130     0    0     0
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  333   300   444  922     0   394 1490   130     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.10  1.90  2.00 2.00  0.00  1.00 3.76  0.24  0.00 0.00  0.00
Final Sat.:     0 3367  3033  3200 3200     0  1600 6015   385     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.10  0.10  0.14 0.29  0.00  0.25 0.25  0.34  0.00 0.00  0.00
Crit Moves:                        ****                   ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #5 MacArthur Blvd (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                 Critical Vol./Cap.(X):         1.241
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                 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          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  4  0  1    1  0  4  0  1    2  0  2  1  0    2  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     320 1520    80   150 1510   910   530  700   160   160 1470   190
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  320 1520    80   150 1510   910   530  700   160   160 1470   190
Added Vol:      0    6     0     0   10     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  320 1526    80   150 1520   910   530  700   160   160 1470   190
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:   320 1526    80   150 1520   910   530  700   160   160 1470     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  320 1526    80   150 1520   910   530  700   160   160 1470     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:  320 1526    80   150 1520   910   530  700   160   160 1470     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  1.00 4.00  1.00  2.00 2.44  0.56  2.00 3.00  1.00
Final Sat.:  1600 6400  1600  1600 6400  1600  3200 3907   893  3200 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.20 0.24  0.05  0.09 0.24  0.57  0.17 0.18  0.18  0.05 0.31  0.00
Crit Moves:  ****                        ****  ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MacArthur Blvd (NS) at Birch St (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        1.018
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    1  0  3  1  0    1  1  0  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     180 1030    60   130 1280   390   460  480    70   150 1020   360
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  180 1030    60   130 1280   390   460  480    70   150 1020   360
Added Vol:      0    2     0     0    3     7     4    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  180 1032    60   130 1283   397   464  480    70   150 1020   360
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:   180 1032    60   130 1283   397   464  480    70   150 1020   360
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  180 1032    60   130 1283   397   464  480    70   150 1020   360
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:  180 1032    60   130 1283   397   464  480    70   150 1020   360
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.05  0.95  1.37 1.42  0.21  1.00 1.48  0.52
Final Sat.:  1600 4800  1600  1600 4888  1512  2199 2270   331  1600 2365   835
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.11 0.22  0.04  0.08 0.26  0.26  0.21 0.21  0.21  0.09 0.43  0.43
Crit Moves:  ****                 ****                    ****       ****
********************************************************************************
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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #7 MacArthur Blvd (NS) at Von Karman Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.708
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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
Lanes:        1  0  3  0  1    1  0  3  0  1    1  0  1  1  0    2  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50  960   180   110 1280   110   140  270   100   860  210   110
Growth Adj:  1.00 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  960   180   110 1280   110   140  270   100   860  210   110
Added Vol:     31    0     0     0    0     3     2    2    19     0    3     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   81  960   180   110 1280   113   142  272   119   860  213   110
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:    81  960   180   110 1280   113   142  272   119   860  213   110
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   81  960   180   110 1280   113   142  272   119   860  213   110
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:   81  960   180   110 1280   113   142  272   119   860  213   110
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.39  0.61  2.00 0.66  0.34
Final Sat.:  1600 4800  1600  1600 4800  1600  1600 2226   974  3200 1055   545
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.20  0.11  0.07 0.27  0.07  0.09 0.12  0.12  0.27 0.20  0.20
Crit Moves:  ****                  ****             ****        ****
********************************************************************************

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MacArthur Blvd (NS) at Jamboree Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):        0.859
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):     xxxxxx
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:            Ovl             Ignore           Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        2  0  3  0  1    2  0  3  0  1    2  0  3  1  0    3  0  3  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     290  870   620   260 1600   560   240 1480    70   920 1570   180
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  290  870   620   260 1600   560   240 1480    70   920 1570   180
Added Vol:      0   10     0    11    6     2     3    0     0     0    0    17
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  290  880   620   271 1606   562   243 1480    70   920 1570   197
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:   290  880   620   271 1606     0   243 1480    70   920 1570   197
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  290  880   620   271 1606     0   243 1480    70   920 1570   197
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:  290  880   620   271 1606     0   243 1480    70   920 1570   197
OvlAdjVol:               313
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 3.00  1.00  2.00 3.82  0.18  3.00 3.00  1.00
Final Sat.:  3200 4800  1600  3200 4800  1600  3200 6111   289  4800 4800  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.09 0.18  0.39  0.08 0.33  0.00  0.08 0.24  0.24  0.19 0.33  0.12
OvlAdjV/S:              0.20
Crit Moves:  ****                 ****              ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #9 MacArthur Blvd (NS) at Bison Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.793
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:             Ignore          Ovl             Ignore            Ovl
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  4  0  1    2  0  4  0  1    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     260 2710   140    40 3090   480   330  210   100   220  400    50
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  260 2710   140    40 3090   480   330  210   100   220  400    50
Added Vol:      0    7     0     0    4     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  260 2717   140    40 3094   480   330  210   100   220  400    50
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   260 2717     0    40 3094   480   330  210     0   220  400    50
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  260 2717     0    40 3094   480   330  210     0   220  400    50
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  260 2717     0    40 3094   480   330  210     0   220  400    50
OvlAdjVol:                                315                                30
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.00  1.00  2.00 4.00  1.00  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 6400  1600  3200 6400  1600  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.08 0.42  0.00  0.01 0.48  0.30  0.10 0.07  0.00  0.07 0.13  0.03
OvlAdjV/S:                               0.20                              0.02
Crit Moves:  ****                  ****        ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                         1600 Dove Street Residences
                          General Plan With Project
                                PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #10 Jamboree Dr (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):          100               Critical Vol./Cap.(X):         1.184
Loss Time (sec):        0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:        100               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          Include          Ignore           Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  3  1  0    2  0  2  1  0    2  0  2  0  1    2  0  2  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     160 1950   720   470 2660   260   610  850    30   360  650   530
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  160 1950   720   470 2660   260   610  850    30   360  650   530
Added Vol:      0   11     0     0   17     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  160 1961   720   470 2677   260   610  850    30   360  650   530
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
PHF Volume:   160 1961   720   470 2677   260   610  850     0   360  650   530
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  160 1961   720   470 2677   260   610  850     0   360  650   530
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00  1.00 1.00  1.00
FinalVolume:  160 1961   720   470 2677   260   610  850     0   360  650   530
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 2.73  0.27  2.00 2.00  1.00  2.00 2.00  1.00
Final Sat.:  3200 4800  1600  3200 4375   425  3200 3200  1600  3200 3200  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.41  0.45  0.15 0.61  0.61  0.19 0.27  0.00  0.11 0.20  0.33
Crit Moves:  ****                  ****        ****                          ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #11 Jamboree Rd (NS) at Bristol St North (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.607
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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        Permitted        Permitted        Permitted
Rights:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        2  0  2  1  1    0  0  3  1  1    0  0  0  0  0    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     900 2620     0     0 1460  1040     0    0     0     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:  900 2620     0     0 1460  1040     0    0     0     0    0     0
Added Vol:      3    3     0     0    2     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  903 2623     0     0 1462  1040     0    0     0     0    0     0
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:   903 2623     0     0 1462  1040     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  903 2623     0     0 1462  1040     0    0     0     0    0     0
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:  903 2623     0     0 1462  1040     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  0.00 3.00  2.00  0.00 0.00  0.00  0.00 0.00  0.00
Final Sat.:  3200 4800  1600     0 4800  3200     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.28 0.55  0.00  0.00 0.30  0.33  0.00 0.00  0.00  0.00 0.00  0.00
Crit Moves:  ****                        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #12 Jamboree Rd (NS) at Bristol St South (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.868
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
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:         Permitted        Protected         Protected          Permitted
Rights:           Include          Include           Include            Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        0  0  4  1  0    0  0  4  0  0    1  1  1  0  2    0  0  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0 2360   110     0 1490     0  1180 1500  1010     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 2360   110     0 1490     0  1180 1500  1010     0    0     0
Added Vol:      0    7     0     0    2     0     0    2     2     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0 2367   110     0 1492     0  1180 1502  1012     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:     0 2367   110     0 1492     0  1180 1502  1012     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    0 2367   110     0 1492     0  1180 1502  1012     0    0     0
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 2367   110     0 1492     0  1180 1502  1012     0    0     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 4.78  0.22  0.00 4.00  0.00  1.32 1.68  2.00  0.00 0.00  0.00
Final Sat.:     0 7645   355     0 6400     0  2112 2688  3200     0    0     0
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.00 0.31  0.31  0.00 0.23  0.00  0.56 0.56  0.32  0.00 0.00  0.00
Crit Moves:       ****        ****                  ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #13 Jamboree Rd (NS) at Eastbluff Dr/University Ave (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.668
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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       Split Phase      Split Phase
Rights:           Include          Include          Include          Ignore
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  3  0  1    2  0  3  0  1    1  1  0  0  1    1  1  1  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      50 1940   360   190 1920   390   200  110    10   340  110   210
Growth Adj:  1.00 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 1940   360   190 1920   390   200  110    10   340  110   210
Added Vol:      0    7     0     0    4     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   50 1947   360   190 1924   390   200  110    10   340  110   210
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
PHF Volume:    50 1947   360   190 1924   390   200  110    10   340  110     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   50 1947   360   190 1924   390   200  110    10   340  110     0
