

ORANGE COAST MEMORIAL MEDICAL CENTER PARKING STRUCTURE

Initial Study and Mitigated Negative Declaration (IS/MND)

CEQA Analysis Prepared for:



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Project No. 7307

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PROJECT INFORMATION SHEET

- 1. Project Title** Orange Coast Memorial Medical Center Parking Structure
- 2. CEQA Lead Agency** **City of Fountain Valley**
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- 3. Project Applicant** Mark Shuck, Executive Director, Facilities Development and Operations
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- 4. Project Location** 18111 Brookhurst Street,
Fountain Valley, CA 92708
- 5. Assessor's Parcel Numbers** APN 157-511-01
- 6. Project Site General Plan Designation(s)** Specific Plan
- 7. Project Site Zoning Designation(s)** Specific Plan
- 8. Surrounding Land Uses and Setting** Surrounded by a church and single-family homes to the north, the medical center to the east, multi-family homes to the south and single-family homes to the west.
- 9. Description of Project** The proposed project would replace a surface parking lot at the Orange Coast Medical Center (OCMC) with the development of a three-story parking structure. The parking structure would consist of a basement floor, one grade level floor, two floors above grade, and rooftop parking. The proposed parking structure would be a 3-story building above grade. The parking structure would also include security gates, a bike rack, storage room, stairs, lighting, landscaping and a third-story pedestrian bridge connecting the parking structure to the west edge of the medical center campus.



Refer to **Section 3.0** of this document for additional information.

The project applicant is requesting the following discretionary actions, which are discussed in detail in **Section 3.0** of this document:

Specific Plan Amendment
Precise Plan of Design

10. Selected Agencies whose Approval is Required

City of Fountain Valley

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, has consultation begun?

Letters were sent by the City of Fountain Valley (the Lead Agency), to local Native American tribes on May 22, 2025 asking if they wished to participate in AB 52 and SB 18 consultation concerning the proposed project in the City of Fountain Valley. Tribes had up to 30 days for AB 52 and 90 days for SB 18 in which to respond to notification of the project. Two responses were received. Both the Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes requested consultation and provided mitigation measures for this project. These were accepted by the City and Mitigation Measures **TCR-1** through **TCR-6** are included. SB 18 consultation can be concluded on August 20, 2025.

12. Other Public Agencies

Agencies that will review the proposed project include the following:

- California Regional Water Quality Control Board
- South Coast Air Quality Management District
- Fountain Valley Fire Department



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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
°F	degrees Fahrenheit
AB	Assembly Bill
AB 32	California Global Warming Solutions Act of 2006
AB 939	California Integrated Waste Management Act
AB 1327	California Solid Waste Reuse and Recycling Access Act of 1991
ADA	Americans with Disabilities Act
ADT	average daily traffic
AMSL	above mean sea level
APE	area of potential effect
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATP	Active Transportation Plan
bgs	below ground surface
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CAOs	Cleanup and Abatement Orders
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDOs	Cease and Desist Orders
CDFW	California Department of Fish & Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geologic Society
CH ₄	methane
CHP	California Highway Patrol
CHRIS	California Historic Resources Inventory System
CIWMA	State of California Integrated Waste Management Act
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency



Acronym/Abbreviation	Term
CO	Carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
CRC	California Residential Code
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel scale
DIF	Development Impact Fees
DMA	drainage management area
DOC	California Department of Conservation
DOSH	California Division of Safety and Health
DRP	Design Review Project
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EMS	Emergency Medical Service
EOP	Emergency Operations Plan
ESA	Endangered Species Act
ESA	Environmental Site Assessment
FAR	floor area ratio
FHSZ	Fire Hazard Severity Zones
FMMP	Farmland Mapping and Monitoring Program
FRAP	CalFire Fire Resource and Assessment Program
FTA	Federal Transit Administration
GHG	greenhouse gas
GPCD	gallons per capita per day
GWP	global warming potential
GWTS	groundwater treatment system
HAZNET	Hazardous Waste Tracking System
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
Hz	hertz
IFC	International Fire Code
IPCC	Intergovernmental Panel on Climate Change
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	killowatt hours
L ₉₀	noise level that is exceeded 90% of the time
L _{eq}	equivalent noise level
LED	light-emitting diode
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L _{max}	root mean square maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LRP	Legally Responsible Person



❖ ACRONYMS AND ABBREVIATIONS ❖

Acronym/Abbreviation	Term
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
M-1	Light Industrial zoning designation
MBTA	Migratory Bird Treaty Act
MCR	Master Case No.
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
MMTCO _{2e}	million metric tons of CO _{2e}
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MS4	municipal separate storm sewer systems
MWD	Metropolitan Water District of Southern California
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NHPA	National Historic Preservation Act
NO	nitric oxide
NO ₂	nitrogen dioxide
NO _x	Nitrogen oxides
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	Ozone
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
PFCs	perfluorocarbons
PM	particulate matter
PM _{2.5}	fine particulate matter
PM ₁₀	respirable particulate matter
Porter-Cologne	Porter-Cologne Water Quality Control Act
PPM	parts per million
PPV	peak particle velocity
PRDs	Permit Registration Documents
PRP	potential responsible party
Qyf5	Young Alluvial Fan Deposits, unit 5
RCRA	Resource Conservation and Recovery Act
REC(s)	recognized environmental condition(s)
RMS	root mean square
ROG	Reactive organic gases



❖ ACRONYMS AND ABBREVIATIONS ❖

Acronym/Abbreviation	Term
ROW	right-of-way
RP	Regional Plant
RWQCB	Regional Water Quality Control Board
SARWQCB	Santa Ana Regional Water Quality Control Board
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARTS	Stormwater Multi-Application and Report Tracking System
SO ₂	sulfur dioxide
SoCalGas	Southern California Gas Company
SOPs	Standard Operating Procedures
SR	State Route
SRA	State Responsibility Area
SRAs	source receptor areas
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SVE	soil vapor extraction
SWP	California State Water Project
SWRCB	California State Water Resources Control Board
SWPPP	Stormwater Pollution Prevention Plan
TCRs	tribal cultural resources
TMP	Traffic Management Plan
USDA	United States Department of Agriculture
USGS	United States Geological Survey
USEPA	United States Environmental Protection Agency
UWMP	Urban Water Management Plan
VCP	Vitrified Clay Pipe
VdB	vibration decibels
VHFHSZs	very high fire hazard severity zones
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Worker Environmental Awareness Program
WQMP	Water Quality Management Plan
WOUS	water(s) of the United States



1.0 INTRODUCTION

1.1 Proposed Project

The City of Fountain Valley (City) is processing a request to implement a series of discretionary actions that would ultimately allow for the replacement of a surface parking lot with the development of a three-story parking structure at the Orange Coast Medical Center (OCMC) located at 18111 Brookhurst Street within the City of Fountain Valley, at the southwest corner of the Talbert Avenue and Foster Street intersection.

1.1.1 Project Components

The proposed project would consist of a three-story parking structure consisting of a basement floor, one ground level floor, two floors above grade, and rooftop parking. The proposed parking structure would be a 3-story building above grade. The parking structure would also include security gates, a bike rack, storage room, stairs, lighting, landscaping and a third-story pedestrian bridge connecting the parking structure to the west side of the OCMC campus.

1.1.2 Estimated Construction Schedule

Construction is expected to take one year to complete, beginning in March 2027 and ending in February 2028. Refer to **Section 3.0** for details.

1.2 Lead Agencies – Environmental Review Implementation

The City of Fountain Valley is the Lead Agency for the proposed project. Pursuant to the California Environmental Quality Act (CEQA) and its implementing regulations,¹ the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

1.3 CEQA Overview

1.3.1 Purpose of CEQA

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.
- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

1 Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.



- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures (MMs) when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.3.2 Authority to Mitigate under CEQA

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the “nexus”² and “rough proportionality”³ standards.

CEQA allows a Lead Agency to approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

1.4 Purpose of Initial Study

The CEQA process begins with a public agency making a determination as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any farther. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.

2 A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.

3 The mitigation measure must be “roughly proportional” to the impacts of the Project.



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- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue a ND, and no MMs would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that MMs would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare a MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would be required to prepare an EIR to further analyze these impacts.

1.5 Review and Comment by Other Agencies

Other public agencies are provided the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.
- A Trustee Agency⁴ (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.
- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

4 The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.



1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the particular environmental threshold in any way.
- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.
- An impact is considered potentially significant if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

1.7 Organization of Initial Study

This document is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 - Introduction**, which identifies the purpose and scope of the IS/MND.
- **Section 2.0 - Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surroundings.
- **Section 3.0 - Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, operational characteristics of the proposed project, and discretionary actions needed for project approval.
- **Section 4.0 - Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes MMs, as needed, to reduce potential environmental impacts to less than significant levels.
- **Section 5.0 - References**, which includes a list of documents cited in the IS/MND.
- **Section 6.0 - List of Preparers**, which identifies the primary authors and technical experts that prepared the IS/MND.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the following appendices:

- Appendix A1 Project Plans
- Appendix A2 Parking Letter
- Appendix B CalEEMod Input and Results For Air Quality Analysis
- Appendix C Species Occurrence Potential Tables
- Appendix D Cultural Resources Report



- Appendix D2 Paleontological Records Search
- Appendix E1 Geotechnical Report
- Appendix E2 Paleontological Resources Records Search
- Appendix F Water Quality Management Plan
- Appendix G Hydrology Summary
- Appendix H Noise Data
- Appendix I1 Parking Study
- Appendix I2 VMT Memo

1.8 Findings from the Initial Study

1.8.1 No Impact or Impacts Considered Less than Significant

Based on IS findings, the project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

1.8.2 Impacts Considered Less than Significant with Mitigation Measures

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in Appendix G of the CEQA Guidelines when proposed MMs are implemented.

- Biological Resources
- Cultural Resources
- Geology and Soils
- Tribal Cultural Resources
- Mandatory Findings of Significance



2.0 ENVIRONMENTAL SETTING

2.1 Project Location

The proposed Orange Coast Memorial Medical Center Parking Structure at the Orange Coast Medical Center (OCMC) is located at 18111 Brookhurst Street in the City of Fountain Valley, at the southwest corner of the Talbert Avenue and Foster Street intersection. Refer to **Figure 2.1-1**, which shows the project's location in a regional context. **Figure 2.1-2** depicts an aerial photo of the project site and the surrounding land.

2.2 Project Setting

The project site comprises OCMC's current northwestern surface parking lot that has 231 parking spaces. See **Figure 2.2-1**, which depicts the topography of the site and surrounding area; topography within the project site is relatively flat (Google Earth, 2024). Site photographs are provided in **Figure 2.2-2**.

2.2.1 Land Use and Zoning

The land use and zoning designations, as well as existing development of the project site and its immediate vicinity, are listed in **Table 2.2-1**. The project site has a General Plan land use and zoning designation of Specific Plan (City of Fountain Valley, 2023a; City of Fountain Valley, 2019).

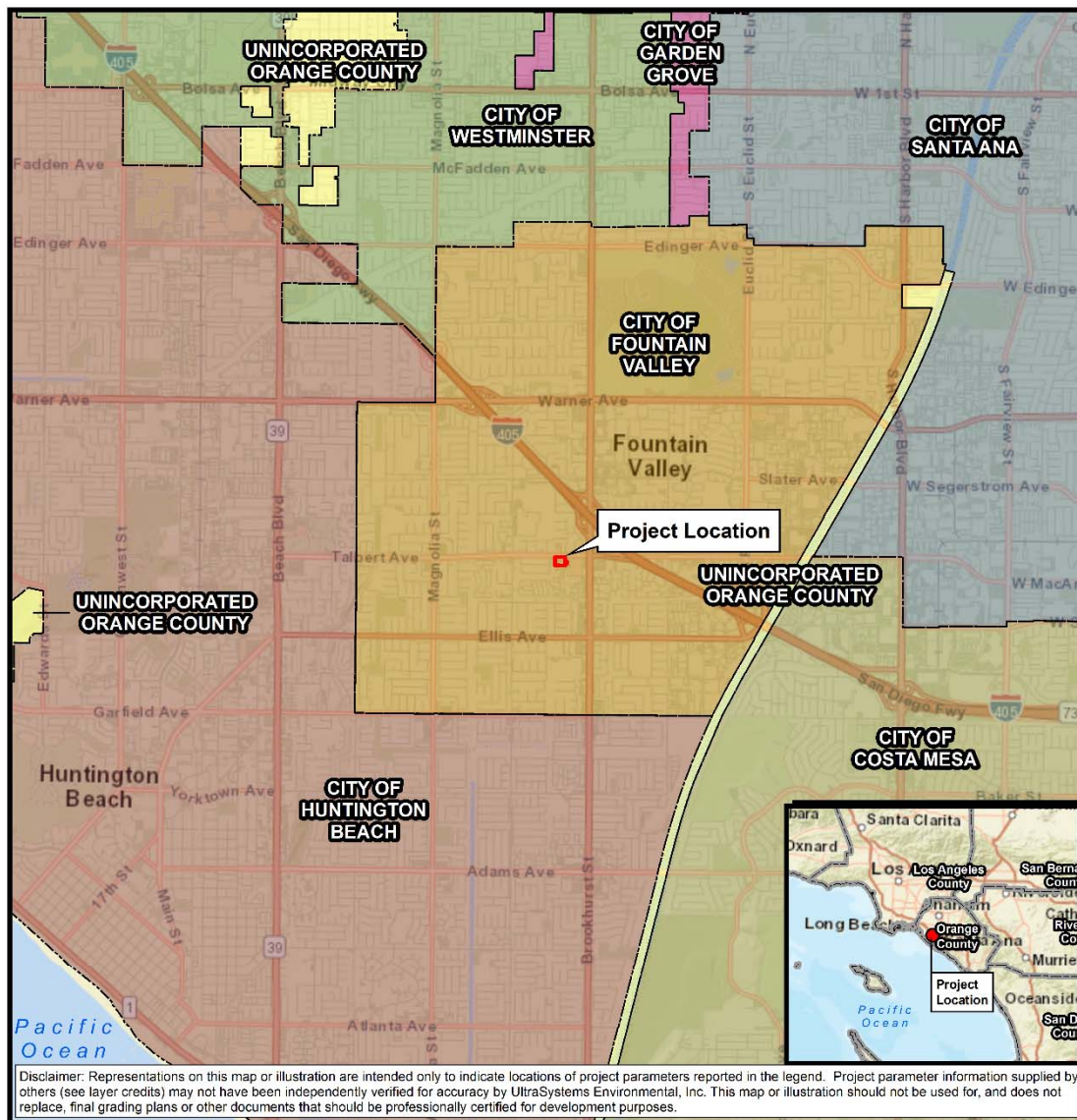
Table 2.2-1
SUMMARY OF EXISTING LAND USE, ZONING AND EXISTING DEVELOPMENTS

Location	General Plan Designation	Zoning Designation	Existing Development
Project Site	Specific Plan	Specific Plan	Orange Coast Medical Center's surface parking lot
North	Low Density Residential (Up to 5 dwelling units per acre (du/ac))	Single-Family Residential (R1)	Single-family homes and church
South	Low Medium Density Residential (Up to 10.8 du/ac)	Garden Homes (GH)	Multi-family homes
East	Specific Plan	Specific Plan	Orange Coast Medical Center
West	Low Density Residential (Up to 5 du/ac)	Single-Family Residential (R1)	Single-family homes

Source: City of Fountain Valley, 2023a; City of Fountain Valley, 2019; Google Earth Pro, 2024



**Figure 2.2-1
PROJECT VICINITY**



Path: I:\GIS\Projects\7307_Fountain Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXDs\7307_FV_3_0_Project_Vicinity_2024_12_10.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intomaps, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, SCAG, 2020: UltraSystems Environmental, Inc., 2024.