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  0.00
FinalVolume:   50 1947   360   190 1924   390   200  110    10   340  110     0
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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  2.00 3.00  1.00  1.29 0.71  1.00  2.00 1.00  1.00
Final Sat.:  1600 4800  1600  3200 4800  1600  2065 1135  1600  3200 1600  1600
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.03 0.41  0.23  0.06 0.40  0.24  0.10 0.10  0.01  0.11 0.07  0.00
Crit Moves:       ****        ****                   ****        ****
********************************************************************************
```

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--------------------------------------------------------------------------------
                          1600 Dove Street Residences
                           General Plan With Project
                                 PM Peak Hour
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
       ICU 1(Loss as Cycle Length %) Method (Future Volume Alternative)
********************************************************************************
Intersection #14 Von Karman Ave (NS) at Campus Dr (EW)
********************************************************************************
Cycle (sec):         100                Critical Vol./Cap.(X):         0.973
Loss Time (sec):       0 (Y+R=4.0 sec)  Average Delay (sec/veh):      xxxxxx
Optimal Cycle:       100                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:           Ignore           Include          Include          Include
Min. Green:     0    0     0     0    0     0     0    0     0     0    0     0
Lanes:        1  0  2  0  1    1  0  1  1  0    1  0  2  0  1    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20  570    20   160 1140   270   240 1020    70    40 1040   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:   20  570    20   160 1140   270   240 1020    70    40 1040   140
Added Vol:      0    2     0     0    3     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   20  572    20   160 1143   270   240 1020    70    40 1040   140
User Adj:    1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:    20  572     0   160 1143   270   240 1020    70    40 1040   140
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   20  572     0   160 1143   270   240 1020    70    40 1040   140
PCE Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  0.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
FinalVolume:   20  572     0   160 1143   270   240 1020    70    40 1040   140
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1600 1600  1600  1600 1600  1600  1600 1600  1600  1600 1600  1600
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 1.62  0.38  1.00 2.00  1.00  1.00 1.76  0.24
Final Sat.:  1600 3200  1600  1600 2589   611  1600 3200  1600  1600 2820   380
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.18  0.00  0.10 0.44  0.44  0.15 0.32  0.04  0.03 0.37  0.37
Crit Moves:  ****                  ****        ****                  ****
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APPENDIX D

APPROVED PROJECTS LIST AND CUMULATIVE PROJECTS

Traffic Phasing Data
Projects Less than 100% Complete

Project Number	Project Name	Percent Completed
148	FASHION ISLAND EXPANSION	40
154	TEMPLE BAT YAHM EXPANSION	65
945	HOAG HOSPITAL PHASE III	0
949	ST. MARK PRESBYTERIAN CHURCH	77
955	2300 NEWPORT BLVD (VUE)	30
958	HOAG HEALTH CENTER 500-540 SUPERIOR	95
959	NORTH NEWPORT CENTER	0
962	328 OLD NEWPORT MEDICAL OFFICE GPA	0
965	MARINER'S POINTE 23,015 SQ FT COMMERCIAL CENTER	82
971	BACK BAY LANDING 300 ECH	0
977	BALBOA MARINA WEST	0
979	NEWPORT CROSSINGS	0
980	Museum House - Vivante Senior Center	0
981	Uptown Newport: Phase 1 - Trans Devel Rights (TDR)	53
982	Uptown Newport: Phase 2 Only	0
983	Residences at 4400 VK	0
984	Picerne Residential (1300 Bristol St N)	0

02/23/23

Approved Projects 80% Volume Summary Intersection Report

Intersection (4155 ::: IRVINE AVE / CAMPUS DR BRISTOL ST)

	NB	**SB**	**EB**	**WB**	**NL**	**NT**	**NR**	**SL**	**ST**	**SR**	**EL**	**ET**	**ER**	**WL**	**WT**	**WR**
AM	0	22	3	0	0	2	-2	0	22	0	5	-2	0	0	0	0
PM	20	6	18	0	0	4	16	0	6	0	10	8	0	0	0	0

Intersection (4160 ::: BRISTOL ST / BIRCH ST)

	NB	**SB**	**EB**	**WB**	**NL**	**NT**	**NR**	**SL**	**ST**	**SR**	**EL**	**ET**	**ER**	**WL**	**WT**	**WR**
AM	1	30	-5	0	0	1	0	29	1	0	0	-5	0	0	0	0
PM	5	5	24	0	0	1	4	4	1	0	0	24	0	0	0	0

Intersection (4170 ::: JAMBOREE RD / BRISTOL ST)

	NB	**SB**	**EB**	**WB**	**NL**	**NT**	**NR**	**SL**	**ST**	**SR**	**EL**	**ET**	**ER**	**WL**	**WT**	**WR**
AM	27	59	64	0	0	27	0	0	59	0	22	12	30	0	0	0
PM	80	26	121	0	0	80	0	0	26	0	90	5	26	0	0	0

Intersection (4172 ::: CAMPUS DR / BRISTOL ST N)

	NB	**SB**	**EB**	**WB**	**NL**	**NT**	**NR**	**SL**	**ST**	**SR**	**EL**	**ET**	**ER**	**WL**	**WT**	**WR**
AM	7	7	0	106	0	7	0	0	7	0	0	0	0	15	91	0
PM	14	4	0	40	0	14	0	0	4	0	0	0	0	3	37	0

Approved Projects 80% Volume Summary Intersection Report

Intersection (4175 ::: BRISTOL ST N / BIRCH ST)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	1	32	0	115	0	1	0	0	9	23	0	0	0	21	83	11
PM	1	14	0	40	0	1	0	0	4	10	0	0	0	2	33	5

Intersection (4190 ::: JAMBOREE RD / BRISTOL ST N)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	50	130	0	0	-7	40	17	0	59	71	0	0	0	0	0	0
PM	184	87	0	0	15	139	30	0	27	60	0	0	0	0	0	0

Intersection (4275 ::: JAMBOREE RD / MACARTHUR BLVD)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	15	50	48	168	-2	12	5	4	30	16	9	35	4	41	116	11
PM	77	44	140	87	8	27	42	12	12	20	14	128	-2	18	62	7

Intersection (4285 ::: MACARTHUR BLVD / NEWPORT PLACE DR VON KARMAN AVE)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	28	35	0	15	0	22	6	0	35	0	0	0	0	15	0	0
PM	46	27	0	12	0	30	16	0	27	0	0	0	0	12	0	0

Approved Projects 80% Volume Summary Intersection Report

Intersection (4295 ::: BIRCH ST / MACARTHUR BLVD)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	17	40	44	62	0	17	0	12	28	0	32	12	0	0	12	50
PM	24	86	21	39	0	24	0	52	34	0	12	9	0	0	12	27

Intersection (4300 ::: CAMPUS DR / MACARTHUR BLVD)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	87	36	0	5	0	87	0	2	34	0	0	0	0	0	0	5
PM	53	77	0	3	0	53	0	6	71	0	0	0	0	0	0	3

Intersection (4302 ::: CAMPUS DR / VON KARMAN AVE)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	15	4	2	12	0	15	0	2	2	0	0	2	0	0	5	7
PM	7	21	6	7	0	7	0	7	14	0	0	6	0	0	3	4

Intersection (4305 ::: JAMBOREE RD / CAMPUS DR)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	116	24	4	1	11	100	5	0	23	1	2	0	2	1	0	0
PM	56	99	13	5	6	47	3	0	97	2	1	0	12	5	0	0

Approved Projects 80% Volume Summary Intersection Report

Intersection (4765 ::: JAMBOREE RD / EASTBLUFF DR / UNIVERSITY DR)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	42	90	0	0	0	38	4	0	90	0	0	0	0	0	0	0
PM	113	60	0	7	0	106	7	0	60	0	0	0	0	7	0	0

Intersection (4995 ::: BISON AVE / MACARTHUR BLVD)

	NB	SB	EB	WB	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR
AM	26	54	8	17	1	17	8	0	52	2	2	5	1	16	1	0
PM	89	38	10	10	4	67	18	0	27	11	5	3	2	6	4	0

CURRENT DISCRETIONARY PROJECTS UNDER REVIEW

Submittal Date	File #	**PA**	Project Description	Schedule	Decision Maker	Planner
16715 Von Karman Ave						
2/9/2023	**00896752-PPA**	**36**	**Pre-App review of access study and site plan for warehouse at Von Karman Corporate Center**	**TBD**	**Staff**	**Hernan DeSantos**
18301 Von Karman						
2/2/2023	**00895726-PCLE**	**36**	**Environmental review deposit for Von Karman & Quartz office building**	**TBD**	**PC**	**Sherman Jones**
2055 Main Street						
1/31/2023	**00895933-PSS**	**36**	**Sign Program for New IBC Apartment "Aurum" located at 2055 Main Street**	**TBD**	**ZA**	**Eric Martin**
Volar						
1/25/2023	**008954621-PCLE**	**36**	**PCLE application for environmental review for modification to Volar project**	**TBD**	**PC**	**Calvin Mingione**
9800 Muirlands						
1/17/2023	**00894298-PCPM**	**35**	**CUP for Oceans Church**	**tbd**	**ZA**	**Stacy Tran**
PA51 D2 & D3						
12/22/2022	00893185-PPA	51	Pre-Application review for the traffic study for portions of D2 and D3 in Planning Area 51	TBC	Staff	Hernan DeSantos
1780 Main Street						
12/21/2022	00890575-PPA	36	Pre-Application to determine land use, entitlement process, and city support for a proposed EV charging facility	TBD	Staff	Ann Wuu
18831 Von Karman						

Projects Submitted within last 30 days.

For Additional Information call DAC at (949) 724-6308

PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
PC - Planning Commission CSC - Community Services Commission

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
12/16/2022	00891072-PSS	36	Sign Program for Quinn Apartments	TBD	ZA	Alkemi
9740 Irvine Blvd						
12/16/2022	00892629-PMPC	36	Modification to add mezzanine space	TBD	Staff	Victor Mendez
15014.5 Culver Drive						
12/15/2022	00892193-PCPM	11	Minor Modification to expand the lease area for an existing wireless facility	TBD	Staff	Juliet Mukasa
16200 Sand Canyon						
12/15/2022	00892524-PSS	13	Modification to approved sign program for Hoag Hospital	TBD	ZA	Hernan Desantos
18850 Von Karman Avenue						
12/13/2022	00892346-PSS	36	Sign Program for Hensel Phelps	TBD	ZA	Juliet Mukasa
Camden Apts						
12/13/2022	00887257-PSS	36	Sign Program for Camden Apts at Main & Jamboree	TBD	ZA	Sherman Jones
San Joaquin Golf Course						
12/13/2022	00890887-PSS	19	Sign Program with AR for Rancho San Joaquin Golf Course	TBD	ZA	Hernan DeSantos
20 & 40 Pacifica						
12/12/2022	00892179-PSS	33	Sign Program Modification with AR for the 20 & 40 Pacifica Sign Program	TBD	ZA	Eric Martin
Alton Marketplace						

Projects Submitted within last 30 days.

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Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
12/12/2022	00891926-PSS	32	Sign Program Modification with AR for Alton Marketplace to add signage for Bass Pro Shop	03/16/2023	PC	Ann Wuu
18301 Von Karman						
12/5/2022	00891064-PMPC	36	New 16,538 SF office building	TBD	PC	Sherman Jones
Volar						
12/5/2022	00891063-PCPU	36	Major Modification to add 54 dwelling units	TBD	PC	Alkemi
12/5/2022	00891238-PPK	36	Major Modification to update park requirements for the addition of 54 dwelling units	TBD	PC	Alkemi
17892 Sky Park Circle						
12/2/2022	00891467-PCPM	36	Expand tenant space and make interior improvements for health clinic	TBD	ZA	Juliet Mukasa
Innovation Park						
12/2/2022	00890105-PTP	12	VTPM 2020-182 for Innovation Park, Phases 3 and 4	TBD	SC	Hernan DeSantos
18100 Derian						
11/28/2022	00891071-PSS	36	Sign Program for Decorative Construction Fence	TBD	Staff	Alkemi
1900 Main Street						
11/22/2022	00890873-PSS	36	Sign Program Modification with AR for Irvine Concourse	02/16/2023	PC	Juliet Mukasa
3500 Barranca Parkway						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
11/22/2022	00890458-PAR	14	Administrative Relief from parking and landscaping standards to support conversion to medical office use	TBD	ZA	Alkemi
17900 Jamboree Road						
11/18/2022	00890166-PCPM	36	Modification to update parking rate and implement valet parking	TBD	Staff	Sherman Jones
Woodbury Walk Apartments						
11/18/2022	00890137-PPA	9	Pre-Application for Housing Department Review of the Transfer LP interests from BFIM to BHVI for Woodbury Walk Apartments	TBD	Staff	Stacy Tran
16752 Armstrong						
11/17/2022	00890098-PPA	36	Pre-application for question related to potential warehouse use	TBD	Staff	Hernan Desantos
2710 Alton Parkway						
11/10/2022	00889488-PCPM	36	Upgrade existing ABC License from Type 41 (Beer & Wine) to Type 47 (Full Alcohol) at a karaoke lounge	03/02/2023	PC	Eric Martin
2941 Alton Parkway						
11/1/2022	00888298-PCPM	36	CUP for new childcare facility associated with Westcliff University	TBD	PC	Juliet Mukasa
2712 Kelvin						
10/26/2022	00887710-PPA	36	Pre-application review of playground and exercise equipment with canopies over existing tennis court	TBD	Staff	Eric Martin
14111 Jeffrey Road						
10/25/2022	00887532-PCPM	8	Modify CUP to demolish existing gas station car wash and rebuild with a longer tunnel	TBD	ZA	Eric Martin
2151 Michelson Drive						

PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
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Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
10/19/2022	00887028-PSS	36	Master Sign Program for 2151 Michelson	TBD	ZA	Eric Martin
17241 Murphy Avenue						
10/17/2022	00886804-PCPM	36	CUP for a baseball training facility (i.e., commercial school)	TBD	ZA	Eric Martin
Volar						
10/17/2022	00886814-PPA	36	Traffic Study SOW for Volar Apartments	TBD	Staff	Calvin Mingione
Districts 2, 3, & 6 of GPN						
9/30/2022	00885184-PMP	51	Community Design Features & Checklist of Sustainable Design Features	02/16/2023	PC	Hernan DeSantos
D2 of GPN						
9/29/2022	00884898-PTP	51	VTPM 2022-163 located in Development District 2 of Great Park Neighborhoods	TBD	SC	Hernan DeSantos
D2 of GPN						
9/28/2022	00884907-PTP	51	VTPM 2021-204 located in Development District 2 of Great Park Neighborhoods	TBD	SC	Hernan DeSantos
9/28/2022	00884906-PTP	51	VTPM 2021-201 located in District 2 of Great Park Neighborhoods	TBD	SC	Hernan DeSantos
PA 4						
9/28/2022	00884832-PTP	4	Parcel Map to create four lots, three for residential use and one for commercial/retail	TBD	SC	Ann Wuu
2700 Alton						

Projects Submitted within last 30 days.

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PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
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Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
9/22/2022	00884328-PCPM	36	conditional use permit for massage	TBD	ZA	Ann Wuu
2030 Main Street						
9/21/2022	00884154-PSSM	36	Sign Program Modificaiton for Irvine Concourse	TBD	Staff	Eric Martin
20 Gramercy						
9/20/2022	00884102-PMPC	36	Minor Modification to Central Park West Trash Enclosure	TBD	Staff	Eric Martin
4 Wrigley						
9/19/2022	00883947-PCPM	35	CUP to all placement of 6 storage containers in the parking lot	TBD	ZA	Eric Martin
2941 Alton Parkway						
9/15/2022	00883655-PPA	36	New childcare facility	TBD	Staff	Juliet Mukasa
18881 Von Karman						
9/14/2022	00883573-PSS	36	Sign Program Modification with AR for Waterfield Tower	TBD	ZA	Eric Martin
PA 4						
9/9/2022	00882754-PMP	4	Master Plan for the development of a new 1,2661 unit, 3-building apartment complex at The Marketplace	TBD	PC	Ann Wuu
D5/D6						
9/8/2022	00883008-PPA	51	Review address plan and meter plan for Tract 19130 in D5 and D6 of PA 51	TBD	Staff	Hernan DeSantos
14010 Remington						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
8/29/2022	00882130-PCPM	8	Add two 320 SF sheds for occupancy by parishioners.	TBD	ZA	Eric Martin
Orchard Hills						
8/19/2022	00881341-PSS	1	Sign Program Modification with AR for Orchard Hills	TBD	ZA	Juliet Mukasa
18182 Culver Drive						
8/18/2022	00877174-PPA	20	Pre-application to address site design and process questions/concerns	TBD	Staff	Sherman Jones
PA 33 Lots 103 and 106						
8/18/2022	00881205-PMP	33	New residential master plan for the development of 244 apartment homes in PA 33	TBD	PC	Victor Mendez
8/18/2022	00881196-PMP	33	New residential master plan for the development of 645 apartment homes in PA 33	TBD	PC	Victor Mendez
4918 Irvine Center Drive						
8/17/2022	00880581-PCPU	11	New Wireless Facility designed as a faux tree	TBD	PC	Sherman Jones
PA 1 N 4						
8/15/2022	00877600-PCPU	1	CUP for two multi-carrier wireless facilities designed as broadleaf trees	TBD	PC	Juliet Mukasa
Northwood Park						
8/10/2022	00880297-PCPU	8	New Class 10 ATT Wireless Facility	TBD	PC	Eric Martin
16221 Construction Circle East						

PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
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Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
8/2/2022	00879628-PCPM	36	Manufactured Structure for office use longer than 2 years	TBD	ZA	Victor Mendez
2572 White Road						
7/26/2022	00879053-PSS	36	Sign Program Modification with AR	TBD	ZA	Victor Mendez
1 Technology						
7/23/2022	00878800-PCPM	32	Minor Modification to add outdoor stairwells and outdoor walkway to access 2nd floor	TBD	Staff	Juliet Mukasa
17821 N Sky Park Cir Suite J&K						
7/22/2022	00875730-PCPM	36	Conditional Use Permit to change use of site from office and manufacturing to alternative health care provider	TBD	ZA	Hernan DeSantos
19510 Jamboree Road						
7/15/2022	00877891-PCPM	36	Modification to existing CUP for ped bridge connecting 2 buildings on 4th floor for internal circulation	TBD	Staff	Bill Rodrigues
PA 39						
6/29/2022	00876485-PPA	39	Pre-Application for Housing Division to review Los Olivos Apartments (Lot 4) documentation	TBD	Staff	Stacy Tran
Jamboree & Campus						
6/13/2022	00874834-PCPU	36	Entitlement for Elements Phase 3	TBD	PC	Stacy Tran
PA 33 Lots 103 and 106						
6/10/2022	00874758-PCLE	33	Environmental Review for proposed GPA & ZC in PA 33 to add residential intensity	TBD	CC, PC	Victor Mendez
PA 4						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
6/10/2022	00874747-PCLE	4	Environmental Review for proposed GPA & ZC in PA 4 to add residential intensity	TBD	CC, PC	Ann Wuu
18542 MacArthur						
6/7/2022	00873667-PMPC	36	New Chick-Fil-A restaurant without drive-thru to replace IHOP	TBD	Staff	Victor Mendez
PA 1 Neighborhood 4						
6/7/2022	00874542-PMP	1	Residential master plan and address plan	TBD	PC	Juliet Mukasa
6/7/2022	00874541-PMP	1	Residential master plan and address plan	TBD	PC	Juliet Mukasa
9780 Irvine Center Drive						
6/6/2022	00873237-PCPU	34	Conditional Use Permit to operate an equipment rental business from 9780 Research	TBD	ZA	Hernan DeSantos
PA 1 Neighborhood 4						
6/6/2022	00873726-PMP	1	Residential Master Plan for 135 SFD	TBD	PC	Juliet Mukasa
Sand Canyon and Great Park Boulevard						
6/6/2022	00873435-PCLE	40	Environmental review for GPA/ZC/and development applications	TBD	PC, CC	Stacy Tran
PA 1 Neighborhood 4						
6/2/2022	00873724-PMP	1	Residential Master Plan for 137 SFR	TBD	PC	Juliet Mukasa
19712 MacArthur Blvd						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
5/16/2022	00872407-PSSM	36	Modification to approved Sign Program to add one non-illuminated wrap-around wall sign at Bldg 6	TBD	ZA	Juliet Mukasa
14200 Culver Drive						
5/11/2022	00871899-PCPM	11	CUP to operate an employee staffed mobile trailer donation site	03/16/2023	PC	Sherman Jones
8000 Great Park Blvd						
5/6/2022	00870830-PPA	51	PreApplication review of traffic study scope of work and trip budget assessment for GP Master Plan 2.0	TBD	Staff	Hernan DeSantos
17422 Pullman Street						
5/4/2022	00871435-PCPM	36	CUP for outdoor storage at Aquatec	TBD	ZA	Sherman Jones
PA 33 Lots 103 and 106						
4/28/2022	00870344-PPA	33	Preliminary review of proposed site plans for PA 33 residential	TBD	Staff	Victor Mendez
4/28/2022	00870341-PZC	33	Zone Change related to GPA to add 1,100 residential units	TBD	PC, CC	Victor Mendez
PA 4						
4/28/2022	00870377-PPA	4	Preliminary review of proposed site plan for PA 4 residential	TBD	Staff	Ann Wuu
4/28/2022	00870374-PZC	4	Zone Change related to GPA to add 1,400 residential units	TBD	PC, CC	Ann Wuu
16200 Sand Canyon						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
4/19/2022	00870057-PCPM	13	Modification to Hoag Hospital Irvine	TBD	Staff	Hernan DeSantos
Great Park						
4/6/2022	00868722-PPA	51	Pre-Application review of traffic study scope of work for Pretend City in Cultural Terrace of Great Park	TBD	Staff	Sherman Jones
Sand Canyon and Great Park Boulevard						
3/31/2022	00868287-PMP	40	Modification to Master Landscape and Trails Plan for PA 40	TBD	CSC PC	Stacy Tran
3/31/2022	00868384-PPP	40	Park Plan for VTTM 19223 for 140 residential condos	TBD	CSC PC	Stacy Tran
17941 Von Karman						
3/21/2022	00864772-PCPM	36	Minor Mod to CUP to remove and restripe parking lot to correct unpermitted work resulting in a basketball court	TBD	Staff	Hernan DeSantos
1900 Main Street						
3/21/2022	00867292-PSS	36	Sign Program Modification to Irvine Concourse	TBD	ZA	Juliet Mukasa
Playground Plan for D4 Orchard Hills						
3/21/2022	00866003-PPA	1	Playground Plan review for new park (Park 1) in Orchard Hills Neighborhood 4	TBD	Staff	Juliet Mukasa
1824 Kaiser Avenue						
3/3/2022	00865578-PCPM	36	CUP to operate Boden Autohaus	TBD	ZA	Sherman Jones
2152 Dupont						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
2/8/2022	00862239-PCPM	36	Conditional Use Permit for alternative health care provider	TBD	ZA	Victor Mendez
PA 33 Lots 103 and 106						
2/7/2022	00863251-PGA	33	General Plan Amendment to add 1,100 dwelling units within Regional Commercial district of PA 33	TBD	PC, CC	Victor Mendez
PA 4						
2/7/2022	00863325-PGA	4	General Plan Amendment to add up to 1,400 dwelling units within the Regional Commercial Land Use category of PA 4	TBD	PC, CC	Ann Wuu
County 100 acres						
2/1/2022	00862977-PPA	51	Pre-Application Review of Be Well Irvine campus	TBD	Staff	Bill Rodrigues
17300 Red Hill Avenue						
1/25/2022	00862465-PPA	36	Pre-application review to demolish existing 162,000 sf office building and construct 160,000 sf industrial warehouse	TBD	Staff	Sherman Jones
17731 Cowan						
1/24/2022	00860930-PPA	36	Pre-Application Review of prospective 56,500 sf warehouse development on 2.785 acres	TBD	Staff	Juliet Mukasa
Sand Canyon and Great Park Boulevard						
1/24/2022	00862242-PMP	40	Master Plan for Tract 19223 for 140 residential condo units	TBD	PC	Stacy Tran
Sand Canyon and Great Park Boulevard						
1/20/2022	00862078-PTT	40	Vesting Tentative Tract Map 19223 for 140 residential condo units and park	TBD	SC, CSC, P	Stacy Tran
3301 Michelson						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
1/18/2022	00861648-PPA	36	Pre-Application review of acquisition and conversion of The Royce Apartments for City's Middle Income Housing Program	TBD	Staff	Lisa Varon
18700 Harvard						
12/29/2021	00860098-PCPM	23	K-12 private school at Bethel Korean Church	03/02/2023	PC	Victor Mendez
Ada Ave & RR Tracks						
12/14/2021	00859433-PPA	32	Review and comment on proposed grade separation of Ada Avenue between Barranca and Maring way	TBD	Staff	Bill Rodrigues
15800 Laguna Canyon Road						
12/8/2021	00858043-PPA	31	Review to convert security gate to controlled access gate	TBD	Staff	Ann Wuu
17241 Murphy Avenue						
12/2/2021	00856934-PCPM	36	CUP for Mankind Physical Therapy	TBD	ZA	Eric Martin
1340 Reynolds						
10/28/2021	00855935-PCPU	36	CUP for BrainyActz Escape Room	TBD	PC	Juliet Mukasa
1 Fire Authority Road						
8/23/2021	00850215-PPA	4	Pre-Application for expansion of OCFA Training Grounds	TBD	Staff	Sherman Jones
Orange County Metrolink Facility						
7/8/2021	00846471-PCPU	51	CUP for Orange County Metrolink Maintenance Facility	TBD	PC	Victor Mendez
Ridge Valley and Marine Way, NWC						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
6/22/2021	00844668-PCLE	40	Peer review of environmental document	TBD	PC / CC	Stacy Tran
6894 Marine Way						
5/24/2021	00842193-PCPM	40	Conditional Use Permit Extension for 00510068-PCPM to allow Metrolink's utility building to remain for two years in PA 40.	TBA	Staff	Victor Mendez
184 Technology Drive						
4/28/2021	00841098-PPA	32	Pre-Application to review AT&T right-of-way wireless installation at 184 Technology Drive in PA 32.	TBA	Staff	Victor Mendez
17875 Von Karman						
4/5/2021	00839442-PCPM	36	Conditional Use Permit for a restaurant with TDR at the Intersect Campus Office Complex, 17875 Von Karman in Planning Area 36.	TBD	ZA	Stacy Tran
3900 Michelson						
3/4/2021	00837149-PCPM	19	Conditional Use Permit to allow permanent tent structure on the Congregation Beth Jacobs facility in Planning Area 19	TBA	ZA	Victor Mendez
Sand Canyon and Great Park Boulevard						
1/20/2021	00834204-PZC	40	Zoning Code Amendment to allow residential uses at the SE corner of Sand Canyon and Great Park Blvd. in PA 40.	TBD	PC, CC	Stacy Tran
1/20/2021	00834207-PGA	40	General Plan Amendment to allow residential uses at the SE corner of Sand Canyon and Great Park Blvd. in PA 40.	TBD	PC, CC	Stacy Tran
18881 Von Karman Ave, Suite 900						
11/23/2020	00830587-PCPM	36	Conditional Use Permit to establish the Futures Academy (private school) in the Waterfield Tower in Planning Area 36.	TBD	ZA	Ann Wuu
Great Park Neighborhoods						

Projects Submitted within last 30 days.

For Additional Information call DAC at (949) 724-6308

PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
PC - Planning Commission CSC - Community Services Commission

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
11/17/2020	00830360-PSSM	51	Sign Program Modification for Great Park Neighborhoods in PA 51.	TBD	Staff	Sherman Jones
14952 Sand Canyon						
9/8/2020	00825614-PSS	31	Sign Program for Knowlwood's restaurant at 14952 Sand Canyon in Old Town Irvine.	TBD	PC	Sherman Jones
Orchard Hills Dr						
8/28/2020	00824643-PPD	1	Park Design for Park 1 (Lot 522), District 4	06/07/2023	CSC	Hernan DeSantos
Ridge Valley and Marine Way, NWC						
8/13/2020	00823932-PTP	40	Vesting Tentative Parcel Map 2020-137 to subdivide 3 parcels into 5 parcels in PA 40.	TBD	SC	Stacy Tran
16751 Noyes Avenue						
7/23/2020	00821827-PCPM	36	Conditional Use Permit to establish an automotive repair business in a 10,309 sf suite	03/02/2023	PC	Calvin Mingione
2550 Alton Parkway						
3/31/2020	00816420-PPA	36	Pre-application to review Diamond Jamboree Phase 2's mixed use development and parking structure in PA 36.	TBD	Staff	Ann Wuu
30 Auto Center Drive						
3/5/2020	00814576-PPA	35	Sign Permit #3 to allow off-site advertising on the Irvine Auto Center Electronic message sign at 30 Auto Center Drive in Planning Area 35.	on-going	Staff	Bill Rodrigues
15955 Alton Parkway						
2/3/2020	00811566-PAR	13	Administrative Relief to reduce required parking for an existing office building at the Canon Headquarters; submitted by JCM, Facilities, Planning and Management.	TBD	ZA	Bill Rodrigues
SCE Easement in PA 17						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
11/21/2019	00804797-PCPU	17	Conditional Use Permit for an AT&T wireless facility on SCE tower in Quail Hill (PA 17).	TBD	PC	Calvin Mingione
Novel Park						
11/4/2019	00802982-PSS	51	Modification to Sign Program for Novel Park Signs in PA 51.	TBD	Staff	Sherman Jones
Ridge Valley and Marine Way, NWC						
7/29/2019	00793825-PGA	40	General Plan Amendment to transfer 675,237 square feet of land use intensity from the 3.1H Multi-Use District to the 5.5D Medical and Science District in PA 40.	TBD	PC, CC	Stacy Tran
7/29/2019	00793828-PZC	40	Zoning Code Amendment to transfer land use intensity from the 3.1H Multi-Use District to the 5.5D Medical and Science District in PA 40.	TBD	PC, CC	Stacy Tran
14522 Myford (SW corner of Jamboree and Myford)						
6/19/2019	00789713-PCPM	10	Conditional Use Permit modification to add additional sports-related activities, tutoring and physical therapy to the sports center at 14522 Myford Road in the Jamboree Business Center in Planning Area 10.	TBD	PC	Calvin Mingione
19722 and 19732 MacArthur						
6/19/2019	00789718-PTT	36	Tentative Tract Map 18112 for condominium purposes at 19722 MacArthur in Planning Area 36.	TBD	SC, PC	Juliet Mukasa
14725 Alton Parkway						
4/24/2019	00783724-PSS	35	Sign Program Modification with administrative relief for the Irvine Campus of Chapman University to add 14725 Alton in Planning Area 35.	TBD	PC	Ann Wuu
East Bosque South Great Park Blvd						
4/23/2019	00783515-PCPU	51	Conditional Use Permit for Accessory Retail and Dining	TBA	ZA	Victor Mendez
2626 Dupont						

Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
1/30/2019	00775207-PAR	36	Administrative Relief for parking requirements at the Jamboree Promenade, 2626, 2636, and 2646 Dupont in PA 36.	TBD	ZA	Juliet Mukasa
9259 Research Drive						
9/28/2018	00763244-PCPM	34	Community Facility to establish live performance space in an industrial office building.	TBD	PC	Sherman Jones
Southeast Chinon and "N" Street						
6/18/2018	00751736-PCPM	51	Conditional Use Permit for Child Care Use	TBD	PC	Hernan DeSantos
2222 and 2272 Michelson Drive						
9/28/2017	00724855-PPA	36	Pre-application to review and implement parking management strategies for the Michelson Marketplace (Trade) at 2222 & 2272 Michelson Drive in Planning Area 36.	TBD	Staff	Ann Wuu
17 Pasteur						
9/12/2017	00723112-PSS	13	Sign Program for a mural on the 405 facing frontage of Tilly's at 17 Pasteur in Planning Area 13.	TBD	PC	Ann Wuu
17832 and 17840 Gillette						
1/23/2017	00698921-PCLE	36	Environmental Review for a 336 unit apartment project at 17832 and 17840 Gillette in Planning Area 36.	TBD	PC	Ann Wuu
1/23/2017	00698920-PPP	36	Park Plan for a 336 unit apartment project at 17832 and 17840 Gillette in Planning Area 36.	TBD	PC, CSC	Ann Wuu
17832 and 17840 Gillette						
12/13/2016	00695550-PZC	36	Zone Change to increase the IBC residential unit cap for a 336 unit apartment project at 17832 and 17840 Gillette in Planning Area 36.	TBD	PC, CC	Ann Wuu

Projects Submitted within last 30 days.