December 10, 2024

Scale: 1:55,200



0 2,300 4,600 Feet

0 700 1,400 Meters

Legend

- Project Boundary
- City Boundary

**Orange Coast Memorial
Medical Center Parking Structure**

Project Vicinity





**Figure 2.2-2
PROJECT LOCATION**



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\GIS\GIS\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure\JSMND\MXDs\7307_FV_OCMedCtr_3_0_Project_Location_2024_11_25.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar
Geographics, and the GIS User Community, UltraSystems Environmental, Inc., 2024.

November 25, 2024

Scale: 1:900



0 37.5 75 Feet

0 10 20 Meters

Legend

 Project Boundary

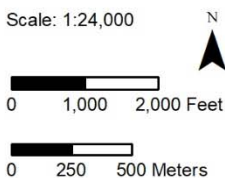
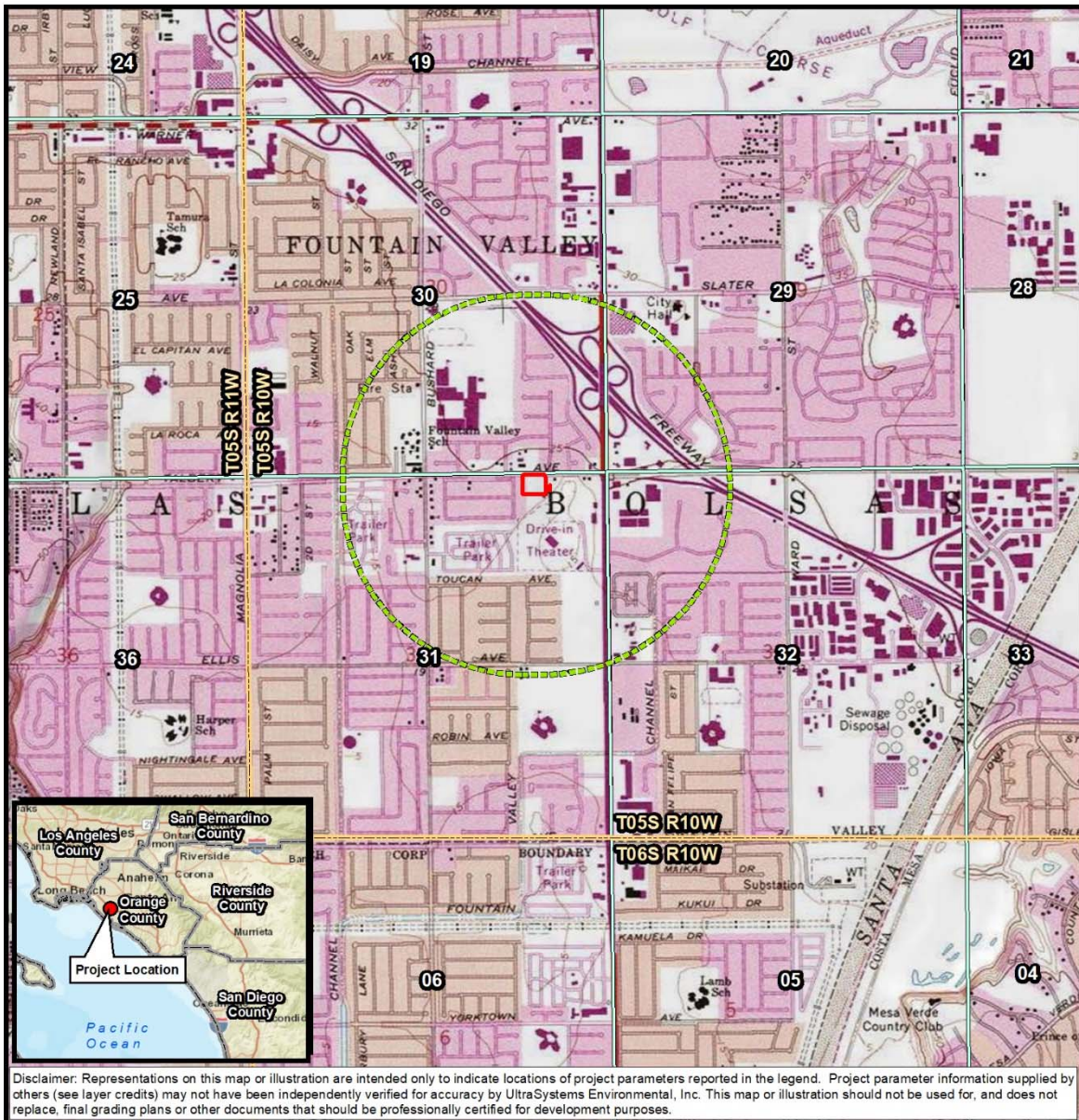
**Orange Coast Memorial
Medical Center Parking Structure**

Project Location





**Figure 2.2-3
TOPOGRAPHIC MAP**



Legend

- Project Boundary
- Half-Mile Radius
- Township Boundary
- Section Boundary

**Orange Coast Memorial
Medical Center Parking Structure**

Topographic Map
USGS Quadrangle: Newport Beach
Township: 5S Range: 10W
Section: 31





Figure 2.2-4
PROJECT SITE PHOTOGRAPHS



PHOTO 1: View of the northern portion of the project site along Talbert Avenue.



PHOTO 2: View of the eastern portion of the project site along Foster Street.



PHOTO 3: View of the southern portion of the project site along Foster Street.



PHOTO 4: View of the western portion of the project site along Talbert Avenue.



2.3 Existing Characteristics of the Site

2.3.1 Climate and Air Quality

The project site is located within the South Coast Air Basin (SCAB), a 6,600-square-mile area encompassing all of Orange County, as portions of Los Angeles, Riverside and San Bernardino counties. A persistent high-pressure area that commonly resides over the eastern Pacific Ocean largely dominates regional meteorology. The distinctive climate of this area is determined primarily by its terrain and geographic location. Local climate is characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidity. Ozone (O₃) and pollutant concentrations tend to be lower along the coast, where the onshore breeze disperses pollutants toward the inland valley of the SCAB and adjacent deserts. However, as a whole, the SCAB fails to meet National Ambient Air Quality Standards (NAAQS) for O₃ and fine particulate matter (PM_{2.5}), and is classified as a “nonattainment area” for those pollutants (CARB, 2024).

2.3.2 Geology and Soils

Topography within the project site is relatively flat as the project site is developed with a surface parking lot. The project site is not within the Alquist-Priolo Earthquake Fault Zone or landslide zone. However, the project site is located within a liquefaction zone (DOC, 2024).

2.3.3 Hydrology

The project site is developed with a surface parking lot and has a relatively flat elevation ranging from 25 feet above mean sea level (amsl) to 29 amsl. Currently, water would sheet flow to the northwestern portion of the project site (Google Earth Pro, 2024).

2.3.4 Biology

The project site is located in an urbanized area and provides low habitat value for special-status plant and wildlife species; however, there are trees and landscaping on the project site boundary that could provide nesting and foraging habitat.

2.3.5 Public Services

The City is served by a full range of public services including Fountain Valley Fire Department, Fountain Valley Police Department, Fountain Valley School District, Huntington Beach Union High School District, Garden Grove Unified School District, Ocean View School District, and Fountain Valley Library (City of Fountain Valley, 2023b, p. 4-12).

2.3.6 Utilities

The City of Fountain Valley Public Works provides wastewater/sewer collection services. The Orange County Sanitation District (OCSD) provides waste water treatment for the City of Fountain Valley and Orange County cities. Water supplies are from local groundwater aquifers managed by Orange County Water District (OCWD) that is pumped from the City-owned wells and imported water from Metropolitan Water District of Southern California that is provided by the Municipal Water District of Orange County. The Orange County Waste & Recycling (OCWR) provides solid waste services to the City and is transferred to the Frank Bowerman Sanitary Landfill (City of Fountain Valley, 2023b, p. 5.13-2 to 5.13-19). Electricity is provided to the city by Southern California Edison and natural gas is provided to the city by Southern California Gas Company (City of Fountain Valley, 2023b, p. 5.3-7 to 5.3-8).



3.0 PROJECT DESCRIPTION

3.1 Project Background

The City of Fountain Valley (City) is processing a request for discretionary approvals for development of a parking structure on a portion of the campus of the Orange Coast Medical Medical Center (OCMC) at 18111 Brookhurst Street, at the southwest corner of the intersection of Brookhurst Street and Talbert Avenue.

The proposed project includes development of a three-story parking structure (one underground level, one at-grade level, and three aboveground levels including the rooftop level) with 784 parking spaces. The site is currently developed as a surface parking lot with 231 spaces.

OCMC is comprised of five primary buildings, which include Orange Coast Memorial Hospital, Patient Care Pavilion and three medical office buildings totaling approximately 465,318 square feet of gross floor area. Existing parking for the OCMC campus totals 1,353 spaces consisting of an 816-space parking structure in the southern part of the campus and 537 spaces spread among four surface parking lots (Hunsaker, 2023).

The existing General Plan land use designation and zoning district for the project site are both Orange Coast Memorial Medical Center Specific Plan (Specific Plan), which was approved by the City of Fountain Valley in 2007. The Specific Plan permits construction of a parking structure expansion in Area 1 (the southern part) of the Specific Plan area.

The project includes applications for two discretionary approvals from the City of Fountain Valley: 1) a Specific Plan Amendment to the Orange Coast Memorial Medical Center Specific Plan; and 2) a Precise Plan of Design.

3.2 Project Overview

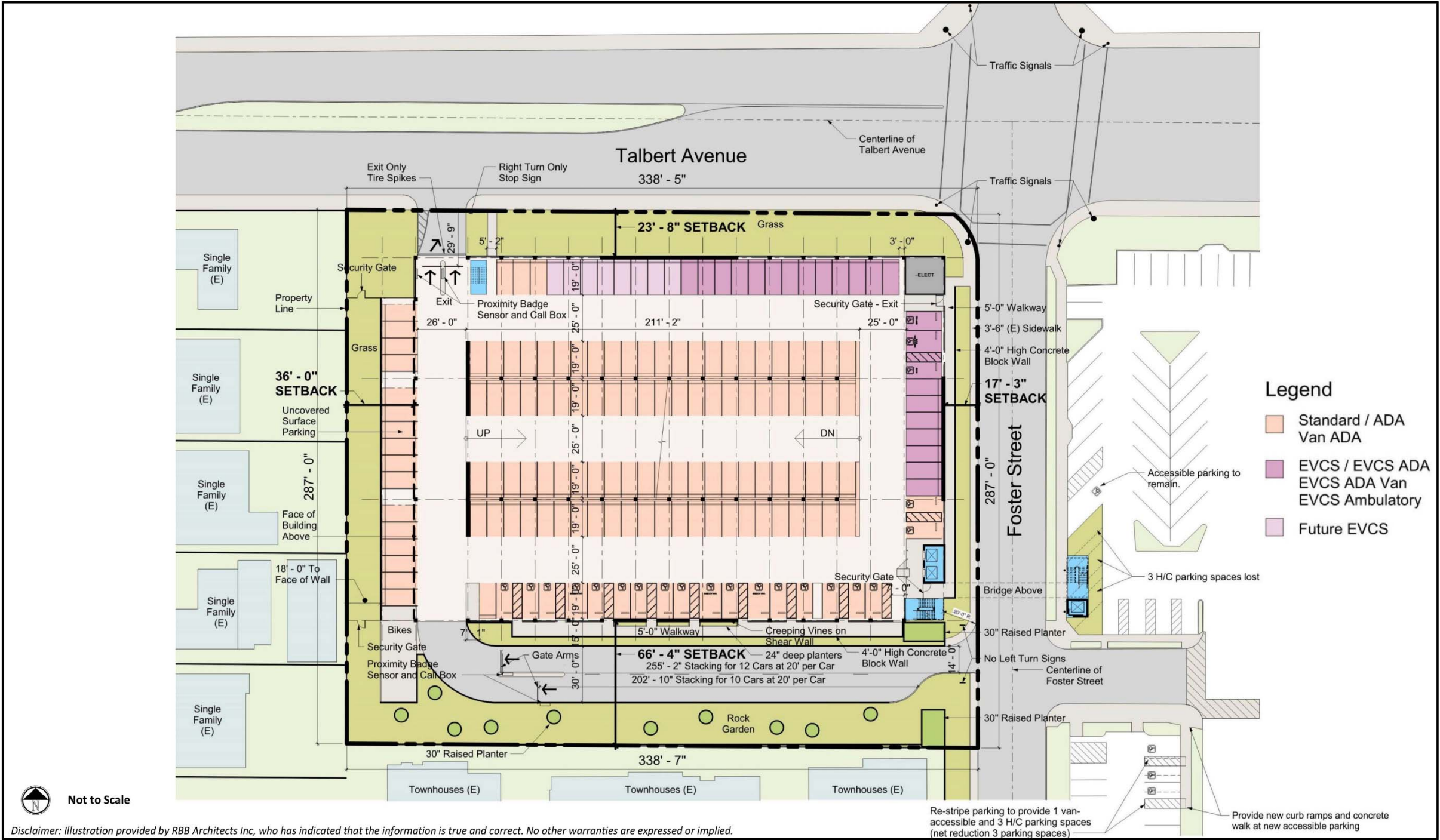
The proposed project includes development of a three-story parking structure to replace the existing surface parking lot. **Figure 3.2-1** shows the project site plan; **Figures 3.2-2** through **3.2-6** show the basement, first floor, second floor, third floor, and roof plans, respectively. **Figure 3.2-7** shows the north and east elevations. The parking structure would have open sides; the open north sides facing Talbert Avenue would be covered by printed perforated screens as illustrated in **Figure 3.2-8**. Part of the sides of the east side of the structure would be closed with a shear wall containing artwork, as shown in **Figure 3.2-9**. The total height of the proposed structure would be 35 feet 2 inches to the fourth level parapet, and 41 feet 10 inches to the parking structure elevator tower. **Figure 3.2-10** shows a pedestrian bridge that is proposed from the third level of the parking structure extending eastward over Foster Street.