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Submittal Date	File #	PA	Project Description	Schedule	Decision Maker	Planner
12/13/2016	00695549-PGA	36	General Plan Amendment to increase the IBC residential unit cap for a 336 unit apartment project at 17832 and 17840 Gillette in Planning Area 36.	TBD	PC, CC	Ann Wuu
17832 and 17840 Gillette						
8/15/2016	00681568-PCPU	36	Conditional Use Permit for a 336 unit apartment project at 17832 and 17840 Gillette in Planning Area 36.	TBD	PC	Ann Wuu
15415 Jeffrey Road						
7/28/2016	00679655-PPA	11	Pre-application to study parking alternatives at the Irvine Village Center, 15415 Jeffrey Road, in Planning Area 11.	TBD	Staff	Ann Wuu
18301 Von Karman						
	00885646-PPA	36	Preapplication review of Von Karman & Quartz Traffic Study SOW	TBD	Staff	Sherman Jones

PA - Planning Area CC - City Council ZA - Zoning Administrator SC - Subdivision Committee
PC - Planning Commission CSC - Community Services Commission

APPENDIX E

TPO ONE-PERCENT THRESHOLD ANALYSIS

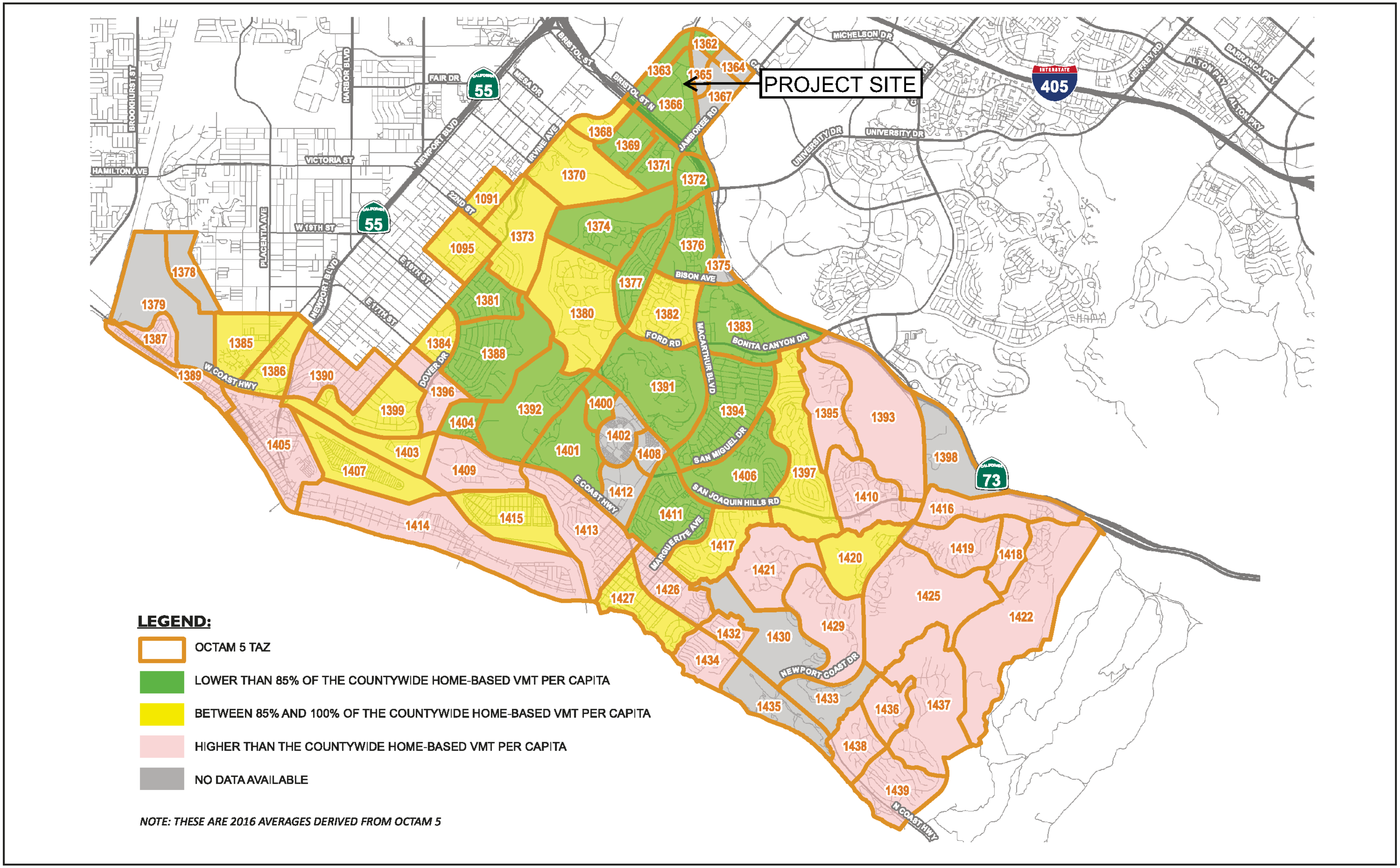
Traffic Phasing Ordinance (TPO) One-Percent Threshold Calculations

		AM Peak Hour Approach Totals															
		TPO Year 2029 Without Project				1% of TPO Volume				AM Peak Hour Project Volume				Threshold Met?			
ID	Study Intersection	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
1.	Campus Dr (NS) at Bristol St North (EW)	1386	487	0	1383	14	5	0	14	0	0	0	14	No	No	No	Yes
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	960	566	2430	0	10	6	25	0	0	0	-11	0	No	No	No	No
3.	Birch St (NS) at Bristol St North (EW)	703	261	0	1785	7	3	0	18	-22	24	0	-2	No	Yes	No	No
4.	Birch St (NS) at Bristol St South (EW)	452	500	1590	0	5	6	16	0	-11	9	-11	0	No	Yes	No	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)	557	1467	697	256	6	15	7	3	11	-4	0	0	Yes	No	No	No
6.	MacArthur Blvd (NS) at Birch St (EW)	477	1005	321	225	5	10	4	3	3	-5	7	0	No	No	Yes	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	857	627	76	251	9	7	2	3	-25	-3	37	-3	No	No	Yes	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)	1002	663	1113	1486	10	7	12	15	-12	31	-7	-6	No	Yes	No	No
9.	MacArthur Blvd (NS) at Bison Ave (EW)	1583	2106	231	314	16	22	3	4	-14	6	0	0	No	No	No	No
10.	Jamboree Rd (NS) at Campus Dr (EW)	1127	2043	226	466	12	21	3	5	18	-6	0	0	Yes	No	No	No
11.	Jamboree Rd (NS) at Bristol St North (EW)	2594	1264	0	0	26	13	0	0	-10	3	0	0	No	No	No	No
12.	Jamboree Rd (NS) at Bristol St South (EW)	1774	839	2528	0	18	9	26	0	-10	3	7	0	No	No	No	No
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	1301	2048	483	461	13	21	5	5	-10	6	0	0	No	No	No	No
14.	Von Karman Ave (NS) at Campus Dr (EW)	348	453	357	286	4	5	4	3	3	-3	0	0	No	No	No	No

		PM Peak Hour Approach Totals															
		TPO Year 2029 Without Project				1% of TPO Volume				PM Peak Hour Project Volume				Threshold Met?			
ID	Study Intersection	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB	NB	SB	EB	WB
1.	Campus Dr (NS) at Bristol St North (EW)	1092	1392	0	2122	11	14	0	22	0	0	0	-6	No	No	No	No
2.	Irvine Ave/Campus Dr (NS) at Bristol St South (EW)	1040	823	1760	0	11	9	18	0	0	0	11	0	No	No	No	No
3.	Birch St (NS) at Bristol St North (EW)	420	779	0	2057	5	8	0	21	12	-14	0	6	Yes	No	No	No
4.	Birch St (NS) at Bristol St South (EW)	521	616	1240	0	6	7	13	0	1	-8	11	0	No	No	No	No
5.	MacArthur Blvd (NS) at Campus Dr (EW)	1048	1170	529	800	11	12	6	8	-1	9	0	0	No	No	No	No
6.	MacArthur Blvd (NS) at Birch St (EW)	699	812	484	513	7	9	5	6	-2	9	1	0	No	Yes	No	No
7.	MacArthur Blvd (NS) at Newport Pl Dr/Von Karman Ave (EW)	719	658	278	538	8	7	3	6	24	3	-18	3	Yes	No	No	No
8.	MacArthur Blvd (NS) at Jamboree Rd (EW)	1021	1378	1196	1449	11	14	12	15	7	-13	2	15	No	No	No	Yes
9.	MacArthur Blvd (NS) at Bison Ave (EW)	2409	1794	406	316	25	18	5	4	4	-10	0	0	No	No	No	No
10.	Jamboree Rd (NS) at Campus Dr (EW)	1826	1207	508	648	19	13	6	7	0	15	0	0	No	Yes	No	No
11.	Jamboree Rd (NS) at Bristol St North (EW)	2845	1439	0	0	29	15	0	0	5	-5	0	0	No	No	No	No
12.	Jamboree Rd (NS) at Bristol St South (EW)	2346	821	2406	0	24	9	25	0	5	-5	0	0	No	No	No	No
13.	Jamboree Rd (NS) at Eastbluff Dr/University Dr (EW)	2201	1907	383	463	23	19	4	5	5	-7	0	0	No	No	No	No
14.	Von Karman Ave (NS) at Campus Dr (EW)	497	788	424	432	5	8	5	5	-2	3	0	0	No	No	No	No

APPENDIX F

EXISTING VMT PER POPULATION MAP



LSA

FIGURE 2

NO SCALE

SOURCE: Urban Crossroads

SB 743 Vehicle Miles Traveled Implementation Guide

Existing VMT per Population
Compared to Regional Average

I:\CNB1702.02\G\Exist_VMT_Per_Pop.cdr (5/28/2020)

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Appendix H

Sewer Capacity Study

Sewer Capacity Study

For

1600 Dove St
Newport Beach, CA 92660

December 13, 2023

David Sloan, P.E.
Registered Civil Engineer No. 82595
Exp.: 9/30/24

Prepared for:

The Picerne Group
5000 Birch St, Suite 600
Newport Beach, CA 92660
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TAIT JOB # **SP8968**

Table of Contents

Section 1 Study Purpose

The purpose of this study is to provide a site-specific sewer capacity study to assess the amount of wastewater generated by the proposed development of the project site at 1600 Dove St, Newport Beach, CA. This sewer study will assess if the city sewer system capacity is sufficient when the project site is redeveloped from a commercial site to a residential site and if the change in sewer usage complies with the City of Newport Beach's design criteria indicated in the City's Sewer Master Plan (SMP).

Section 2 Existing Site Location & Information

The proposed project site, approximately 2.49 acres, is in the City of Newport Beach, Orange County, California. The site is located between the Dove St / Westerly Pl intersection and the Dove St / Dolphin-Striker Way intersection and has an existing office building structure along with a surface parking lot. The current land use is for a multi-story office complex. The site is relatively flat and drains from east to west and is identified as Assessor Parcel Number 427-181-03. The zoning code is PC-11 and the site is enclosed by the existing parking lot to the North and East, Dove St to the West, and Dolphin-Striker Way to the South. See Figure 1 Below as well as Appendix A for project Vicinity Map Information.

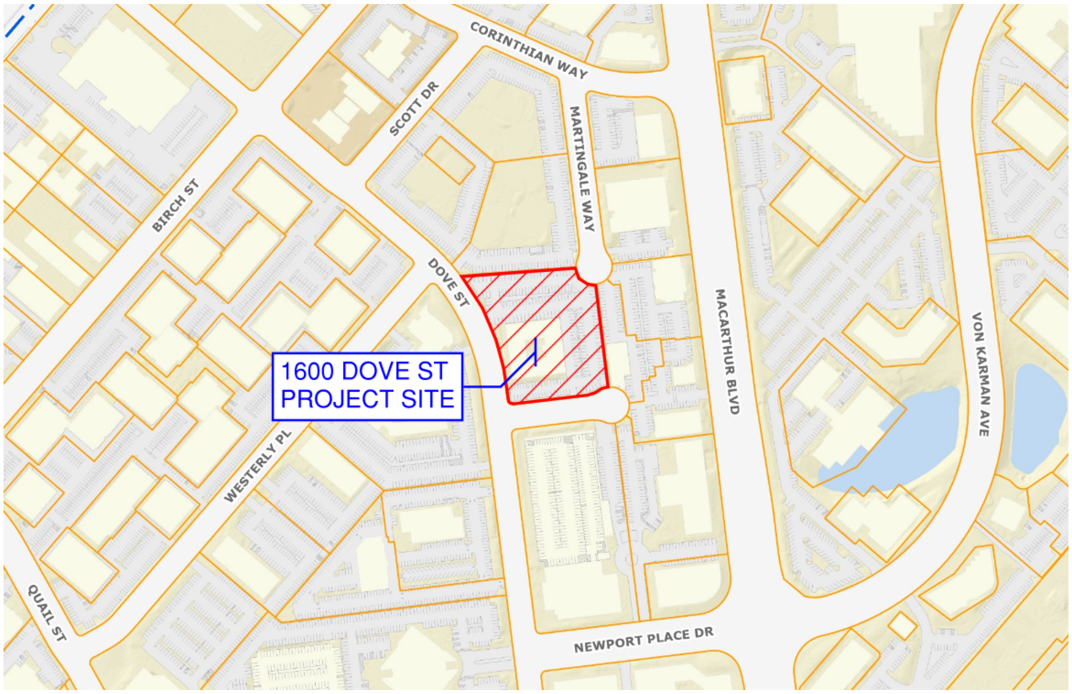


Figure 1. Vicinity Map

Section 3 Proposed Site Description

The proposed project is comprised of a 6-story podium apartment building with two levels of subterranean parking. A leasing office and mailroom will be on the ground level closest to the Dove St / Westerly Pl intersection. Vehicular access to the building will be from proposed driveways on Dove Street on the west side of the building and on Dolphin-Striker Way on the south side of the building. See Figure 2 below for general site configuration.