Parking in the proposed structure would be limited only to OCMC staff, including physicians. Access to the parking structure would be controlled by code boxes and entry arms. **Table 3.2-1** shows the numbers of parking spaces, by type, as well as square footage, on each of the five levels of the proposed structure.

The project is intended to address existing parking demand at OCMC. The project does not propose any expansion of land uses – such as patient capacity or medical office uses, or hospital staffing – that would increase parking demands.



Figure 3.2-1
SITE PLAN

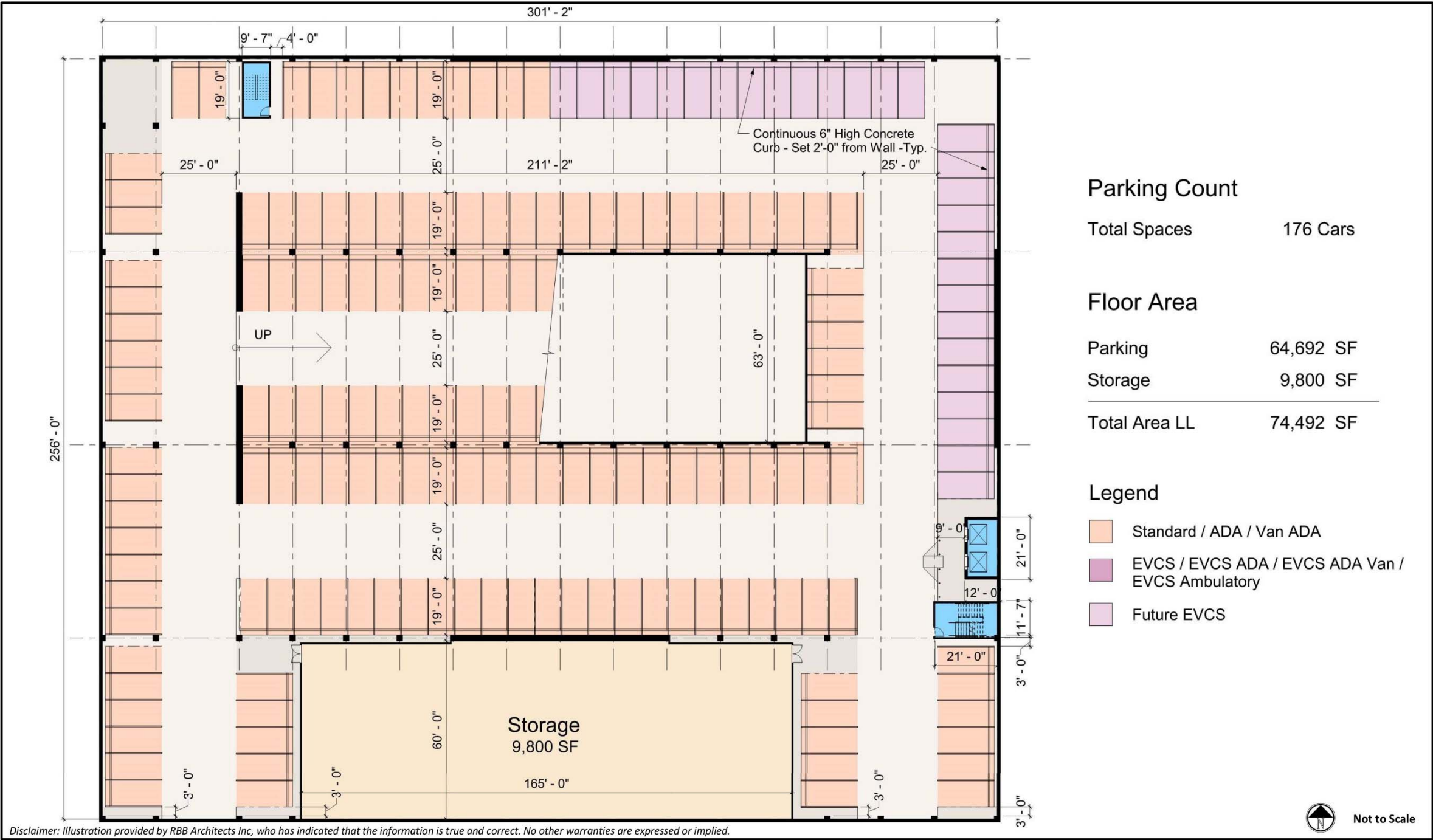


**Orange Coast Memorial
Medical Center Parking Structure**
Site Plan





Figure 3.2-2
BASEMENT PLAN



**Orange Coast Memorial
Medical Center Parking Structure**
Basement Floor Plan



Talbert Avenue

Foster Street

36' - 0" SETBACK

23' - 8" SETBACK

17' - 3" SETBACK

66' - 4" SETBACK

Parking Count

Basement	176
First Floor	162 (19 ADA)
Second Floor	160
Third Floor	160
Roof	126
Total	784

Floor Area

Basement	74,492 SF
First Floor	59,318 SF
Elev/Stairs	373 SF
Second Floor	56,115 SF
Elev/Stairs	373 SF
Third Floor	56,115 SF
Bridge/Elev/Stairs	900 SF
Roof	45,637 SF
Total Area	293,323 SF

Legend

- Standard / ADA / Van ADA
- EVCS / EVCS ADA / EVCS ADA Van / EVCS Ambulatory
- Future EVCS

Disclaimer: Illustration provided by RBB Architects Inc, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RBB Architects Inc, November 26, 2025.

First Floor Plan

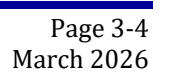
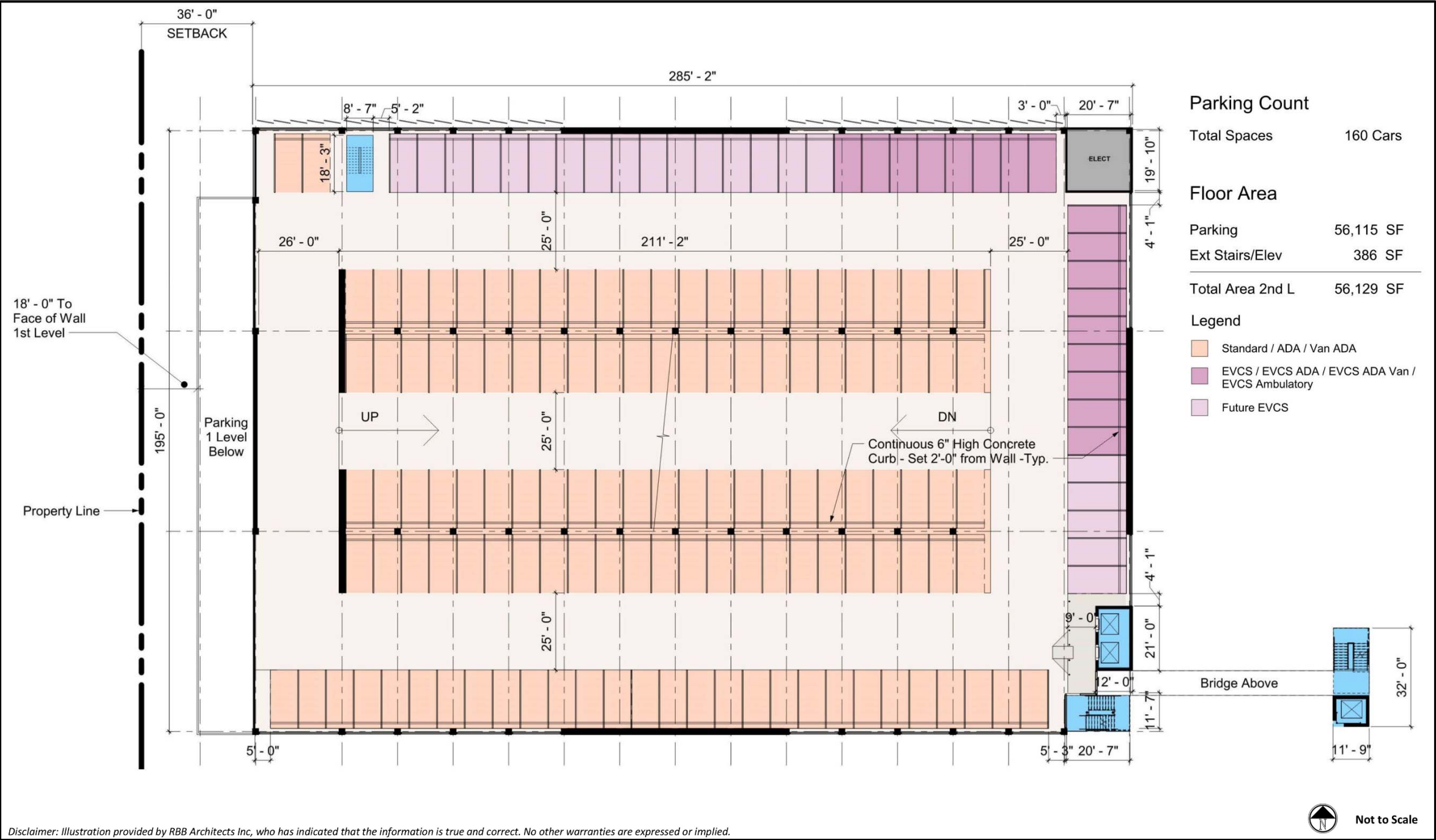




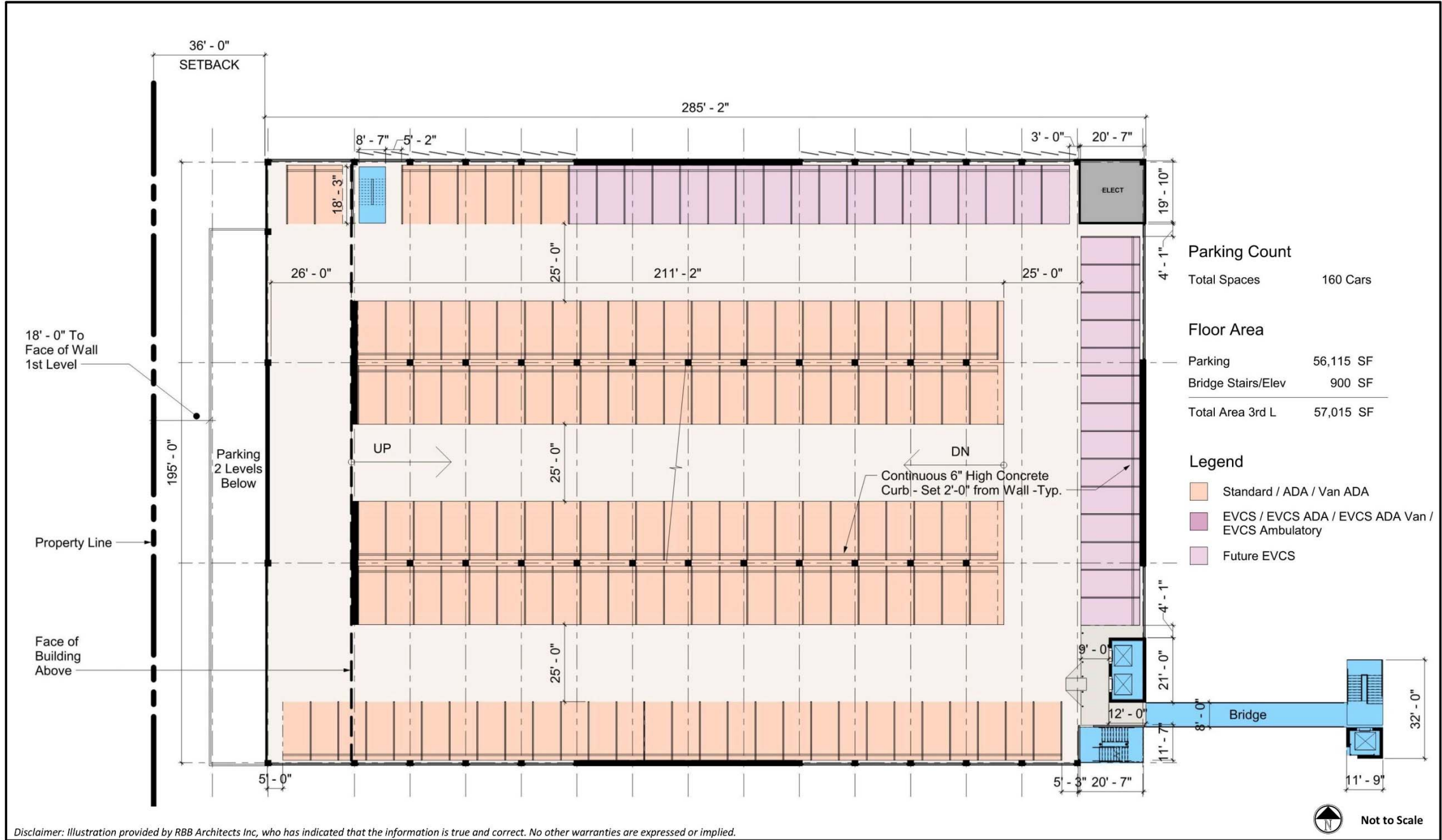
Figure 3.2-4
SECOND FLOOR PLAN



**Orange Coast Memorial
Medical Center Parking Structure**
Second Floor Plan



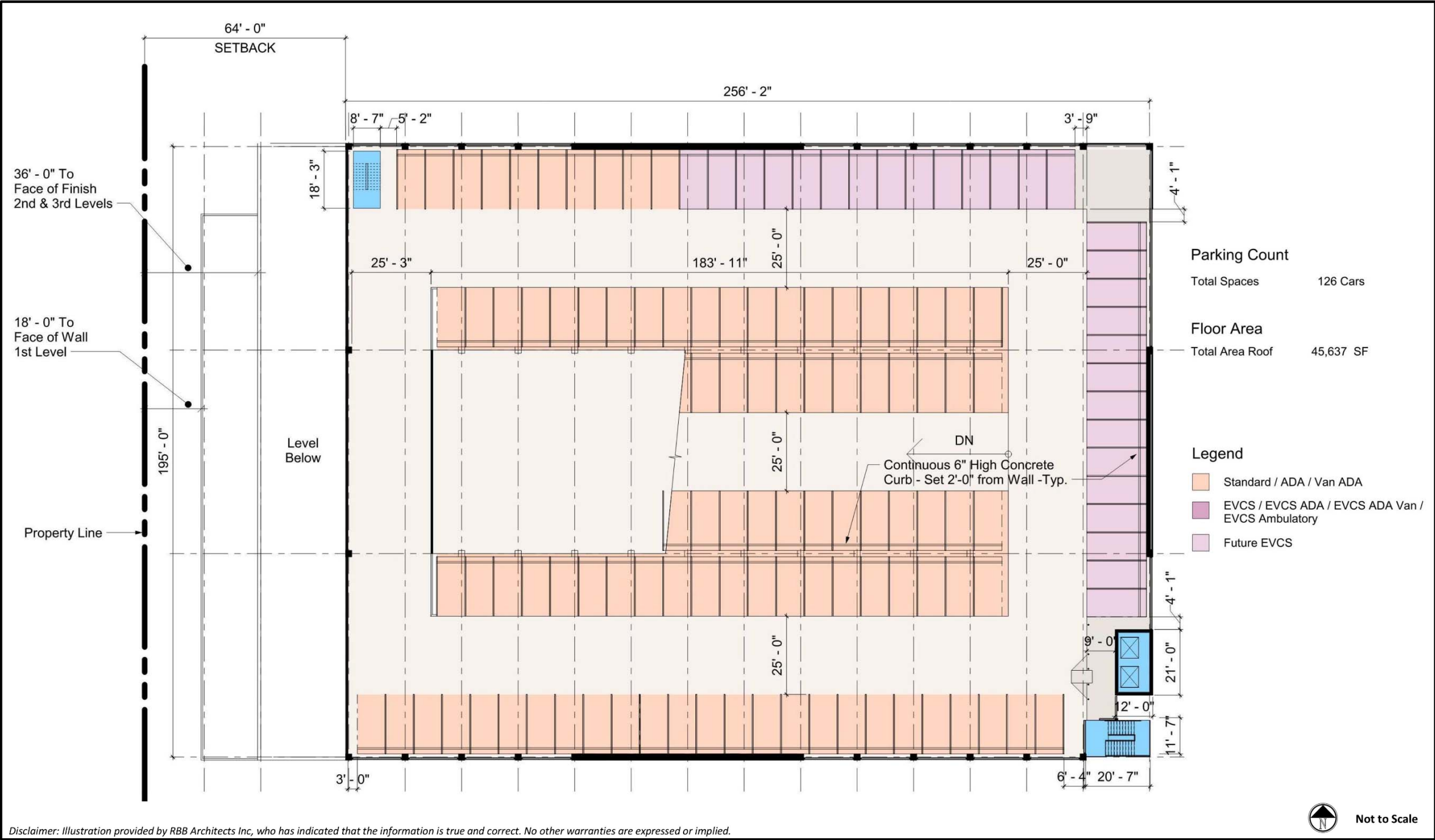
Figure 3.2-5
THIRD FLOOR PLAN



**Orange Coast Memorial
Medical Center Parking Structure**
Third Floor Plan



Figure 3.2-6
ROOF PLAN

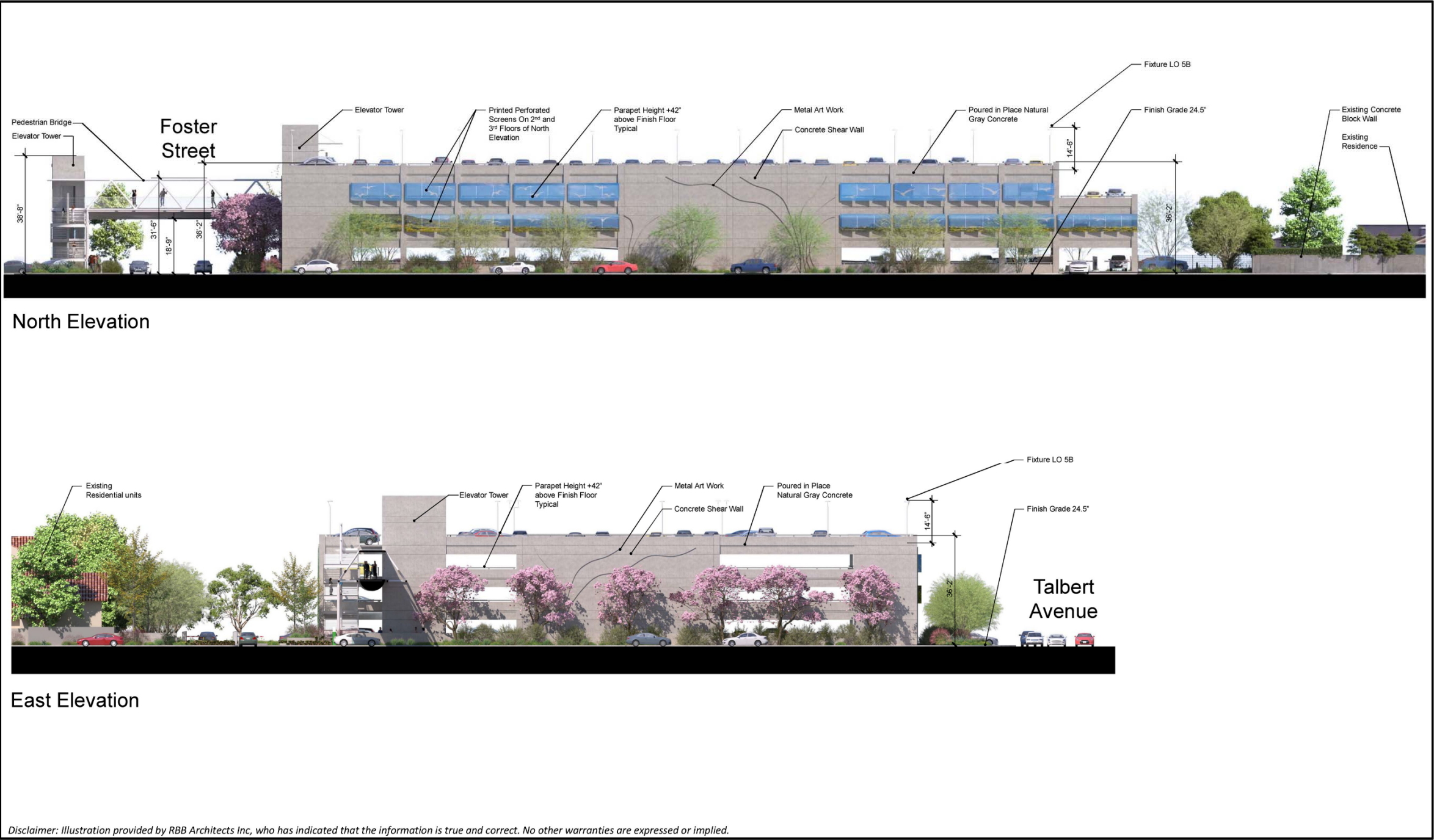


Orange Coast Memorial
Medical Center Parking Structure
Roof Plan





Figure 3.2-7
NORTH AND EAST ELEVATIONS, PROPOSED PARKING STRUCTURE



Source: RBB Architects Inc, November 26, 2025.



**Orange Coast Memorial
Medical Center Parking Structure**
North and East Elevations



Figure 3.2-8
NORTH ELEVATION, PROPOSED PARKING STRUCTURE



Disclaimer: Illustration provided by RBB Architects Inc, who has indicated that the information is true and correct. No other warranties are expressed or implied.
Source: RBB Architects Inc, November 26, 2025.

**Orange Coast Memorial
Medical Center Parking Structure**
North Elevation Perspective





Figure 3.2-9
EAST ELEVATION



Disclaimer: Illustration provided by RBB Architects Inc, who has indicated that the information is true and correct. No other warranties are expressed or implied.

Source: RBB Architects Inc, October 29, 2024.

**Orange Coast Memorial
Medical Center Parking Structure**
East Elevation



Figure 3.2-10
RENDERING, PROPOSED PEDESTRIAN BRIDGE



Disclaimer: Illustration provided by RBB Architects Inc, who has indicated that the information is true and correct. No other warranties are expressed or implied.
Source: RBB Architects Inc, November 26, 2025.



**Orange Coast Memorial
Medical Center Parking Structure**
Rendering of Pedestrian Bridge



3.2.1 Existing and Proposed Parking Spaces

The numbers of proposed and existing parking spaces on the OCMC campus are compared in **Table 3.2-2**. The 231 existing surface parking spaces on the project site would be removed to make space for the proposed structure. Three existing ADA surface parking spaces next to the east side of Foster Street would be lost to make way for the east landing of the proposed pedestrian bridge, for a total reduction of 234 spaces. Thus, development of the proposed structure would result in a net increase of 550 parking spaces on the OCMC campus (784 new less 234 removed). The proposed structure would contain 22 ADA spaces (including three electric vehicle charging station [EVCS] ADA spaces); thus, project development would not reduce the number of ADA spaces on the OCMC campus. Bicycle parking consisting of 44 spaces would be provided on the first level, secured by a gate.

All of the existing parking facilities on the campus are available for staff (including physicians), patients, and visitors.⁵ The first floor of the existing parking structure is reserved for physicians, and the top floors for employees. At project completion the existing parking structure would be reserved for patients and visitors.

Project construction would involve the temporary loss of the 234 surface parking spaces mentioned above in the operations analysis. Memorial Health Services (MHS), the parent company of OCMC, operates office uses at 17330, 17360, and 17390 Brookhurst Street, about 0.6 mile north of the project site. Parking available for use at the 17330-17390 Brookhurst Street property amounts to 1,730 spaces including 1,400 at the Brookhurst Street property and 330 at 10101 Slater Avenue, immediately to the south of the Brookhurst Street property. Memorialcare proposes to use available parking capacity at MHS' Brookhurst Street facilities and Slater Avenue parking lot to accommodate parking demand temporarily displaced from the project site. A letter from John Somers, Memorialcare Vice President Real Estate and Facilities, regarding use of parking at the Brookhurst Street facilities and Slater Avenue lot is included as **Appendix A2**.

3.3 Ingress, Egress, and Pedestrian Circulation

Ingress into the structure would be via a two-lane driveway from Foster Street, and egress from the structure would be via a two-lane right-out-only driveway onto Talbert Avenue, which is a divided road.

A pedestrian bridge would connect the third level of the parking structure to an elevator and stairway on the opposite (east) side of Foster Street a short distance west of the medical office building at 9900 Talbert Avenue on the OCMC campus. Two pedestrian paths of travel would be provided between the parking structure and the rest of the OCMC campus – the pedestrian bridge and the crosswalk across Foster Street on the south side of the intersection of Foster Street and Talbert Avenue.

⁵ 114 parking spaces in three of the existing surface lots (all east of Foster Street) are used by valets.



**Table 3.2-1
PROJECT SUMMARY**

Level	Parking Spaces						Square Feet
	Standard	ADA and ADA/Van	EVCS	EVCS: ADA and ADA/Van	EVCS: subtotal	Total	
Basement	176	0	0	0	0	176	74,492
1 st	120	19	20	3	23	162	59,691
2 nd	143	0	17	0	17	160	56,129
3 rd	160	0	0	0	0	160	57,015
Rooftop	126	0	0	0	0	126	45,637
Total	725	19	37	3	40	784	293,323

EVCS = electric vehicle charging station
Source: RBB Architects, 2024

**Table 3.2-2
PROPOSED AND EXISTING OCMC PARKING**

	Location	Parking Spaces
Proposed Parking	Proposed Structure	784
	Existing Structure	816
	Surface Parking	303 ¹
	Total	1,903
Existing Parking	Existing Structure	816
	Surface Parking	537
	Total	1,353
Net Increase	Not Applicable	550

¹ Includes reduction of 231 spaces in the surface lot on the project site; and 3 surface parking spaces for east landing of the proposed pedestrian bridge

3.4 Lighting

Pole-mounted parking lot lights, shown in **Figure 3.4-1**, would be installed on the rooftop level.



3.5 Landscaping

Landscaping consisting of trees, shrubs, and grasses, would be planted along the perimeter of the project site. Landscaping would be in setbacks ranging in width from 23 feet along the north and south site boundaries to 18 feet along the west site boundary and 17 feet along the east boundary.⁶ Landscaping along the south edge of the project site would include a dry riverbed. **Figure 3.5-1** shows the project conceptual landscape plan, while **Figure 3.5-2** shows trees that would screen much of the west side of the parking structure from neighboring residences. The total pervious area would be 23,105 square feet (0.53 acre), or about 24 percent of the project site (Tait and Associates, 2024, p. 2).

3.6 Drainage

The proposed parking structure will sheet flow to roof drains on the north and south side of the parking structure that will be discharged at grade and flow to a proposed Modular Wetland System in the northeast corner of the project site. The Modular Wetland System will discharge to the existing catch basin at the northeast of the site, tributary to the existing 45-inch storm drain north of the site in Talbert Avenue (Tait and Associates, 2024, p. 2). Impervious area onsite at project completion would be about 72,531 square feet (1.67 acres), or approximately 76 percent of the project site.

3.7 Project Construction

3.7.1 Offsite Improvements

Construction would need to occur in Foster Street to connect the utility lines for the proposed project to the existing main lines.