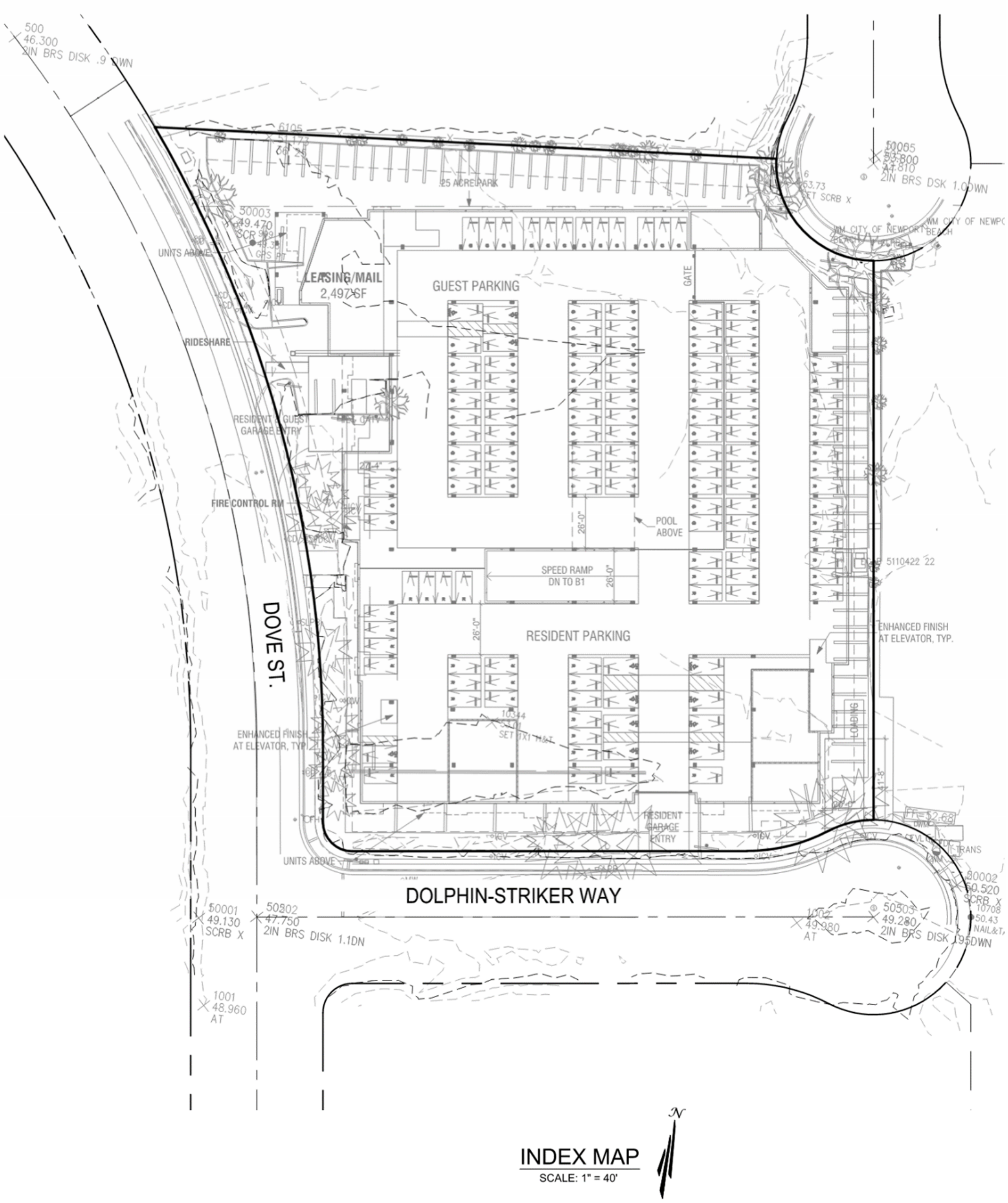


Figure 2. Proposed Site Conditions at the Project Site

Section 4 Sewer System Layout

4.1 Existing Sewer System

An existing 6” VCP sewer lateral connects the project site to the existing 8” VCP public sewer main on Dolphin-Striker Way. The subject public sewer main originates on Dolphin-Striker Way at the existing sewer lateral connection, and drains in the west direction to manhole MHM28_005 at the intersection of Dolphin-Striker Way and Dove St. The sewer line increases to 10” VCP at Dove St and continues south to Manhole MHM28_003 at the intersection of Dove St and Newport Place Dr. The sewer line increases to 15” VCP at Newport Place Dr and continues east to MacArthur Blvd and then north to MHM28_051. The sewer main increases to 18” and continues for a short run to MHM27 before discharging into the OCSD sewer main. See Figure 3 below for a graphical representation of the existing sewer system servicing the project site.

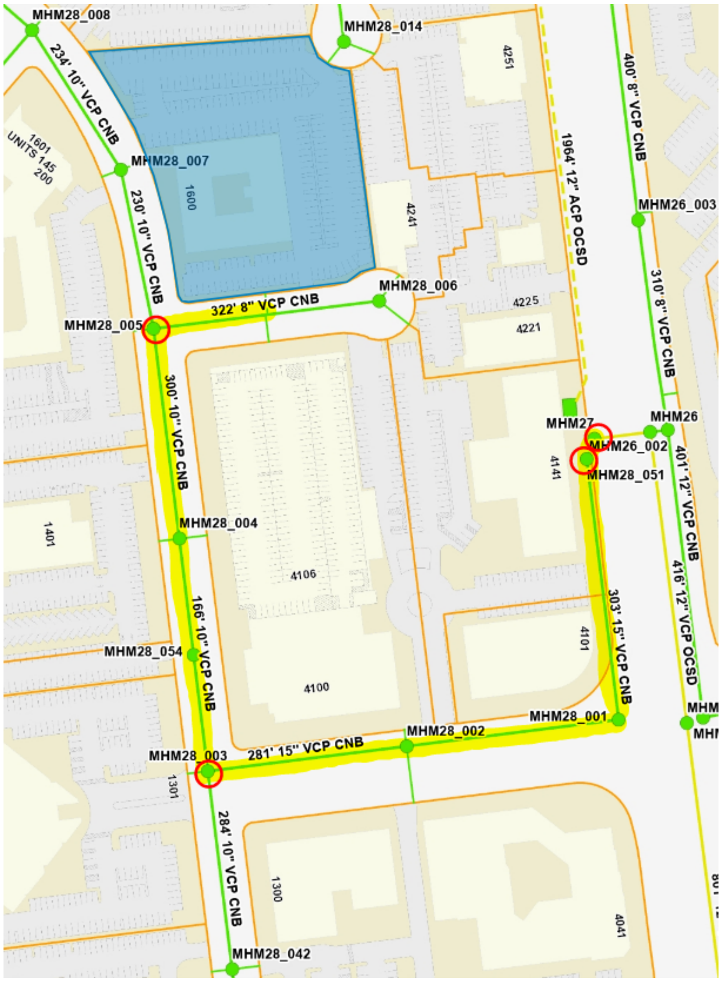


Figure 3. Existing Sewer System at the Project Site

4.2 Proposed Sewer System

The existing 6" VCP sewer lateral connecting the project site to the existing 8" VCP public sewer main on Dolphin-Striker way will be upgraded to an 8" VCP line. No other change to the public sewer system is proposed as part of this project. The land use of the project site will change from commercial use to residential use. The project site is currently a multi-story office complex with surface parking behind. The proposed project will redevelop the site to construct a 6 story 282-unit podium building, with 5 levels of residential apartment (type III) over one level on grade parking garage, and 2 levels of subterranean parking. The change in use for the site is anticipated to increase the rate of discharge to the system and is further detailed and justified below.

Section 5 Design Criteria

5.1 Sewer Design Criteria

Design criteria utilized in this report are based on the City of Newport Beach's Sewer Master Plan (SMP) prepared by AKM Consulting Engineers (August 2010). The focus of this study is to calculate the generation rates for the existing and proposed development based on land use generation rates in order to calculated the projected ratio of flow depth versus pipe diameter (d/D).

d/D Requirements: Based on the City' SMP, existing sewer pipes are considered deficient if this ratio is greater than 0.6 at peak dry weather flows and 0.8 at peak wet weather flows.

Manning's Friction Factor: Per City's SMP requirements a Manning's friction factor of 0.013 has been utilized on all flow calculations.

Flow Generation Rates: Since water use records were unavailable to the parcels in the sewer system, a typical unit flow factor of 2500 gallons per day per acre (gpd/ac) is utilized for the project based on the commercial use and the maps provided in the City's SMP (see Appendix D).

Peaking Factor (Dry Weather): Per the City's SMP, a peaking factor formal has been applied to the calculated daily generation rates as follows:

$$\text{PDWF (mgd)} = 2.20 \times \text{ADWF (mgd)}^{0.92}$$

See Table 1 below for a summary of the key design factors utilized in the report and Appendix B for a listing of the City's required design criteria for sewer systems.

Table 1. Sewer Design Criteria

Flow Depth vs Pipe Diameter Ratio (d/D)	Manning's Friction Factor (n value)	Unit Flow Factor (gpd/ac)	Peaking Factor
0.6 for all pipe sizes at peak dry weather flow 0.8 for all pipe sizes at peak wet weather flow	0.013	2,500	PDWF (mgd) = 2.20 x ADWF (mgd) $^{0.92}$

5.2 Available Pipe Capacity

The available pipe capacity for each segment has been determined by identifying the minimum slope of pipe within the reach and calculating the flows for the given pipe diameter and slope at a d/D ratio = 0.6. Pipe diameter and slopes were obtained from the City of Newport Beach GIS – Map Viewer website. Available flows were calculated utilizing the above noted design factors and the AutoCAD HydraFlow Express extension in Civil 3D for each critical pipe segment (See Appendix C). The results of the above noted calculations are included in Table 2 below.

Table 2. Available Pipe Capacity of the Existing Sewer System

MH Reach From	MH Reach To	Pipe Diameter D (in)	Pipe Diameter D (ft)	Minimum Slope in Reach (%)	Depth of Flow @ d/D=0.6 (ft)	Pipe Flow Q @ d/D = 0.6 (CFS)
Lateral Connection	MHM28_005	8	0.67	3.4	0.4	1.51
MHM28_005	MHM28_003	10	0.83	0.6	0.5	1.14
MHM28_003	MHM28_051	15	1.25	0.2	0.75	1.95
MHM28_051	MHM27	18	1.5	0.2	0.9	3.17

5.3 Existing Flow Rates

Existing daily flow rates were calculated based on total tributary parcel acreage and the above noted flow generation rates, except for known properties with recent residential developments being proposed or entitled. Known residential developments captured in this report include:

- 1300 Bristol St → 193 Units @ 160 gpd/Unit
- 1400 Bristol St → 221 Units @ 160 gpd/Unit
- Newport Crossings (1660 Dove St/1701 Corinthian Way) → 350 Units @ 160 gpd/Unit
- 1401 Quail Street → 78 Units @ 160 gpd/Unit

According to the City's SMP, the residential unit flow factors range from 110 gpd/du to 240 gpd/du (see Appendix D for the City's SMP Unit Flow Factor Map). Based on a review of similar parcels within the City, a generation rate of 160 gpd/du has been selected for the subject parcels. See Figure 4 below for the assumed tributaries for each sewer segment and refer to Appendix C for a listing of all Area-Based Flow Calculations.

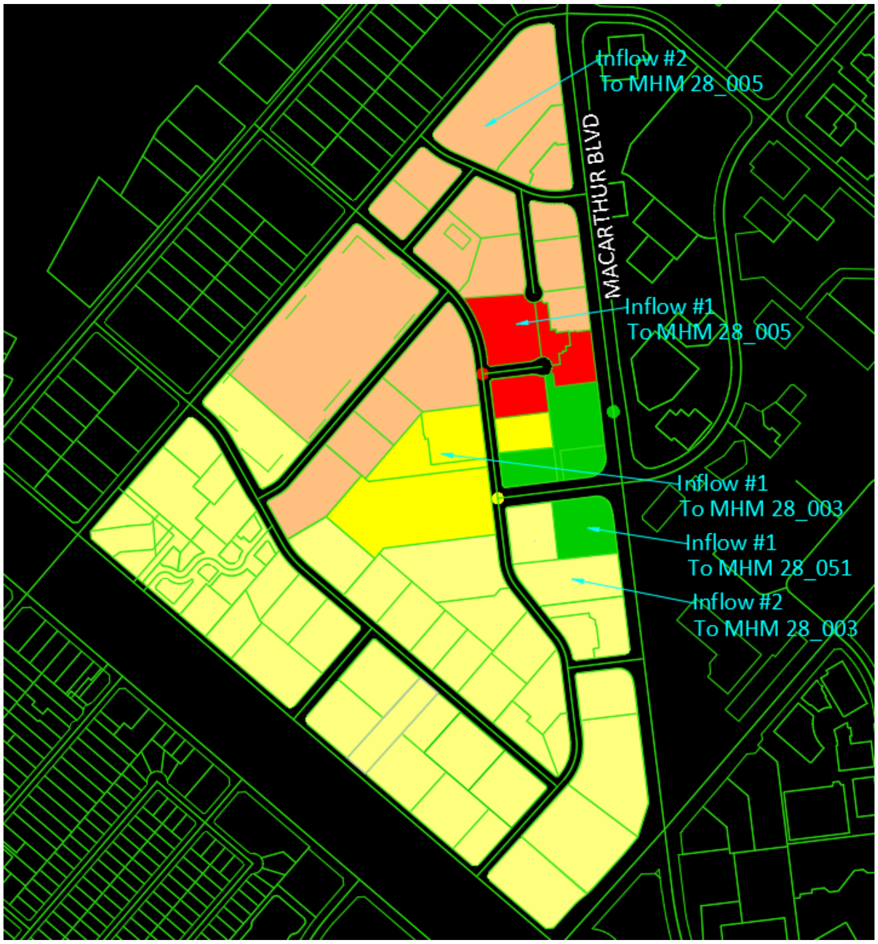


Figure 4. Existing Wastewater Flows to Important Manholes

The tributary areas generating incremental inflow along the primary system (highlighted in Figure 3) have been designated as inflow #1. Other tributary inflows that are added to the system only at the key manholes have been identified as inflow #2. The total sub area outflows for main manholes in the system are then calculated as the sum of inflow #1 and #2. The key manholes that are taken into consideration for the sewer system are identified in Table 3 below with the correlating daily flow rates for each inflow:

Table 3. Generation Rates by Tributary Area

EXISTING GENERATION RATES BY TRIBUTARY AREA			
	Sub Area Flow to MHM28_005	**Sub Area Flow to MHM28_003**	**Sub Area Flow to MHM28_051**
Inflow #1 Areas (Ac)	5.56	11.31	6.43
Inflow #1 Flows (gpd)	13,891.67	28,266.67	16,083.33
Inflow #2 Areas (Ac)	43.24	76.42	-
Inflow #2 Flows (gpd)	149,893.75	254,634,.58	-
TOTAL Sub Area Flow Generation (gpd)	163,785.42	282,901.25	16,083.33

The total cumulative flows for each segment have subsequently been calculated by summing the total sub-area flow generated from the up-stream manhole (as applies) with the Inflow #1 generation rates for the subject segment. Inflow #2 generation rates are subsequently added at the manhole to create the total system outflow from each manhole. See Table 4 below for a summary of total existing flows.