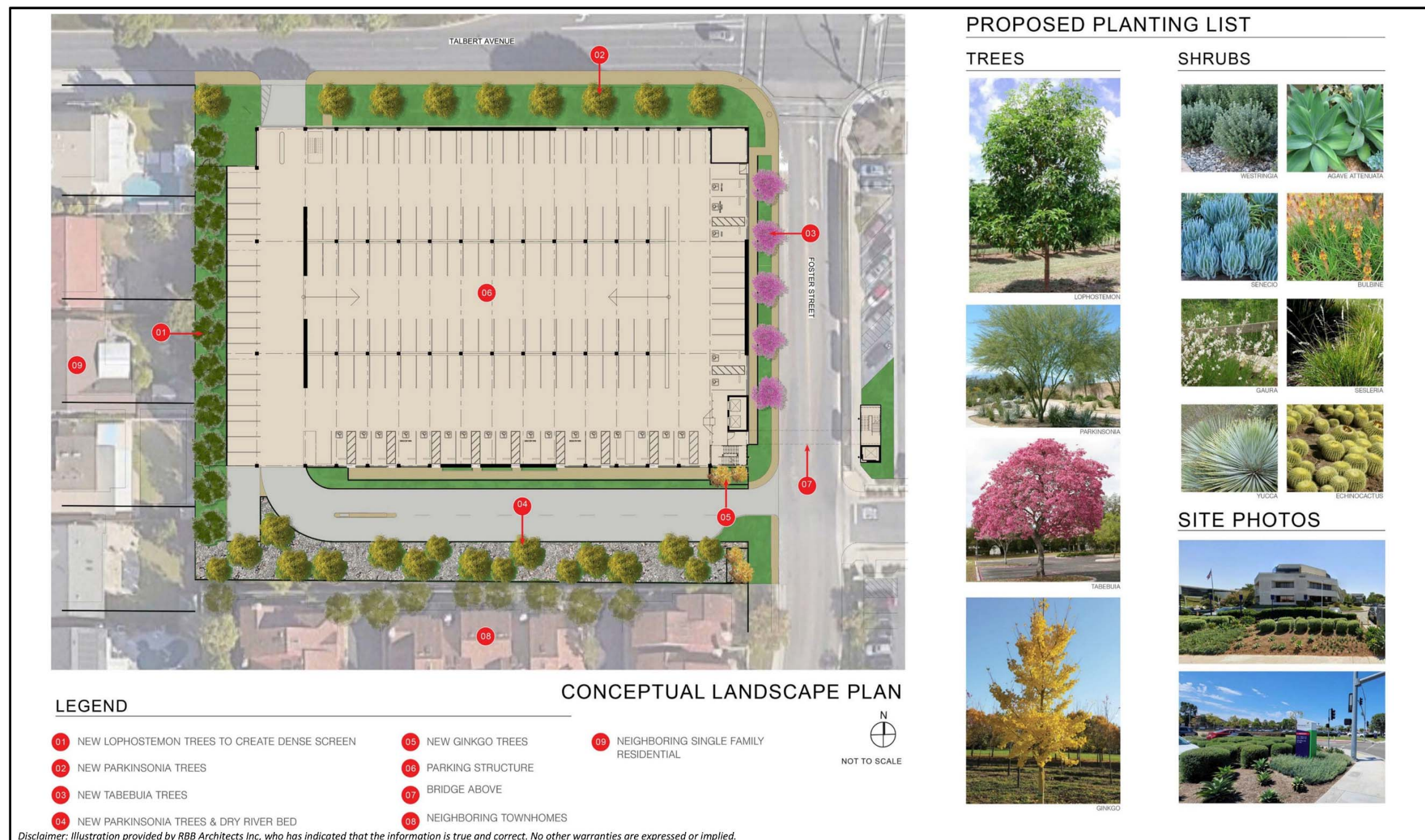
⁶ The total setback on the south site boundary would be 66 feet and would include a two-lane driveway and a second smaller landscaped area.

Figure 3.4-1
RENDERING, PROPOSED ROOFTOP PARKING LOT LIGHTS



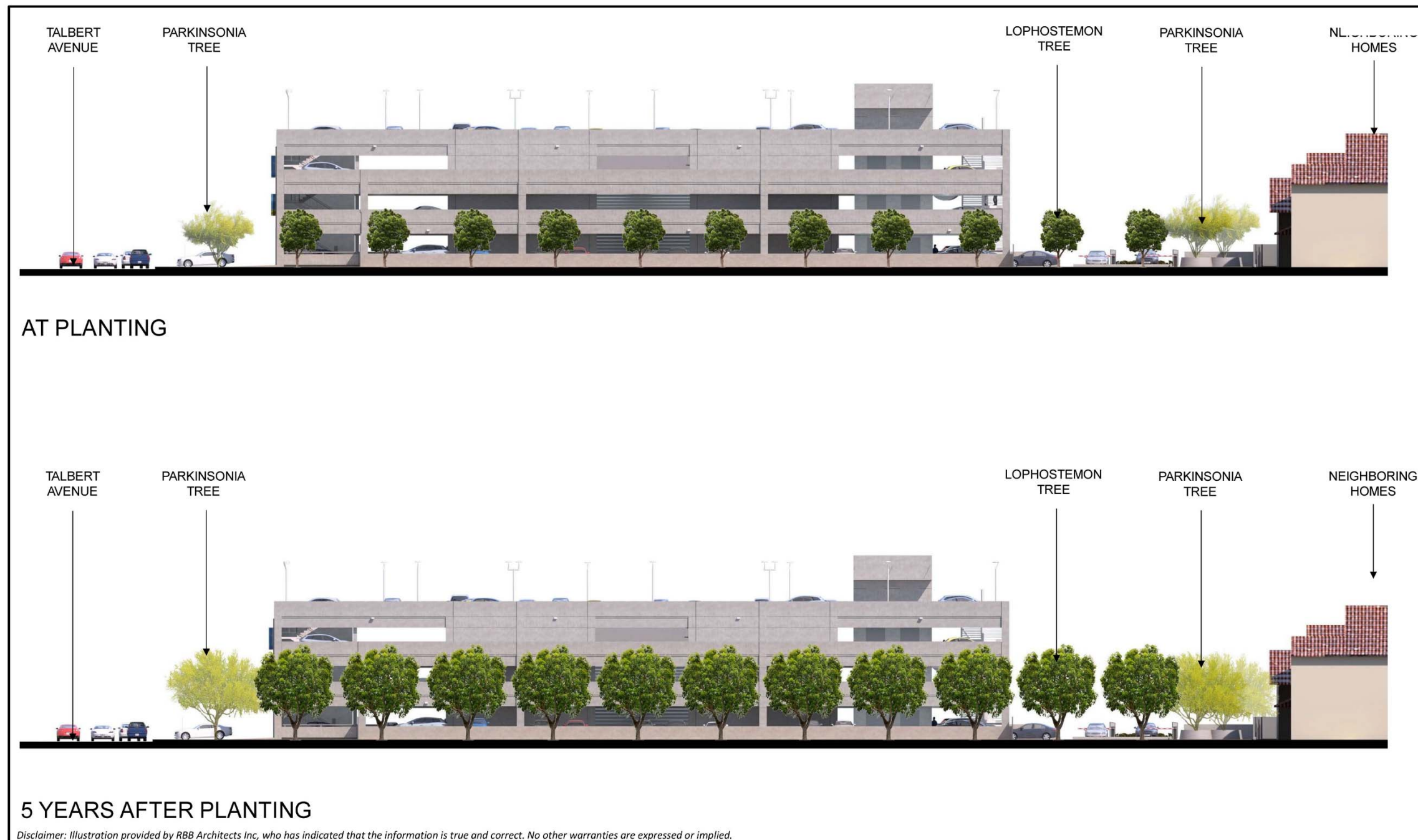
**Orange Coast Memorial
Medical Center Parking Structure**
Rendering Roof Light Fixtures

Figure 3.5-1
CONCEPTUAL LANDSCAPE PLAN



**Orange Coast Memorial
Medical Center Parking Structure**
Landscape Plan

Figure 3.5-2
LANDSCAPE PLAN, WEST ELEVATION



**Orange Coast Memorial
Medical Center Parking Structure**
Landscape Plan, West Elevation





3.7.2 Construction Activities

Construction is expected to take one year to complete, beginning in March 2027 and ending in February 2028.⁷ Construction would be conducted in several phases: 1) demolition of the existing surface parking lot; 2) site preparation and grading; 3) utilities trenching and installation; 4) construction of the parking structure; 5) paving; and 6) landscape installation. The only utilities required are electricity and potable water for landscaping; the project site is not near a recycled water main. Construction equipment types and numbers, estimated using the CalEEMod emissions model employed in the air quality and greenhouse gas analysis, are shown below in **Table 3.7-1**.

**TABLE 3.7-1
CONSTRUCTION EQUIPMENT**

Construction Phase	Equipment Type	Number
1 - Demolition	Rubber-Tired Dozers	1
	Concrete Saws	1
	Tractor/Loader/Backhoe	3
2 - Site Preparation	Graders	1
	Rubber Tired Dozers	1
	Tractor/Loader/Backhoe	1
3- Grading	Graders	1
	Rubber-Tired Dozers	1
	Tractor/Loader/Backhoe	2
4-Building Construction	Forklifts	1
	Crane	1
	Tractor/Loader/Backhoe	1
	Generator Sets	1
	Welders	3
3 - Paving	Paving Equipment	1
	Rollers	1
	Cement and Mortar Mixer Mixers	1
	Pavers	1
	Tractor/Loader/Backhoe	1
4-Architectural Coating	Air Compressors	1

Source: CAPCOA, 2022: CalEEMod Version 2022.1.1.29

3.8 Discretionary Actions

The proposed project includes applications for the following discretionary approvals by the City of Fountain Valley:

- A Specific Plan Amendment to the Orange Coast Memorial Medical Center Specific Plan to allow the relocation of Specific Plan's parking structure expansion from Planning Area 1 to

⁷ The beginning and ending months of the construction schedule are both during the rainy season (December through March). The schedule is therefore subject to interruptions and slight delays due to rain.



❖ SECTION 3.0 - PROJECT DESCRIPTION ❖

Planning Area 3 with an increase of 185,867 square feet in parking structure gross floor area (from 107,456 square feet to 293,323 square feet).

- A **Precise Plan of Design** for the review and approval of the proposed parking structure design to ensure the project complies with all applicable development and design standards/guidelines and minimize potential adverse effects.

3.9 Other Permits and Approvals

Following the City's approval of the Initial Study/Mitigated Negative Declaration, the following permits/approvals, as shown in **Table 3.6-1**, would be required prior to construction.

Table 3.6-1
PERMITS AND APPROVALS

Agency	Permit or Approval
City of Fountain Valley Building & Safety Division	Site Plan review and approval and Grading and Building Permits
City of Fountain Valley Planning Division	Specific Plan Amendment Precise Plan of Design
Fountain Valley Fire Department	Building plan check and approval. Review for compliance with the current California Fire Code, current California Building Code, California Health & Safety Code and City of Fountain Valley Municipal Code. Plans for fire detection and alarm systems, and automatic sprinklers.
Santa Ana Regional Water Quality Control Board (Region 8)	Water quality permits



4.0 ENVIRONMENTAL CHECKLIST

Environmental Factors Potentially Affected

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

- | | | |
|--|--|--|
| ☐ Aesthetics | ☐ Agricultural and Forest Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Energy |
| ☒ Geology / Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards & Hazardous Materials |
| ☐ Hydrology / Water Quality | ☐ Land Use / Planning | ☐ Mineral Resources |
| ☐ Noise | ☐ Population / Housing | ☐ Public Services |
| ☐ Recreation | ☐ Transportation | ☒ Tribal Cultural Resources |
| ☐ Utilities/Service Systems | ☐ Wildfire | ☒ Mandatory Findings of Significance |

Determination (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

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

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

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

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

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

Signature

Date

Printed Name

City of Fountain Valley



Evaluation of Environmental Impacts

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



❖ SECTION 4.0 – ENVIRONMENTAL CHECKLIST ❖

to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- (9) The explanation of each issue should identify:
 - (a) The significance criteria or threshold, if any, used to evaluate each question; and
 - (b) The mitigation measure identified, if any, to reduce the impact to less than significant.



4.1 Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway?				X
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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

A “visual environment” includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views.

- Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity.
- Viewer groups identify who is most likely to experience the view.
- High-sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas.
- Duration of a view is the amount of time that a particular view can be seen by a specific viewer group.
- Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.



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

Less than Significant Impact

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest. The City is primarily a residential community, predominantly composed of suburban residential areas dotted with shopping centers and parks. The Santa Ana and San Gabriel Mountains are east and north of the city, respectively. However, considering the distance and the built-out nature of the City, potential views to these scenic resources are limited.

The existing General Plan EIR does not designate scenic views or vistas within the City, and there are no unique or unusual features in the region that constitute a dominant portion of a viewshed (City of Fountain Valley, 2023b, p. 5.1-2). As shown in **Figure 4.1-1** below, the project site is surrounded by urban development and trees. Additionally, the parking structure would be three stories tall above ground level, which is similar to the buildings and parking structure of the Orange Coast Medical Center (OCMC). With no identified scenic vistas and comparable building heights in the surrounding areas, impacts to scenic vistas would be less than significant.

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

No Impact

There are no official scenic highways within the City. The nearest officially designated scenic highway is a portion of SR-91 approximately 9.25 miles northeast of Fountain Valley (City of Fountain Valley, 2023b, p. 5.1-2). Therefore, the project would have no impacts on trees, rock outcroppings and historic buildings within a state scenic highway.

c) **In non-urbanized areas, would the project 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?**

Less than Significant Impact

The project site is located in an urban portion of the City. Therefore, the analysis for the project should determine if the project would conflict with applicable regulations governing scenic quality. **Table 4.1-1, Project Compliance with Applicable City of Fountain Valley General Plan Policies Regarding Scenic Quality**, details the applicable aesthetics policies from the City General Plan and how the project would adhere to them. **Table 4.1-2, Project Compliance with Applicable Orange Coast Memorial Medical Specific Plan Objectives Regarding Scenic Quality**, details the applicable aesthetics objectives from the Specific Plan and how the project would adhere to them.



Figure 4.1-1
PHOTOGRAPHS OF THE SURROUNDING AREA



PHOTO 1: View north of the project site looking at a single-story church and single-story family home.



PHOTO 2: View east of the project site looking at three-story medical buildings.



PHOTO 3: View south of the project site looking at two-story multi-family homes.