Table 4. Total Existing Flows at Manhole

TOTAL EXISTING AVERAGE DAILY FLOWS AT MANHOLE			
	Total Flow MHM28_005 (gpd)	**Total Flow MHM28_003 (gpd)**	**Total Flow MHM28_051 (gpd)**
Total Existing Inflow #1	13,891.67	192,052.08	462,770.00
Total Existing Inflow #2	149,893.75	254,634.58	-

Total Outflow	163,785.42	446,686.67	462,770.00

Given the above noted average daily flows, the average daily flow for inflow #1 of each segment (mainline flows) was converted to million gallons per day (mgd) which was subsequently used to calculate the peak dry weather flow for each segment based on the Peaking Factor Formula provided in the City's SMP [A]. The calculated peak dry weather flow [A] was then converted to cubic feet per second [B] and compared to the available pipe capacity flows [C] for the given segment (see Table 1 for reference of existing pipe capacities) to validate existing sewer system capacity [D].

Table 5. Total Peak Flows and Available Capacity

TOTAL EXISTING PEAK DRY WEATHER FLOWS AT MANHOLE			
	Total Inflow #1 to MHM28_005	**Total Inflow #1 to MHM28_003**	**Total Inflow #1 to MHM28_051**
PEAK Flow (mgd) [A]	0.04	0.48	1.08
PEAK Flow (cfs) [A]*1.58 = [B]	0.07	0.75	1.68
Available Flow @ d/D = 0.6 (cfs) [C]	1.51	1.14	1.95
Available Capacity (cfs) [C]-[B] = [D]	1.44	0.39	0.27
	OK	**OK**	**OK**

5.4 Proposed Flow Rates

The total area of the project site at 1600 Dove St, Newport Beach, CA is 2.49 acres. Utilizing the typical unit flow factor of 2500 gpd/ac, the existing flow at the project location is calculated as 6225 gpd. Given the proposed 282 dwelling units, the calculated daily flow for the proposed condition (@160 gpd/DU per previous justification) is 45,120 gpd. As a result, the total increase in daily flow is calculated as the difference between the proposed flow and existing flow at the project site, resulting in 38,895 gpd. The summary of this calculation is below in Table 6:

Table 6. Total Daily Flow Increase at the Project Site

Existing Flow at Project Site (gpd)	**Proposed Flow at Project Site (gpd)**	**Total Increase in Flow (gpd)**
6,225	45,120	38,895

Based on the above noted increase in daily sewer generation rates, the total system peak flows for Stream #1 were re-calculated with the additional 38,895 gpd added into each stream's calculations. The results of the proposed system flows are presented in Table 7 below:

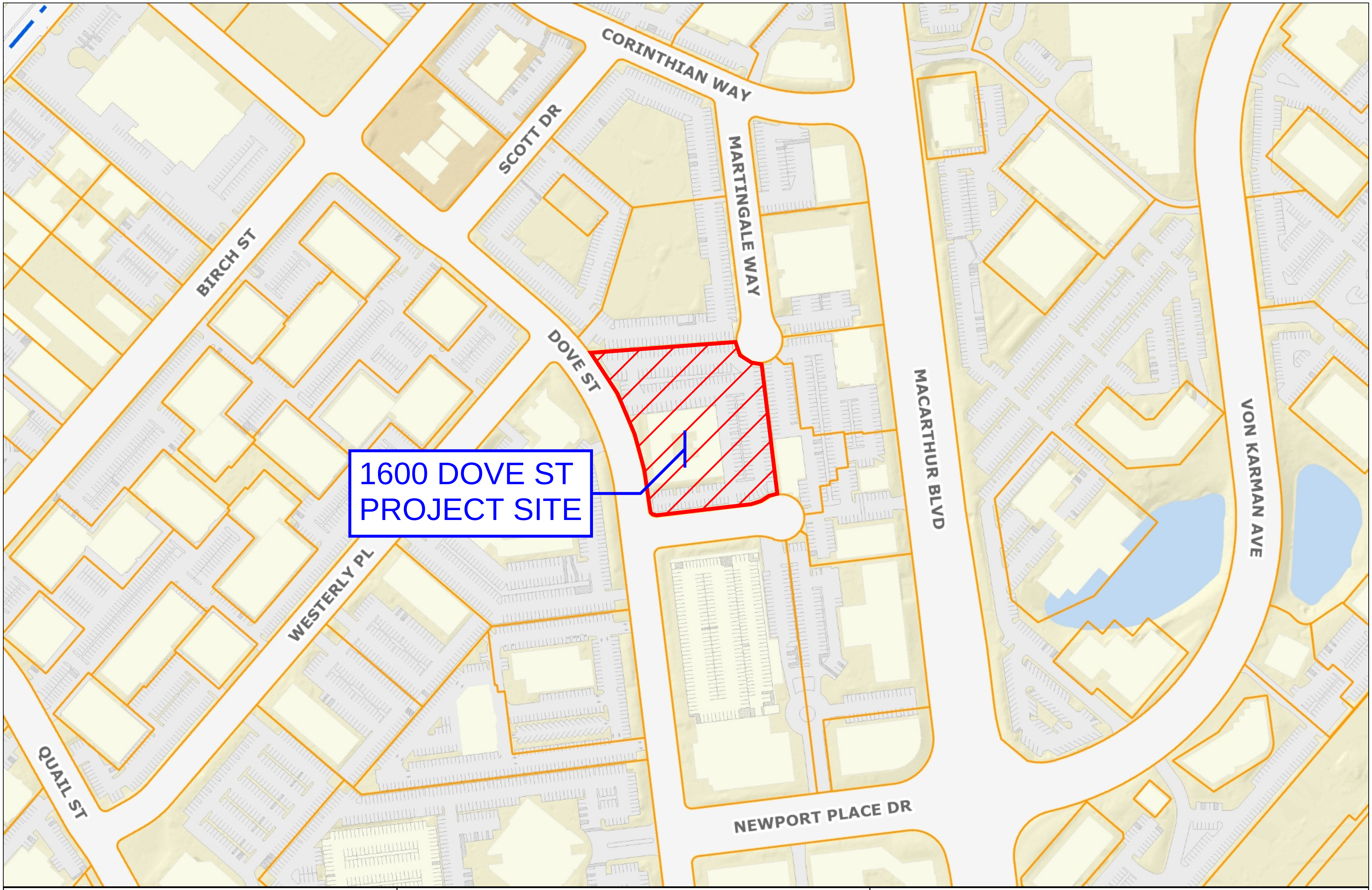
Table 7. Total Proposed Dry Weather Flows

TOTAL PROPOSED DRY WEATHER FLOWS AT MANHOLE (EXISTING + DEVELOPMENT)			
	Total Inflow #1 to MHM28_005	**Total Inflow #1 to MHM28_003**	**Total Inflow #1 to MHM28_051**
Total Proposed Average Daily Inflow #1 (gpd)	52,786.67	230,947.08	501,665.00
PEAK Flow (mgd) [A]	0.15	0.57	1.17
PEAK Flow (cfs) [A]*1.58 = [B]	0.23	0.88	1.80
Available Flow @d/D = 0.6 [C]	1.51	1.14	1.95
Available Capacity (cfs) [B]-[A] = [D]	1.28	0.26	0.15
	OK	**OK**	**OK**

Section 6 Results and Conclusion

Based on the above noted calculations, data, and the City's SMP design guidelines, the proposed redevelopment of the subject site from commercial to residential will not result in adverse impacts to the existing sewer system and adequate capacity exists within the system to handle the increase in projected daily sewer generation rates.

Appendix A – Vicinity Map



0 303 607

Feet

1/4/2023

Appendix B – Sewer Design Criteria

Sewer System Criteria

Collection System	
Minimum Pipe Size	8-inch
Minimum Velocity	2.0 ft/sec at average flow 3.0 ft/sec at peak dry weather flow
Pipe Depth to Diameter Ratio for *Existing Pipes*	0.60 for all pipe sizes at peak dry weather flow 0.80 for all pipe sizes at peak wet weather flow
Pipe Depth to Diameter Ratio for *New Construction*	0.50 for pipes 15-inches and smaller at peak dry weather flow 0.60 for pipes 18-inches and larger at peak dry weather flow 0.80 for all pipe sizes at peak wet weather flow

Minimum Sewer Slopes

Sewer Size (in)	2 ft/sec Velocity Slope	3 ft/sec Velocity Slope
8	0.0029	0.0065
10	0.0022	0.0049
12	0.0017	0.0038
15	0.0013	0.0029
18	0.0010	0.0022
21	0.0008	0.0018
24	0.0007	0.0015

**Assuming d/D = 0.60 and n=0.013*

Appendix C – Existing Flow Calculations

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Jan 9 2023

8in VCP @ 3.4% Slope

Circular

Diameter (ft) = 0.67

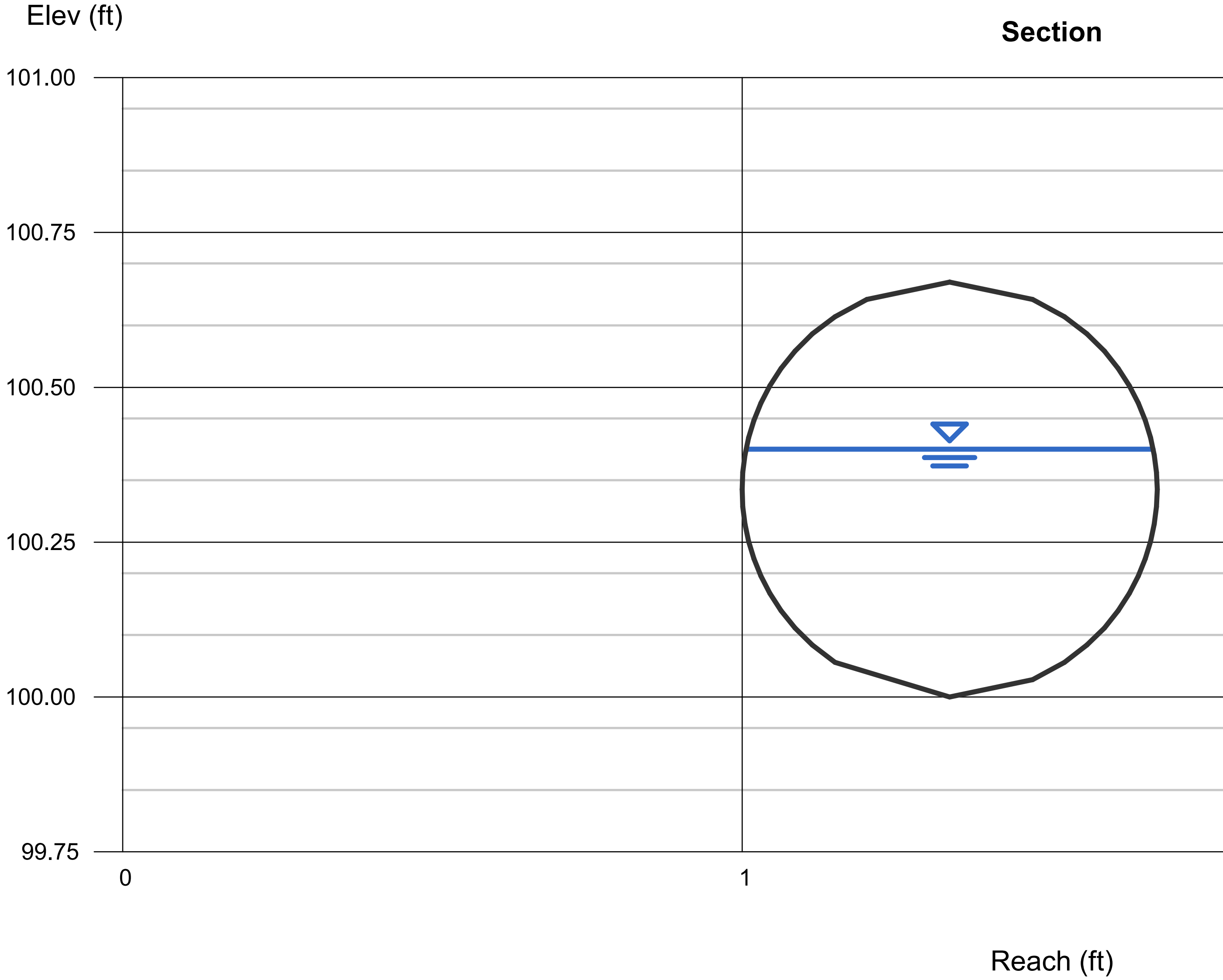
Invert Elev (ft) = 100.00
Slope (%) = 3.40
N-Value = 0.013

Calculations

Compute by: Known Depth
Known Depth (ft) = 0.40

Highlighted

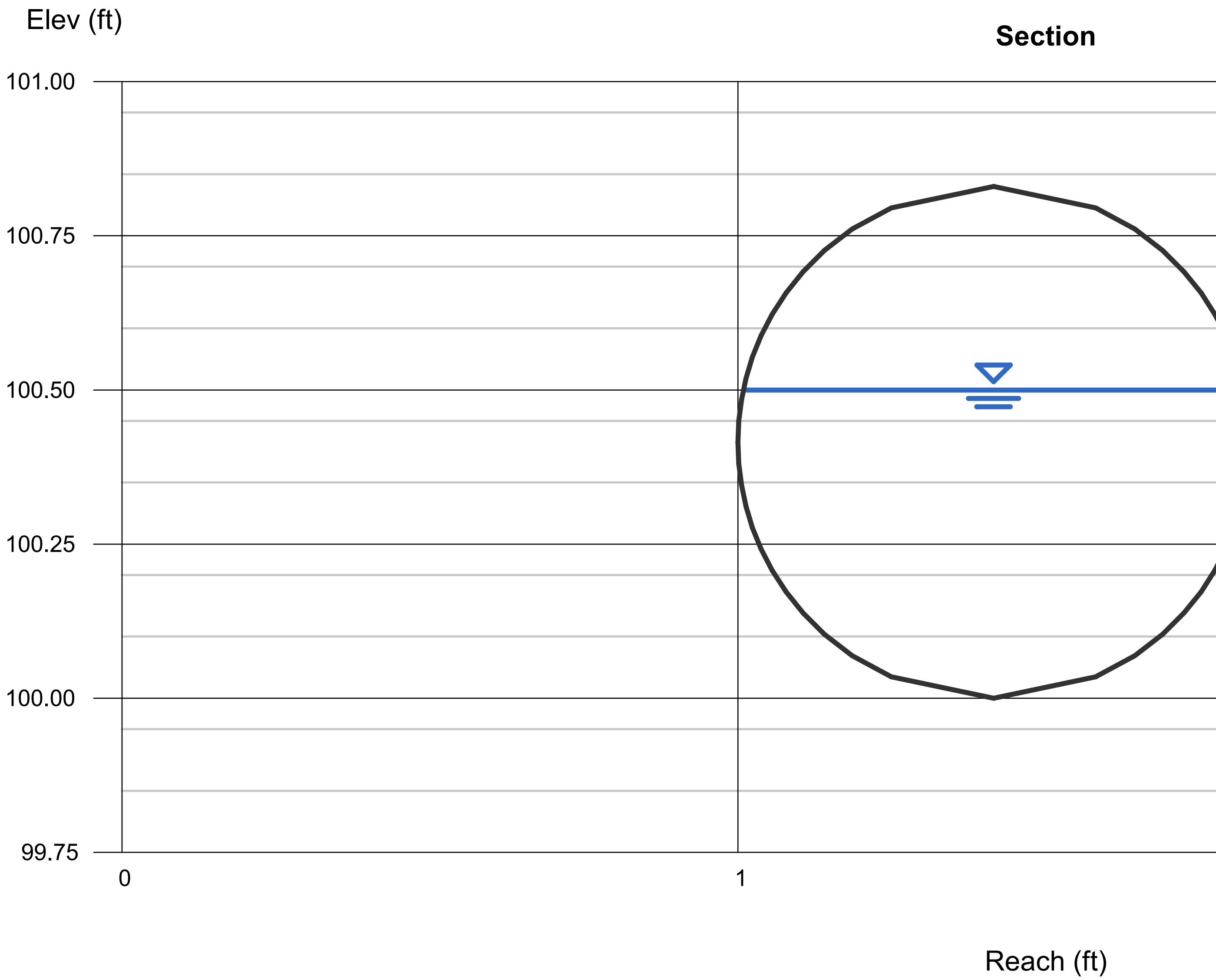
Depth (ft) = 0.40
Q (cfs) = 1.512
Area (sqft) = 0.22
Velocity (ft/s) = 6.86
Wetted Perim (ft) = 1.19
Crit Depth, Yc (ft) = 0.58
Top Width (ft) = 0.66
EGL (ft) = 1.13



Channel Report

10in VCP @ 0.6% Slope

Circular		**Highlighted**	
Diameter (ft)	= 0.83	Depth (ft)	= 0.50
		Q (cfs)	= 1.139
		Area (sqft)	= 0.34
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 3.33
Slope (%)	= 0.60	Wetted Perim (ft)	= 1.48
N-Value	= 0.013	Crit Depth, Yc (ft)	= 0.48
		Top Width (ft)	= 0.81
Calculations		EGL (ft)	= 0.67
Compute by:	Known Depth		
Known Depth (ft)	= 0.50		



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Jan 9 2023

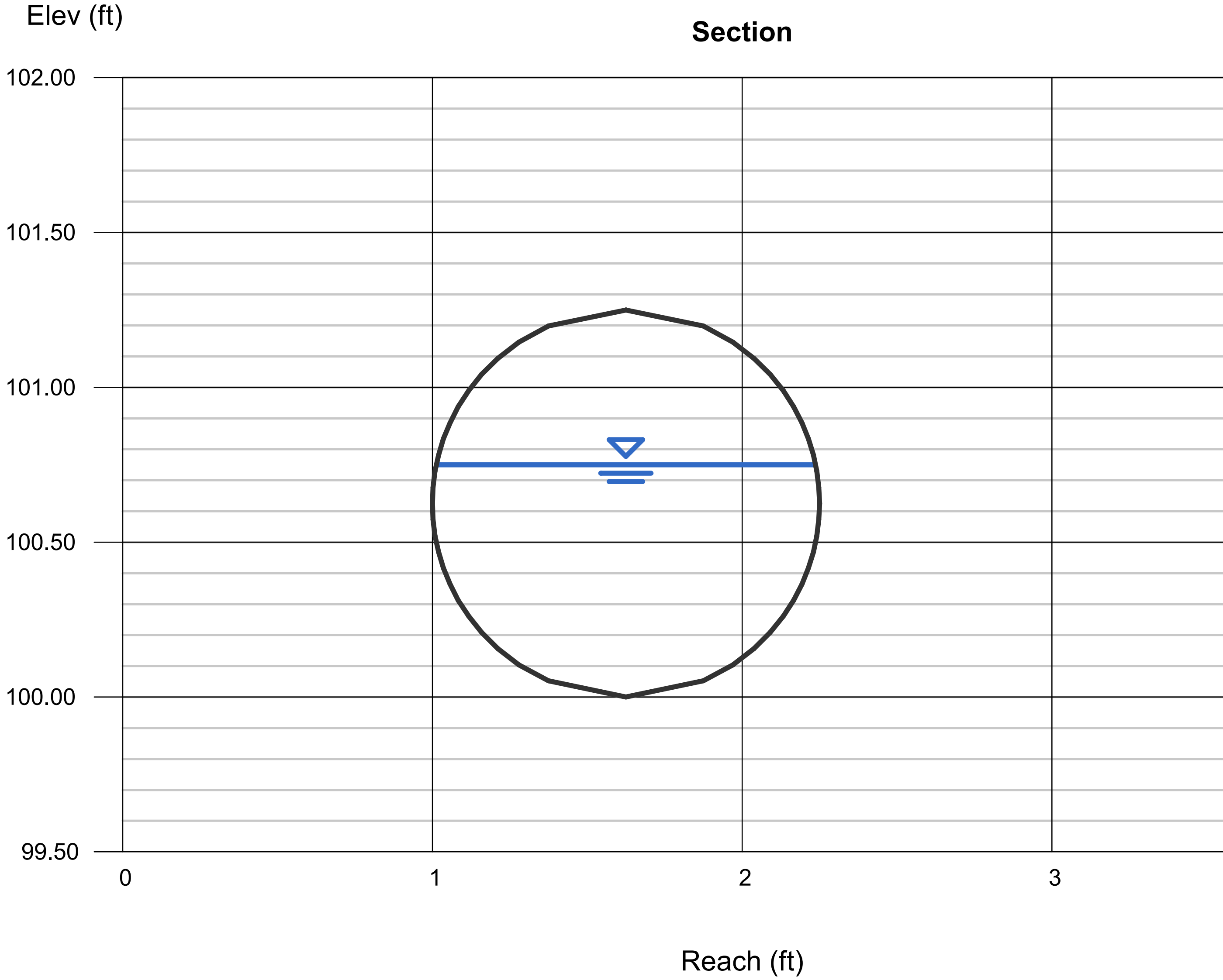
15in VCP @ 0.2% Slope

Circular
Diameter (ft) = 1.25

Invert Elev (ft) = 100.00
Slope (%) = 0.20
N-Value = 0.013

Calculations
Compute by: Known Depth
Known Depth (ft) = 0.75

Highlighted
Depth (ft) = 0.75
Q (cfs) = 1.947
Area (sqft) = 0.77
Velocity (ft/s) = 2.53
Wetted Perim (ft) = 2.22
Crit Depth, Yc (ft) = 0.56
Top Width (ft) = 1.22
EGL (ft) = 0.85



Channel Report

18in VCP @ 0.2% Slope

Circular

Diameter (ft) = 1.50

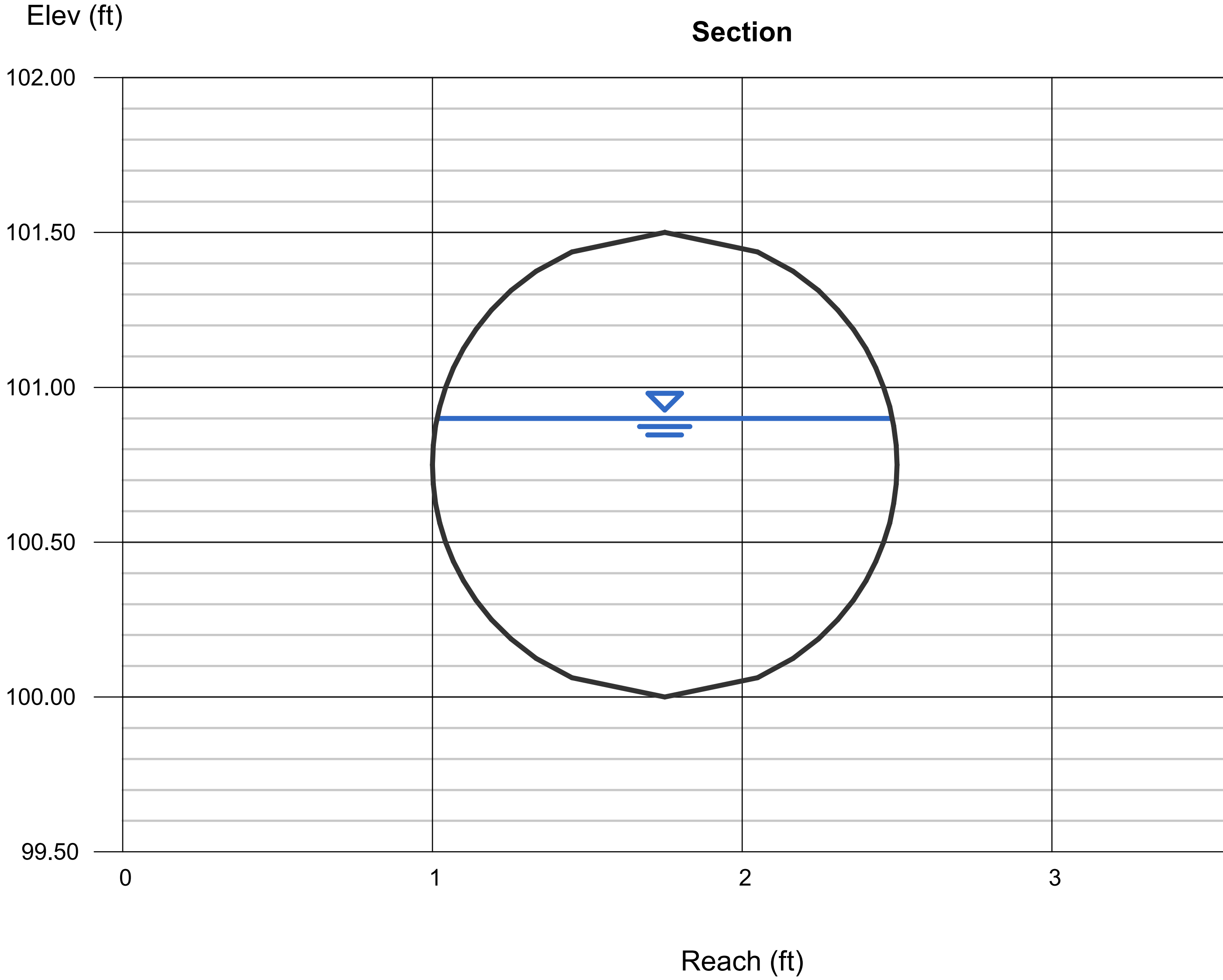
Invert Elev (ft) = 100.00
Slope (%) = 0.20
N-Value = 0.013

Calculations

Compute by: Known Depth
Known Depth (ft) = 0.90

Highlighted

Depth (ft) = 0.90
Q (cfs) = 3.166
Area (sqft) = 1.11
Velocity (ft/s) = 2.85
Wetted Perim (ft) = 2.66
Crit Depth, Yc (ft) = 0.68
Top Width (ft) = 1.47
EGL (ft) = 1.03

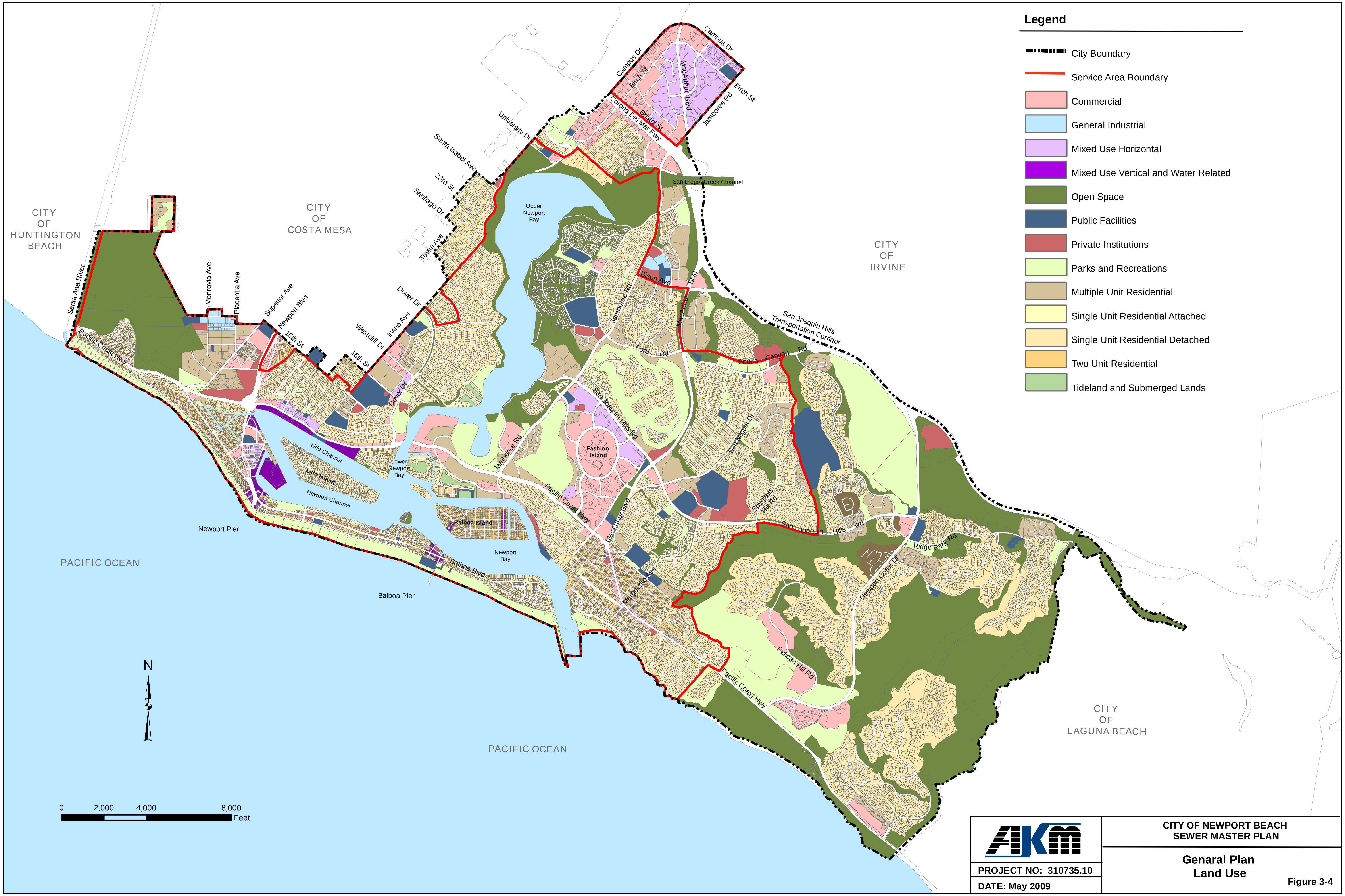


Area Based Sewer Generation Rates (2,500 gpd/Ac)				
Parcel #	**Area (acre)**	**Tributary to MH**	**Inflow #**	**Flow (GPD)**
1600 Dove St	2.49	MHM28_008	#1	6,225
4241 McArthur Blvd	0.72	MHM28_008	#1	1,800
4221 McArthur Blvd	1.1	MHM28_008	#1	2,750
4100 Newport Place Dr	1.246666667	MHM28_008	#1	3,117
4251 McArthur Blvd	1.08	MHM28_008	#2	2,700
4301 McArthur Blvd	1	MHM28_008	#2	2,500
4299 McArthur Blvd	1.45	MHM28_008	#2	3,625
4341 McArthur Blvd	0.94	MHM28_008	#2	2,350
4343 McArthur Blvd	1	MHM28_008	#2	2,500
4545 McArthur Blvd	6.32	MHM28_008	#2	15,800
4250 Birch St	1.4	MHM28_008	#2	3,500
4200 Birch St	1.2	MHM28_008	#2	3,000
No Site Address	6.4575	MHM28_008	#2	16,144
1601 Dove St	3.99	MHM28_008	#2	9,975
4000 Westerly Pl	1.46	MHM28_008	#2	3,650
3990 Westerly Pl	1.46	MHM28_008	#2	3,650
1500 Quail St	2.38	MHM28_008	#2	5,950
3901 Westerly Pl	0.64	MHM28_008	#2	1,600
3919 Westerly Pl	0.37	MHM28_008	#2	925
3900 Birch St	0.97	MHM28_008	#2	2,425
4000 Birch St	0.52	MHM28_008	#2	1,300
4001 Westerly Pl	0.86	MHM28_008	#2	2,150
4020 Birch St	0.72	MHM28_008	#2	1,800
4029 Westerly Pl	0.52	MHM28_008	#2	1,300
4100 Birch St	0.38	MHM28_008	#2	950
4120 Birch St	0.58	MHM28_008	#2	1,450
4101 Westerly Pl	0.97	MHM28_008	#2	2,425
1901 Dove St	0.51	MHM28_008	#2	1,275
1801 Dove St	0.38	MHM28_008	#2	950
Known Residential Development				
1701 Corinthian Way & 1660 Dove St (350 Residential Units)	5.68	MHM28_008	#2	56,000
4100 Newport Place Dr	1.246666667	MHM28_003	#1	3,117
1401 Dove St	1.92	MHM28_003	#1	4,800
1375 Dove St	1.68	MHM28_003	#1	4,200
1301 Dove St	6.46	MHM28_003	#1	16,150
1200 Dove St	4.333333333	MHM28_003	#2	10,833
1000 Dove St	0.9	MHM28_003	#2	2,250
1050 Dove St	1.56	MHM28_003	#2	3,900
1201 Dove St	3.59	MHM28_003	#2	8,975
1151 Dove St	1.75	MHM28_003	#2	4,375

Area Based Sewer Generation Rates (2,500 gpd/Ac)				
Parcel #	**Area (acre)**	**Tributary to MH**	**Inflow #**	**Flow (GPD)**
1101 Dove St	1.49	MHM28_003	#2	3,725
1001 Dove St	1.51	MHM28_003	#2	3,775
901 Dove St	1.71	MHM28_003	#2	4,275
1000 Quail St	1.52	MHM28_003	#2	3,800
1100 Quail St	1.15	MHM28_003	#2	2,875
1200 Quail St	1	MHM28_003	#2	2,500
1300 Quail St	1.5	MHM28_003	#2	3,750
1400 Quail St	1.47	MHM28_003	#2	3,675
1500 Quail St	2.38	MHM28_003	#2	5,950
3991 McArthur Blvd	1.66	MHM28_003	#2	4,150
3991 McArthur Blvd	8.01	MHM28_003	#2	20,025
3601 Jamboree Rd	2.87	MHM28_003	#2	7,175
895 Dove St	3.95	MHM28_003	#2	9,875
900 Bristol St	1	MHM28_003	#2	2,500
1101 Quail St	1	MHM28_003	#2	2,500
1000 Bristol St	3.91	MHM28_003	#2	9,775
1301 Quail St	1.85	MHM28_003	#2	4,625
1401 Quail St	1.7	MHM28_003	#2	4,250
1451 Quail St	1.41	MHM28_003	#2	3,525
1501 Quail St	2.22	MHM28_003	#2	5,550
1550 Bristol St	0.86	MHM28_003	#2	2,150
1 Upper Newport Plaza Dr	0.21	MHM28_003	#2	525
2 Upper Newport Plaza Dr	0.18	MHM28_003	#2	450
3 Upper Newport Plaza Dr	0.2	MHM28_003	#2	500
4 Upper Newport Plaza Dr	0.54	MHM28_003	#2	1,350
5 Upper Newport Plaza Dr	0.14	MHM28_003	#2	350
6 Upper Newport Plaza Dr	0.41	MHM28_003	#2	1,025
6 Upper Newport Plaza Dr (rest of area)	2.28	MHM28_003	#2	5,700
7 Upper Newport Plaza Dr	0.31	MHM28_003	#2	775
1701 Quail St	1.22	MHM28_003	#2	3,050
1811 Quail St	0.69	MHM28_003	#2	1,725
3880 Birch St	1.21	MHM28_003	#2	3,025
3636 Birch St	2.38	MHM28_003	#2	5,950
3600 Birch St	0.93	MHM28_003	#2	2,325
3610 Birch St	1.13	MHM28_003	#2	2,825
3620 Birch St	0.9	MHM28_003	#2	2,250
No Site Address	2.1525	MHM28_003	#2	5,381
1800 Quail St	0.51	MHM28_003	#2	1,275
1900 Quail St	0.37	MHM28_003	#2	925
Known Residential Developments				
1300 Bristol St (193 Residential Units)	1.97	MHM28_003	#2	30,880
1400 Bristol St (221 Residential Units)	2.38	MHM28_003	#2	35,360
4100 Newport Place Dr	1.246666667	MHM28_051	#1	3,117

Area Based Sewer Generation Rates (2,500 gpd/Ac)				
Parcel #	**Area (acre)**	**Tributary to MH**	**Inflow #**	**Flow (GPD)**
1200 Dove St	2.166666667	MHM28_051	#1	5,417
4101 McArthur Blvd	0.79	MHM28_051	#1	1,975
4141 McArthur Blvd	2.23	MHM28_051	#1	5,575

Appendix D – City of Newport Beach SMP Exhibits



PROJECT NO: 310735.10

DATE: May 2009

CITY OF NEWPORT BEACH
SEWER MASTER PLAN

Genaral Plan
Land Use

Figure 3-4

AKM

PROJECT NO: 310735.10

DATE: May 2009

CITY OF NEWPORT BEACH
SEWER MASTER PLAN

Unit Flow Factors

Figure 4-3

Appendix I

Water System Study

TAIT
RISING TO THE CHALLENGE
701 N. Parkcenter Drive, Santa Ana, CA 92705
p:714/560/8200 www.tait.com