PHOTO 4: View west of the project site looking at one- and two-story single-family homes.



Table 4.1-1
PROJECT COMPLIANCE WITH APPLICABLE CITY OF FOUNTAIN VALLEY GENERAL PLAN
POLICIES REGARDING SCENIC QUALITY

Policy	Project Compliance
Goal LU-1: An arrangement of compatible land uses that protects and maintains attractive and safe neighborhoods while promoting dynamic activity centers and preserving conventional commercial and industrial uses.	
Policy LU-1.1 Land use compatibility and viability. Require that new development is located, scaled, buffered, and designed to minimize negative impacts on existing conforming uses and adjacent neighborhoods. Require that new residential developments are located, scaled, buffered, and designed so as to not hinder the economic viability and continuity of areas planned for nonresidential uses.	The proposed parking structure would conform to the project site's General Plan land use and zoning designations of Orange Coast Memorial Medical Center Specific Plan, which would allow a parking structure that is three stories above grade. Additionally, the structure would be consistent with the three-story medical center and parking structure buildings that are part of the medical center. Therefore, the project would be in compliance with this policy.
GOAL LU-3: Neighborhoods, places, and buildings that are well maintained, demonstrate pride and reinvestment, and reinforce a sense of community.	
Policy LU-3.1 Pride and identity. Enhance the sense of identity and increase the feeling of pride among residents, business owners, employees, and visitors by encouraging excellent physical design and continual property maintenance and improvements	The proposed project would be consistent with the development of the medical center that has similar height buildings and parking structure. The proposed project would be developed according to applicable design regulations such as the City General Plan, Orange Coast Memorial Medical Center Specific Plan, and zoning code to ensure that the project would be consistent with the existing development of the surrounding area. Maintenance of the project would be consistent with other portions of the medical campus. Therefore, the project would be in compliance with this policy.
Policy LU-3.2 Scale and character. Ensure that all new development is compatible with the scale and character of the surrounding neighborhoods in Fountain Valley.	The proposed project would be developed according to applicable design regulations such as the City General Plan, Orange Coast Memorial Medical Center Specific Plan, and zoning code to ensure that the project would be compatible with the existing development of the surrounding area. Therefore, the project would be in compliance with this policy.
Policy LU-3.4 Building design. Nonresidential buildings and related improvements should exhibit authentic and enduring design. Although no specific architectural style is required, the City prefers that designs for individual buildings stay true to a single	The proposed project would be a nonresidential building developed according to applicable design regulations such as the City General Plan, Orange Coast Memorial Medical Center Specific Plan, and zoning code to ensure that the project would be



❖ **SECTION 4.1 – AESTHETICS** ❖

Policy	Project Compliance
architectural style and discourages franchise architecture. Buildings shall present fully finished facades on all sides visible from freeways or streets.	consistent with the style of existing development of the surrounding area. Therefore, the project would be in compliance with this policy.
Policy LU-3.5 Corridor design. Buildings, streetscapes, landscaping, and associated improvements along the City’s arterial streets should be attractive and promote a cohesive sense of place.	The proposed project would be developed according to applicable design regulations such as the City General Plan, Orange Coast Memorial Medical Center Specific Plan, and zoning code to ensure that the project would be consistent with the existing development of the surrounding area. Additionally, the project would include landscaping along the border of the project site, matching adjacent developments, to improve a cohesive sense of place. Therefore, the project would be in compliance with this policy.
Policy LU-3.6 Parking design. Require surface and structured parking lots to be safe and convenient for all users. Parking areas shall also be attractive, particularly when visible from the public realm, with landscaping providing visual relief, buffering, and shade for vehicles and pedestrians.	The proposed project would develop a parking structure that would comply with applicable design regulations, easily accessible from multiple entry points and would include landscaping that would provide visual relief, buffering from adjacent developments, and shade for pedestrians. Therefore, the project would be in compliance with this policy.

Source: City of Fountain Valley, 2023b.

Table 4.1-2
**PROJECT COMPLIANCE WITH APPLICABLE ORANGE COAST MEMORIAL MEDICAL CENTER
SPECIFIC PLAN OBJECTIVES REGARDING SCENIC QUALITY**

Objective	Project Compliance
To plan and locate new uses to assure compatibility with other existing medical facilities.	The existing project site is currently a surface parking lot for the medical center. The proposed project would develop a parking structure that would continue to serve the medical center and would be similar to the southern parking structure of the medical center. Therefore, the project would comply with this objective.
To establish a cohesive and efficient signage program to facilitate on-site circulation and ease of use by medical center patrons.	The proposed parking structure would be used exclusively for medical center staff; the project would establish signage guiding staff to entry and exit points. Therefore, the project would comply with this objective.
To establish a cohesive landscape program which enhances the visual appearance of the medical center.	The proposed project would incorporate a landscaping plan that would match the surrounding landscaped areas of the medical center. Therefore, the project would comply with this objective.



Objective	Project Compliance
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Source: City of Fountain Valley, 2007.

Based on the analysis above, the project would not conflict with applicable General Plan policies or Specific Plan objectives governing scenic quality. While views from surrounding land uses (especially residences west and south of the project site) would change, the changes would not be related to CEQA thresholds and thus would not be significant impacts under CEQA. Therefore, impacts would be less than significant.

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

Less Than Significant Impact

Light and Glare

The ambient lighting in the area consists of the lighting emitted from adjacent developments and traffic lighting. The development of the proposed parking structure would include lighting for visibility and security purposes, including parking lot lighting on the roof level of the parking structure, which could potentially cause light and glare impacts in surrounding areas. However, future development and redevelopment projects in the City would be required to comply with the City Municipal Code § 21.18.060, *Exterior Lighting*, which requires outdoor lighting to be shielded to reduce lighting directly visible from any point five feet or more beyond the property line. This would ensure that substantial light and glare does not extend substantially beyond the site where it is generated. No significant spill light impacts would affect surrounding residences. Project development would not generate substantial additional light and glare and the impact would be less than significant (City of Fountain Valley, 2023b, p. 5.1-6).

Shadows

The following analysis of project shadow impacts is based on a set of sun shadow studies by RBB Architects completed in November 2025; a complete set of shadow studies is included as **Appendix A2**. Shadow-sensitive land uses that could be affected by the project consist of residences next to the west site boundary. Note that the third floor of the parking structure is set back from the west end of the remainder of the structure by 36 feet in order to reduce shadow impacts on residences west of the project site. The analysis below focuses on land uses west, east, and north of the structure. No shadows would be cast onto residences south of the project site on any of the four dates analyzed. While hospitals are shadow-sensitive land uses, OCMC patient care facilities are outside of areas that would be affected by shadows cast by the structure; thus, shadow impacts on existing OCMC facilities are not addressed below.

Shadows are addressed here for the hours of 9:00 a.m. to 4:00 p.m. during winter (December 21) and 9:00 a.m. to 5:00 p.m. during Spring (March 21), Summer (June 21) and Autumn (September 21). The dates and times analyzed are from the City of Los Angeles CEQA Thresholds Guide; and adjusted for the change in beginning and ending of daylight savings time in 2007 pursuant to the Energy Policy Act of 2005 (Public Law 109-58) (that is, daylight savings time now begins the 2nd Sunday in March and ends the first Sunday in November). Thus, March 21 is now during daylight savings time, and shadow impacts for that day are analyzed as per daylight savings time.



A significant impact is shading of shadow-sensitive uses for three hours during the period from 9:00 a.m. to 4:00 p.m. during Pacific Standard Time (early November through early March); or for four hours during the period from 9:00 a.m. to 5:00 p.m. during Pacific Daylight Time (mid-March through early November). The shadow studies for December 21 are used to address impacts during Standard Time, and the studies for March 21, June 21, and September 21 are used to address impacts during Daylight Time.

December 21 (Winter Solstice)

At **9 a.m.** shadows of the parking structure would cover the back yards of houses next to the west side of the project site. Shadows would not affect residences to the west on or after 10:00 a.m.

At **12 p.m.** shadows of the structure would extend over part of Talbert Avenue but would not affect residences west of the project site.

At **4 p.m.** shadows would extend over parts of Talbert Avenue, Foster Street, and the surface parking lot east of the project site; but would not affect residences west of the project site. **Figure 4.1-2** photos 1, 2, and 3 show shadows cast by the structure at 9 a.m., 12 p.m., and 4 p.m., respectively. Shadow impacts on residences west of the parking structure would be less than significant.

March 21 and September 21 (Spring and Fall Equinoxes)

At **9 a.m.** shadows of the parking structure would cover small parts of the backyards of houses next to the west side of the project site.

At **12 p.m.** shadows would not cover any surrounding land uses (shadows would cover part of the parkway immediately north of the structure but would not extend onto Talbert Avenue).

At **5 p.m.** shadows would extend east over Foster Street and a small part of the surface parking lot to the east. **Figure 4.1-3** photos 1, 2, and 3 show shadows cast by the structure at 9 a.m., 12 p.m., and 5 p.m., respectively. Shadow impacts on residences west of the parking structure would be less than significant.

June 21 (Summer Solstice)

At **9 a.m.** shadows covering parts of the backyards of residences west of the site are cast by existing landscape trees in the west project site boundary that would be retained; project development would not change those shadows.

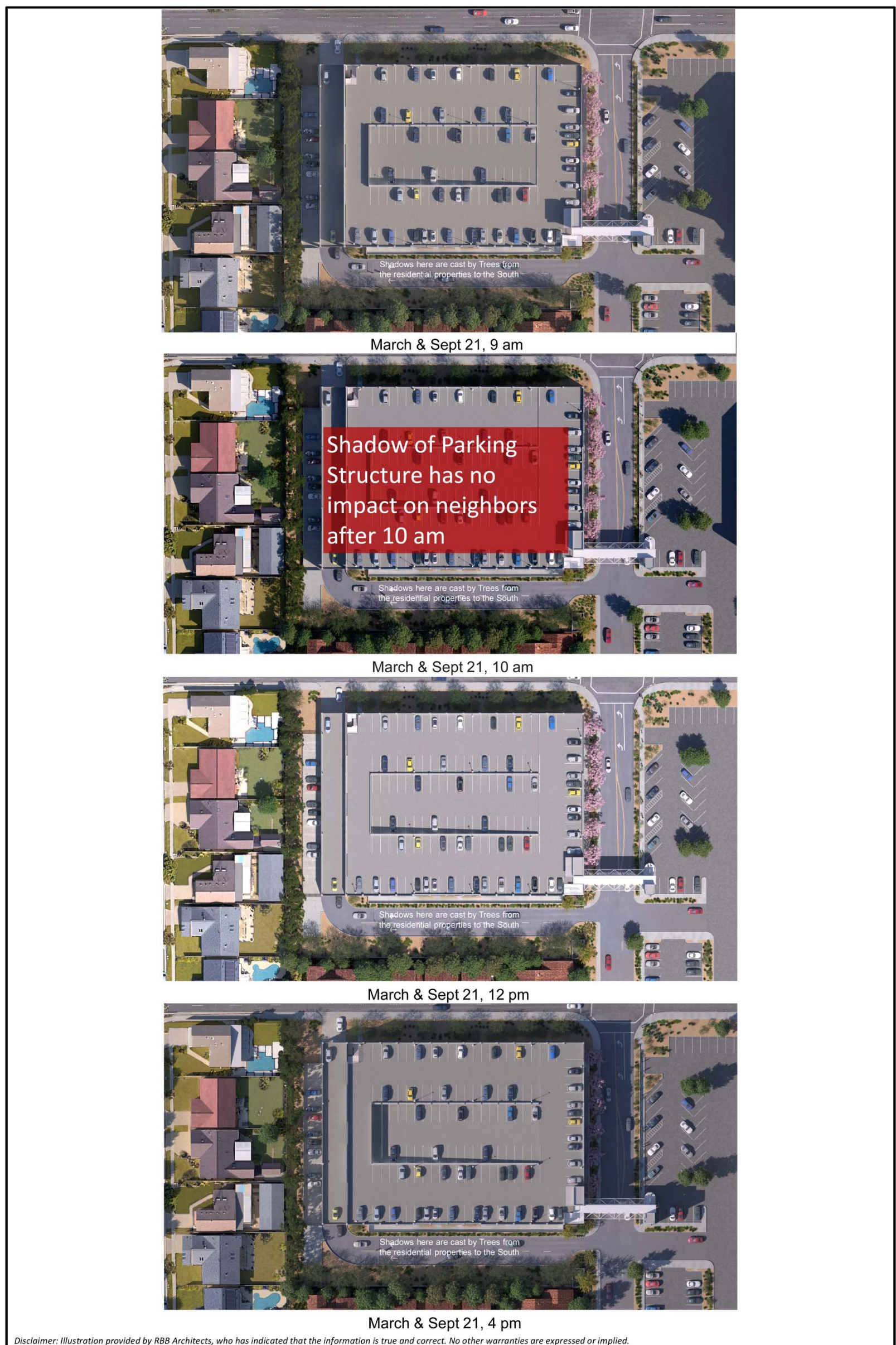
At **12 p.m.** very small shadows would extend north of the parking structure, not affecting any shadow-sensitive uses.

At **5 p.m.** shadows would extend partway across Foster Street. **Figure 4.1-4** photos 1, 2, and 3 show shadows cast by the structure at 9 a.m., 12 p.m., and 5 p.m., respectively. Shadow impacts on residences west of the parking structure would be less than significant.

Figure 4.1-2
SHADOW STUDIES, DECEMBER 21 (WINTER SOLSTICE)

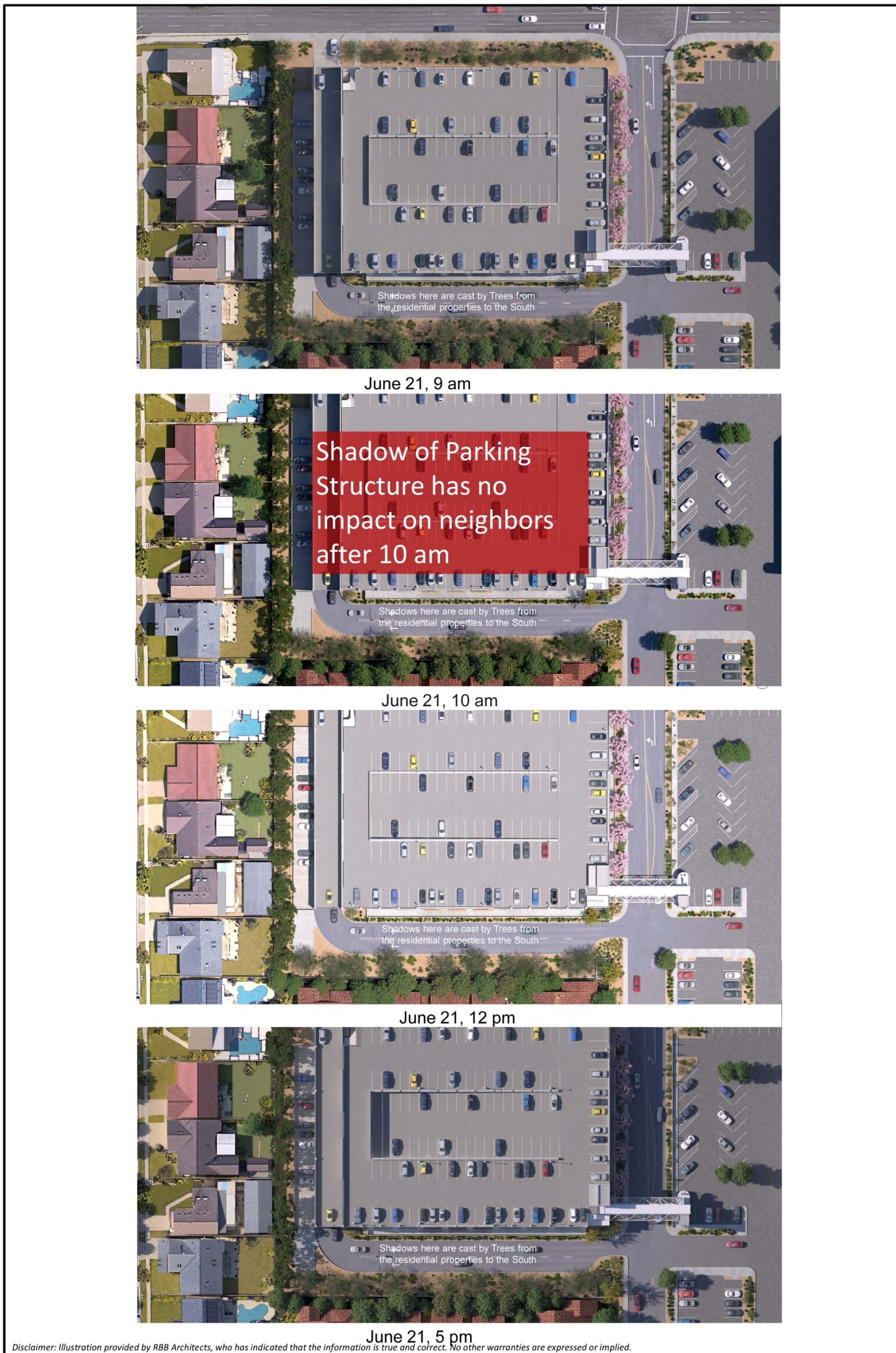


Figure 4.1-2
SHADOW STUDIES, MARCH 21 AND SEPTEMBER 21 (SPRING AND AUTUMN EQUINOXES)



Source: RBB Architects, November 26, 2025.

Figure 4.1-4
SHADOW STUDIES, JUNE 21 (SUMMER SOLSTICE)



Source: RBB Architects, November 26, 2025.



**Orange Coast Memorial
Medical Center Parking Structure**
Sun Shadow Studies
June 21 (Summer Solstice), 3-Level Structure



4.2 Agriculture and Forestry Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
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?				X

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

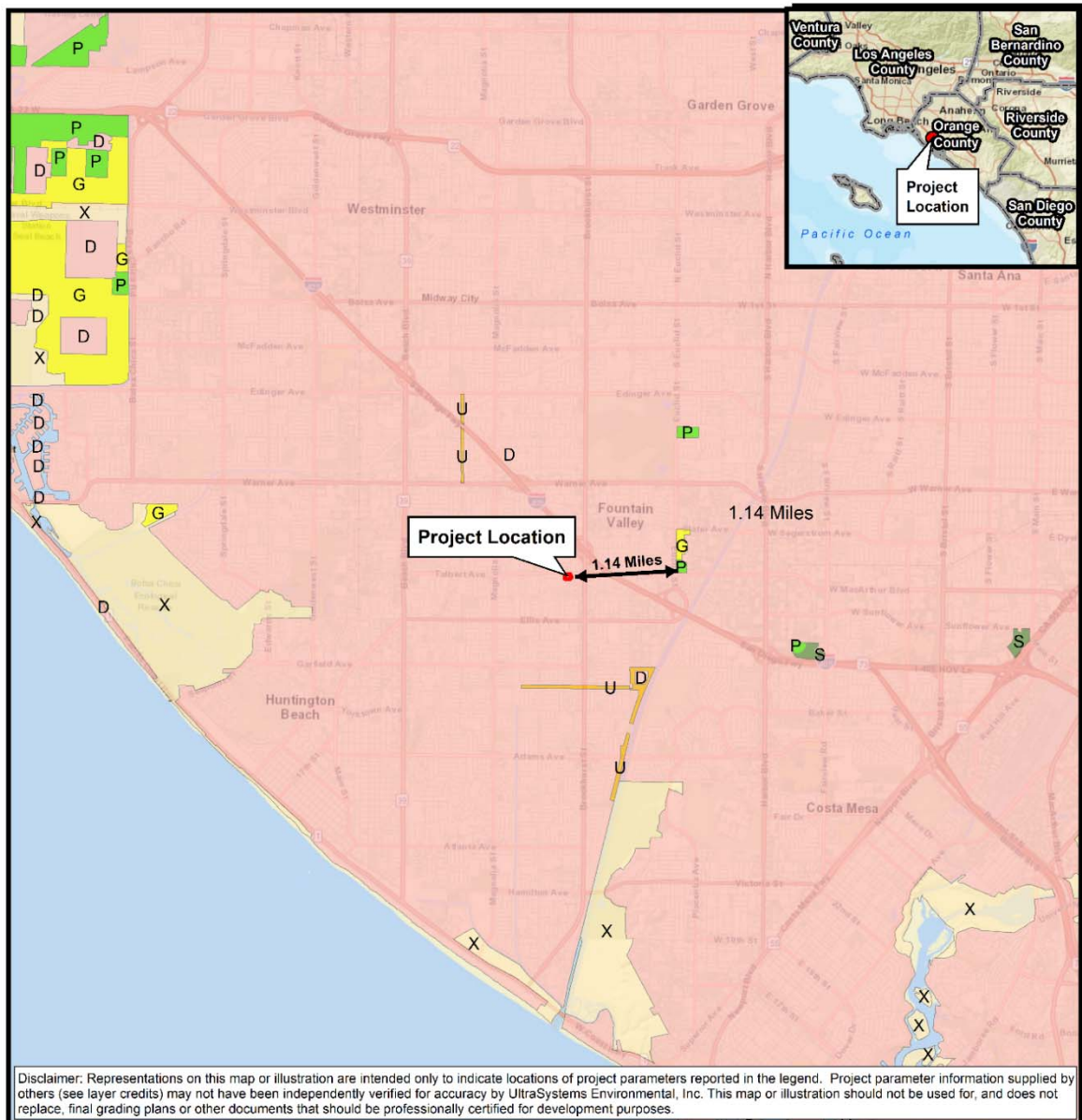
No Impact

The project site and surrounding uses are designated by the Division of Land Resource Protection (DLRP) as “Urban and Built-Up Land” (see **Figure 4.2-1** below), which is land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Urban and Built-Up Land includes residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes (DOC, 2024). Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.



❖ SECTION 4.2 – AGRICULTURE AND FORESTRY RESOURCES ❖

Figure 4.2-1
IMPORTANT FARMLAND CATEGORIES



Path: \\GIS\vr\gis\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXDs\7307_FV_OCMedCtr_4.2_Important_Farmlands_2025_12_01.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, CA Dept. of Conservation, 2020; UltraSystems Environmental, Inc., 2024.

January 02, 2025





❖ SECTION 4.2 – AGRICULTURE AND FORESTRY RESOURCES ❖

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

No Impact

The project site has a Specific Plan zoning designation and is not zoned for agricultural use. Williamson Act contracts restrict the use of privately-owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. The project site is not subject to a Williamson Act contract (DLRP, 2025). Therefore, the project would not conflict with existing zoning for agricultural use, or a Williamson Act contract and no impact would occur.

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

No Impact

The project site is zoned as “Specific Plan”; the site is not zoned for forest, timberland, or timberland production use. Therefore, project development would not conflict with zoning for forest land or timberland, and no impact would occur.

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

No Impact

The project site and surroundings are not cultivated for forest resources. Therefore, project development would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

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

No Impact

The project site is OCMC’s northwestern surface parking lot that currently has 231 parking spaces and is surrounded by single-family homes and Living Waters Christian Fellowship Church to the north, the Orange Coast Medical Center to the east, multi-family homes to the south, and single-family homes to the west. No important farmland is near the project site; the nearest such farmland is Prime Farmland approximately 1.14 miles to the east (DOC, 2024). No forest land is present on or near the project site.

Therefore, project development would not indirectly cause conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and no impacts would occur.



4.3 Air Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

4.3.1 Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), sulfur dioxide (SO₂), lead (Pb), and ozone, and their precursors, such as reactive organic gases (ROG) (which are ozone precursors). Since the proposed project would not generate appreciable SO₂ or Pb emissions,⁸ it is not necessary for the analysis to include those two pollutants.

Presented below is a description of the air pollutants of concern and their known health effects.

Nitrogen oxides (NO_x) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence in the atmosphere will contribute to the violation of one or more AAQs. When NO_x and ROG are released in the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of NO_x are nitric oxide (NO) and NO₂. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO₂ is a reddish-brown pungent gas formed by the combination

⁸ Sulfur dioxide emissions will be below 0.04 pound per day during construction and operations. Lead is typically associated with industrial sources and processes, but quantification of lead emissions are not currently available for CalEEMod.



of NO and oxygen. NO₂ acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens (USEPA, 2011).

Carbon monoxide (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions: primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions. High concentrations are lethal (ARB, 2024a).

Particulate matter (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Primary PM is emitted directly into the atmosphere from activities such as agricultural operations, industrial processes, construction and demolition activities, and entrainment of road dust into the air. Secondary PM is formed in the atmosphere from predominantly gaseous combustion by-product precursors, such as sulfur oxides, NO_x, and ROG.

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have focused on two types of PM. PM₁₀ corresponds to the fraction of PM no greater than 10 micrometers in aerodynamic diameter and is commonly called respirable particulate matter, while PM_{2.5} refers to the subset of PM₁₀ of aerodynamic diameter smaller than 2.5 micrometers, which is commonly called fine particulate matter.

PM₁₀ and PM_{2.5} deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM₁₀ airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of PM₁₀ pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading, for example, to increased risks of hospitalization and mortality from asthma attacks and heart attacks (ARB, 2024b).

Reactive organic gases (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because ROG are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROG are also transformed into organic aerosols in the atmosphere, which contribute to higher PM₁₀ and lower visibility. The term "ROG" is used by the ARB



for this air quality analysis and is defined the same as the federal term “volatile organic compound” (VOC).

Ozone is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO_x. Ozone creation requires ROG and NO_x to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, ozone is considered a regional, rather than a local, pollutant. The health effects of ozone include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber (USEPA, 2020).

The project is in the Orange County portion of the South Coast Air Basin (SCAB), for whose air pollution control the South Coast Air Quality Management District (SCAQMD) is substantially responsible. **Table 4.3-1** shows the attainment status of the SCAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS).

Table 4.3-1
FEDERAL AND STATE ATTAINMENT STATUS

Pollutants	Federal Classification	State Classification
Ozone (O ₃) – 1-hour standard	Nonattainment (Extreme)	Nonattainment
Ozone (O ₃) – 8-hour standard	Nonattainment (Extreme)	
Particulate Matter (PM ₁₀)	Maintenance (Serious)	Nonattainment
Fine Particulate Matter (PM _{2.5})	Nonattainment (Serious)	Nonattainment
Carbon Monoxide (CO)	Maintenance (Serious)	Attainment
Nitrogen Dioxide (NO ₂)	Maintenance (Primary)	Attainment
Sulfur Dioxide (SO ₂)	Unclassified	Attainment
Sulfates	No Federal Standards	Attainment
Lead (Pb)		Attainment
Hydrogen Sulfide (H ₂ S)	Unclassified	
Visibility Reducing Particles		

Sources: ARB, 2023a; USEPA, 2024.

4.3.2 Climate/Meteorology

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.



The project site is located wholly within the SCAB, which includes all of Orange County, as well as the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The distinctive climate of the SCAB is determined by its terrain and geographical location. The SCAB is on a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. Thus, the climate is mild, tempered by cool sea breezes. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds (SCAQMD, 1993).

The annual average temperature varies little throughout the 6,600-square-mile SCAB, ranging from the low 60s to the high 80s. However, with a less pronounced oceanic influence, the inland portion shows greater variability in the annual minimum and maximum temperatures. The mean annual maximum and minimum temperatures in the project area – as determined from the nearest weather station in the City of Santa Ana (WRCC, 2021), which has a period of record from 1906 to 2016 – are 75.8 degrees Fahrenheit (°F) and 52.0°F, respectively. The hottest month is August, with an average maximum temperature of 84.7°F and the coldest month is January, with an average minimum temperature of 43.1°F.

During the period of record, the average rainfall measured 13.69 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 2.67 inches during the winter (December, January, and February), approximately 1.17 inches during the spring (March, April, and May), approximately 0.66 inch during the fall (September, October, and November), and approximately 0.05 inch during the summer (June, July, and August).

4.3.3 Local Air Quality

The SCAQMD has divided its jurisdiction into source receptor areas (SRAs), based on similar meteorological and topographical features. The project site is in SCAQMD's Central Orange County air monitoring area (SRA 17), and is served by the SCAQMD's Anaheim–Pampas Lane station, nine miles north at 1630 West Pampas Lane in Anaheim. This station monitors ozone, PM₁₀, PM_{2.5}, and NO_x. All stations in the SCAB ceased monitoring CO in 2012. The ambient air quality data in the project vicinity as recorded from 2021 through 2023, along with applicable standards, are shown in **Table 4.3-2**.