1600 Dove Street, Newport Beach, CA
APN № 427-181-03
WATER SYSTEM STUDY
FOR PROPOSED RESIDENTIAL DEVELOPMENT

December 13, 2023

INTRODUCTION

The subject site is currently occupied by an office building on a 2.49-acre lot located on the Northeast corner of Dove Street and Dolphin Striker Way. The current land use is for a multi-story office complex. The site is relatively flat and drains from east to west and is identified as Assessor Parcel Number 427-181-03. The zoning code is PC-11 and the site is enclosed by an existing parking lot and office structures to the North and East, Dove St to the West, and Dolphin-Striker Way to the South. See Figure 1 Below for a project Vicinity Map.

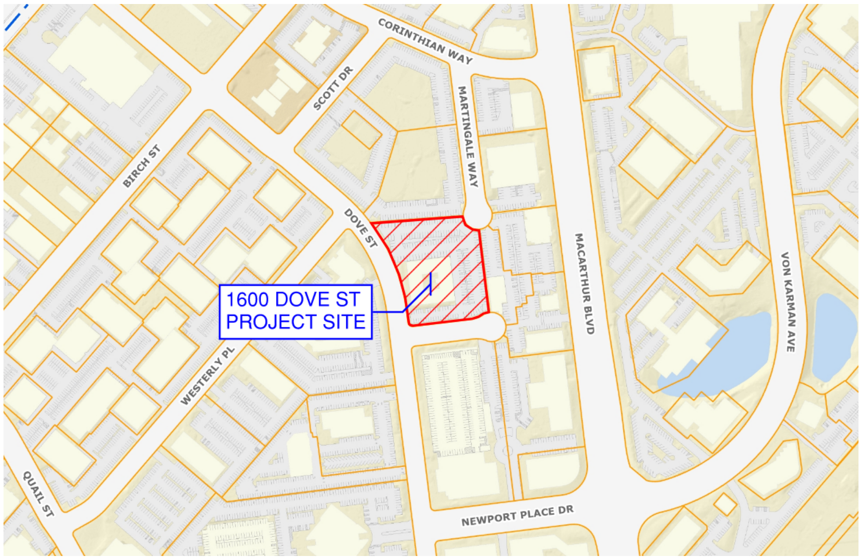


Figure 1. Vicinity Map

The proposed site is anticipated to result in an increased local water demand as a result of the residential development with proposed services connecting either to the existing 8" ACP domestic water main in Dolphin Striker Way, or the existing 12" ACP domestic water main in Dove Street for the proposed domestic, irrigation, and fire water flows.

The purpose of this memo is to initially summarize the existing water condition and the proposed connections for the proposed development. As fire flow tests results are currently in process of being requested, upon receipt of updated fire flow tests from the City, a subsequent study will be prepared to summarize the water flow pressure impacts that are anticipated as part of this development. This mom or TAIT's subsequent study is not meant to be a Water Supply Assessment under California SB610/SB221 which is not required for this development.

EXISTING CONDITIONS

Services for the existing office facility is currently obtained from an 8" ACP water main located in the Martingale Cul-De-Sac where a 4" Fire Water Double Detector Check, a 1"-2" Domestic Water Meter, and Irrigation Backflow Device are currently observed. Existing peak flows have been calculated based on section 4.4 "Land Use Demand Factors" of the City of Newport Beach Water Master Plan (WMP) based on the noted zoning allocation of mixed-use. Based on the WMP, Average demand for the site is calculated as follows:

2.49 Acres x 2,200 GPD/acre = 5,478 GPD or 3.8 GPM

Per City WMP, the subject project is located in Pressure Zone # 2 which requires a peaking factor of 2.6 to calculate peak hour demand, however, in order to provide a factor of safety, a peaking factor of 3.0 has been used for the purpose of calculating peak hour flow rates. Peak flow calculations are as follows:

3.8 GPM x 3.00 = 11.4 GPM average flow of domestic water during peak hour demand

PROPOSED CONDITIONS

The proposed development will utilize the existing 8" ACP water main on Dolphin Striker Way as the primary source and the 12" ACP water main on Dove Street as the secondary source for fire and domestic water service based on the results of water pressure studies (pending final pressures).

Expected daily proposed peak flows have been calculated based on section 4.4 "Land Use Demand Factors" of the City of Newport Beach Water Master Plan (WMP) based on the noted zoning allocation of "Very High Residential". Based on the City's WMP, this site has been categorized as a "Residential Very High" parcel which is identified for all parcels with development densities greater than 25 DU/AC and a generation rate of 3,800 gallons/acre/day (gpad). However, the proposed development includes up to 282 units within 2.49 Acres equating to a development density of up to 100 DU/Acre. Given the proposed density is much higher than the lower range provided in the City's master plan, the generation rate has been quadrupled to assume a conservative rate of:

Project Specific Water Generation Rate (100DU/AC): 3,800 x 4 = 15,200 gpad

Based on the WMP and above noted modification, average demand for the site is calculated as follows:

2.49 Acres x 15,200 GPD/acre = 37,848 GPD or 26.3 GPM

Expected hourly peak flow calculations are as follows:

26.3 GPM x 3.00 = 78.9 GPM average flow of domestic water during peak hour demand

As a result, the expected peak hour demand flow rate for the proposed site would be 78.8 GPM which is 67.5 GPM higher than the existing peak hour demand flow rate.

PRESSURE ASSESSMENT AND CONCLUSION

To analysis the effects for the proposed project on public water mains on Dove Street and Dolphin-Striker Way pipe P-7 and 1600 Dove St. junction was reviewed which showed the greatest changes in flow and pressure within the public system.

The expected proposed daily peak flows resulted in velocity changes less than 0.60FT/S and a pressure change of less than 1 PSI for expected daily domestic water usages which can be considered negligible.

Therefore, it has been determined the existing public water system at the project site is more than adequate to handle the expected daily increased demand, as well as an unlikely extreme demand, of the proposed residential development and will not adversely affect the existing network's ability to serve the surrounding developments.

________________________________ ________

DAVID SLOAN, P.E. DATE
TAIT & Associates, Inc.