Table 4.3-2
AMBIENT AIR QUALITY MONITORING DATA

Air Pollutant	Standard/Exceedance	2021	2022	2023
Ozone	Max. 1-hour Concentration (ppm)	0.089	0.102	0.089
	Max. 8-hour Concentration (ppm)	0.068	0.089	0.077
	# Days > Federal 8-hour Std. of 0.070 ppm	0	1	2
	# Days > California 1-hour Std. of 0.09 ppm	0	1	0
	# Days > California 8-hour Std. of 0.070 ppm	0	1	2
PM ₁₀	Max. 24-hour Concentration (µg/m ³)	63.6	67.0	97.8
	Est. # Days > Fed. 24-hour Std. of 150 µg/m ³	0	ND	ND
	Federal Annual Arithmetic Mean (50 µg/m ³)	23.4	20.9	20.6
PM _{2.5}	Max. 24-hour Concentration (µg/m ³)	54.4	33.1	45.6
	# Days > Fed. 24-hour Std. of 35 µg/m ³	10.0	0	1
	State Annual Average (12 µg/m ³)	11.5	9.8	ND
NO ₂	Max. 1-hour Concentration (ppm)	0.067	0.053	0.051
	State Annual Average (0.030 ppm)	0.012	0.011	0.010
	# Days > California 1-hour Std. of 0.18 ppm	0	0	0

Source: ARB, 2023b.

ND - There was insufficient (or no) data available to determine the value.

4.3.4 Air Quality Management Plan (AQMP)

The SCAQMD is required to produce plans to show how air quality would be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information.⁹ A multi-level partnership of governmental agencies at the federal, state, regional, and local levels implement the programs contained in these plans. Agencies involved include the USEPA, ARB, local governments, Southern California Association of Governments (SCAG), and SCAQMD. The SCAQMD and the SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. The SCAQMD updates its AQMP every three years.

The 2022 AQMP (SCAQMD, 2022) was adopted by the SCAQMD Board on December 2, 2022. It focuses on reducing ozone by limiting the emissions of NO_x, which is a key reactant in ozone formation. The NO_x reductions are through extensive use of zero emission technologies across all stationary and mobile sources categories. The majority of NO_x emissions are from heavy-duty trucks, ships and other state and federally regulated mobile sources that are mostly beyond the SCAQMD's control. The SCAQMD's primary authority is over stationary sources, which account for approximately 20 percent of the SCAB's NO_x emissions.

The AQMP incorporates updated emission inventory methodologies for various source categories and incorporates the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG (2024). The 2024-2050 RTP/SCS was determined to conform to the federally mandated State Implementation Plan for the attainment and maintenance of the NAAQS.

⁹ CCAA of 1988.



4.3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. A sensitive receptor means any residence, including private homes, condominiums, apartments, and living quarters; schools and preschools; daycare centers; and health facilities such as hospitals or retirement and nursing homes, long term care hospitals, hospices; prisons; and dormitories or similar live-in housing (SCAQMD, 1993). Commercial and industrial facilities are not included in the definition of sensitive receptor, because employees typically are present for shorter periods of time, such as eight hours. Therefore, applying a 24-hour standard for PM₁₀ is appropriate not only because the averaging period for the state standard is 24 hours, but because the sensitive receptor would be present at the location for the full 24 hours.

The nearest sensitive receptors to the project site are single-family residences as close as 18 feet from the project site, at 18070 Scanlan Court. Additionally, the Living Waters Christian Fellowship is within 119 feet of the project site and Edinger Medical Group is 118 feet of the project site.¹⁰

4.3.6 Applicable South Coast Air Quality Management District Rules

Rule 403 (Fugitive Dust Rule)

During construction, the project would be subject to SCAQMD Rule 403 (fugitive dust). SCAQMD Rule 403 does not require a permit for construction activities, per se; rather, it sets forth general and specific requirements for all construction sites (as well as other fugitive dust sources) in the SCAB. The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust sources) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source. SCAQMD Rule 403 also prohibits construction activity from causing an incremental PM₁₀ concentration impact, as the difference between upwind and downwind samples, at the property line of more than 50 micrograms per cubic meter as determined through PM₁₀ high-volume sampling. The concentration standard and associated PM₁₀ sampling do not apply if specific measures identified in the rules are implemented and appropriately documented.

Other requirements of Rule 403 include not causing or allowing emissions of fugitive dust that would remain visible beyond the property line; no track-out extending 25 feet or more in cumulative length and all track-out to be removed at conclusion of each workday; and using the applicable best available control measures included in Table 1 of Rule 403.

Rule 1113 (Architectural Coatings)

Construction of this project will include the application of architectural coatings and be subject to SCAQMD Rule 1113 (Architectural Coatings). Among other applicable entities, Rule 1113 requires anyone who applies, stores at a worksite, or solicits the application of architectural coatings use coatings that contain VOC less than or equal to the VOC limits specified in Table 1 of the rule.

¹⁰ These distances are not necessarily those used for the noise impact analysis. See **Section 4.13**.



4.3.7 Impact Analysis

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

Less than significant Impact

The South Coast 2022 AQMP, discussed above, incorporates land use assumptions from local general plans and regional growth projections developed by SCAG to estimate stationary and mobile air emissions associated with projected population and planned land uses. If the proposed land use is consistent with the local general plan, then the impact of the project is presumed to have been accounted for in the AQMP. This is because the land use and transportation control sections of the AQMP are based on the SCAG regional growth forecasts, which incorporate projections from local general plans.

The proposed project is in compliance with the City's General Plan and Zoning designations. The project site has a general plan land use designation and zoning district of the Orange Coast Memorial Medical Center Specific Plan (Specific Plan). The proposed project would be in accordance with the Specific Plan. Therefore, no General Plan amendment or Zone Change is required. The land use would continue to be consistent with the local plans and the impacts of the project are still accounted for in the AQMP.

Another measurement tool in evaluating consistency with the AQMP is to determine whether a project would generate population and employment growth and, if so, whether that growth would exceed the growth rates forecasted in the AQMP and how the project would accommodate the expected increase in population or employment. The project would create minimal increase in population and overall vehicle miles traveled (VMT), which would be included in the growth rates forecasted in the AQMP.

Additionally, to assist the implementation of the AQMP, projects must not create regionally significant emissions of regulated pollutants from either short-term construction or long-term operations. The SCAQMD has developed criteria in the form of emissions thresholds for determining whether emissions from a project are regionally significant (SCAQMD, 2023). They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project is in conformity with plans to achieve attainment. SCAQMD's significance thresholds for criteria pollutant emissions during construction activities and project operation are summarized in **Table 4.3-3**. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding SCAQMD significance thresholds.

Table 4.3-3
SCAQMD THRESHOLDS OF SIGNIFICANCE

Pollutant	Construction Thresholds (lbs/day)	Operational Thresholds (lbs/day)
Volatile Organic Compounds (VOC)	75	55
Nitrogen Oxides (NO _x)	100	55
Carbon Monoxide (CO)	550	550



Pollutant	Construction Thresholds (lbs/day)	Operational Thresholds (lbs/day)
Sulfur Oxides (SO _x)	150	150
Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55

Note: lbs = pounds.
Source: SCAQMD, 2023.

Regional Construction Emissions

Construction activities for the project are anticipated to begin in January 2026 and end in December 2026. **Table 4.3-4** shows the project schedule used for the air quality, GHG emissions and noise analyses.

Table 4.3-4
CONSTRUCTION SCHEDULE

Construction Phase	Start	End
Demolition	March 2027	April 2027
Site Preparation	April 2027	April 2027
Grading	April 2027	April 2027
Building Construction	April 2027	January 2028
Paving	January 2028	February 2028
Architectural Coating	February 2028	February 2028

These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate NO_x emissions. The quantity of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

Estimated criteria pollutant emissions from the project's onsite and offsite project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.29 (CAPCOA, 2022). CalEEMod is a planning tool for estimating emissions related to land use projects. Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. CalEEMod defaults were used for both offroad construction equipment and onroad construction traffic inputs.

As shown in **Table 4.3-5**, construction emissions would not exceed SCAQMD regional thresholds. Therefore, the project's short-term regional air quality impacts would be less than significant. Refer to **Appendix B** of this document for air quality calculations.



Table 4.3-5
MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Construction Activity	Maximum Emissions (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Emissions, 2026	3.13	15.9	16.7	3.47	1.9
<i>SCAQMD Significance Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>55</i>
Significant? (Yes or No)	No	No	No	No	No

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

Regional Operational Emissions

The proposed project includes a three-story parking garage (including three stories plus rooftop above ground) with a storage unit in the basement. Criteria pollutants emitted during operations would only be generated by area sources, which typically represent emissions from consumer products, architectural coatings, and landscaping equipment. The parking garage will not generate new trips to the site so there will be no additional mobile source operational emissions. Energy and water sources will not generate net increases in criteria pollutant emissions, but they will produce greenhouse gas emissions. (See **Section 4.8**.) As seen in **Table 4.3-6**, for each criteria pollutant, operational emissions would be below the pollutant's SCAQMD significance threshold. Therefore, regional operational emissions would be less than significant.

Table 4.3-6
MAXIMUM DAILY PROJECT OPERATIONAL EMISSIONS

Emission Source	Pollutant (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Area Source Emissions	2.22	0.11	13.4	0.02	0.02
Total Operational Emissions	2.22	0.11	13.4	0.02	0.02
<i>SCAQMD Significance Thresholds</i>	<i>55</i>	<i>55</i>	<i>550</i>	<i>150</i>	<i>55</i>
Significant? (Yes or No)	No	No	No	No	No

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

- b) **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?**

Less Than Significant Impact

Since the SCAB is currently in nonattainment for ozone and PM_{2.5}, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. The SCAQMD neither recommends quantified analyses of construction and/or operational emissions from multiple development projects, nor provides methodologies or thresholds of significance to be used to assess the cumulative emissions generated by multiple cumulative projects. Instead, the District



recommends that a project's potential contribution to cumulative impacts be assessed by utilizing the same significance criteria as those for project-specific impacts. Furthermore, the SCAQMD states that if an individual development project generates less-than-significant construction or operational emissions impacts, then the development project would not contribute to a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed above, the mass daily construction and operational emissions generated by the project would not exceed any of the SCAQMD's significance thresholds. Also, as discussed below, localized emissions generated by the project would not exceed the SCAQMD's Localized Significance Thresholds (LSTs). Therefore, the project would not contribute a cumulatively considerable increase in emissions for the pollutants which the SCAB is in nonattainment. Thus, cumulative air quality impacts associated with the project would be less than significant.

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

Less than Significant Impact

Construction of the project would generate short-term and intermittent emissions. Following the SCAQMD's *Final Localized Significance Threshold Methodology* (Chico and Koizumi, 2008), only onsite construction emissions were considered in the localized significance analysis. The residences surrounding the project site's western and southern boundaries are as near as 18 feet (5.4 meters) away.¹¹ LSTs for projects in Source Receptor Area 17 (Central Orange County) were obtained from tables in Appendix C of the aforementioned methodology. Table 4.3-7 shows the results of the localized significance analysis for the project. Localized short-term air quality impacts from construction of the project would be less than significant.

**Table 4.3-7
RESULTS OF UNMITIGATED LOCALIZED SIGNIFICANCE ANALYSIS**

Nearest Sensitive Receptor	Maximum Onsite Construction Emissions (pounds/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum daily unmitigated emissions	12.9	14.6	2.76	1.34
SCAQMD LST for 1 acre @ 25 meters	81	485	4	3
Significant (Yes or No)	No	No	No	No

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

Less than Significant Impact

A project-related significant adverse effect could occur if construction of the proposed project would result in generation of odors that would be perceptible in adjacent sensitive areas. According to the

¹¹ According to SCAQMD guidance, a receptor closer than 25 meters to the source may be assumed to be 25 meters away (Chico and Koizumi, 2008, p. 3-3).



❖ SECTION 4.3 – AIR QUALITY ❖

SCAQMD *CEQA Air Quality Handbook* (SCAQMD, 1993), land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Potential sources that may emit odors during construction activities include equipment exhaust. Odors from these sources would be localized and generally confined to the immediate area surrounding the project. The project would use typical construction techniques, and the odors would be typical of most construction sites and temporary in nature.

The project would not create substantial objectionable odors, and thus the impact would be less than significant.



4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?				X
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?				X
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 nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

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

Less Than Significant with Mitigation Incorporated

The project site is developed with an existing parking lot and is located in developed urban surroundings (see **Figure 4.4-1**). Only minor amounts of ornamental landscaping are present onsite currently, in addition to street trees along the site perimeter. Considering that the project site and surroundings are fully developed, there is a lack of suitable habitat for special-status plant and wildlife species.

A literature review was conducted for the project site and the 500-foot buffer surrounding it, which collectively represents the Biological Study Area (BSA). Plant and wildlife species listed under the federal Endangered Species Act (ESA) or under the California Endangered Species Act (CESA) are referred to collectively as “listed species” in this section. Plant and wildlife species not listed under ESA or CESA but still protected by federal agencies, state agencies, local or regional plans, and/or nonprofit resource organizations, such as the California Native Plant Society (CNPS), are collectively referred to as “sensitive species” in this section. The term “special-status species” is used when collectively referring to both listed and sensitive species. A California Natural Diversity Database (CNDDB) search was generated, and an assessment was conducted to determine the potential for special-status species to occur onsite. Based on the highly urbanized nature of the project site and its surroundings, the area provides minimal suitable habitat to support special-status species. No special-status plant species are expected to occur within the BSA. Two special-status wildlife species have a potential to occur within the BSA but are not expected to occur within the project site.

The BSA contains landscaped areas, sidewalks, and multiple impervious paved surfaces. It lacks suitable soils, biological resources, and physical features to support a healthy native ecosystem with a diversity of plant and wildlife species. No special-status plants were observed within the project site. Therefore, development of the project is anticipated to result in no impacts to special-status plant and wildlife species. The project site is primarily developed with mostly paved surfaces and offers very limited natural habitat. However, trees and existing structures onsite may provide limited nesting, foraging, and cover opportunities for some wildlife species. Bats and raptors could use buildings or trees for roosting, nesting, or hunting.

Plants

Based on a literature review and query from publicly available databases for reported occurrences (CNDDB, 2025a, USFWS, 2025a), within a 10-mile radius of the project site, a total of 31 special-status plant species, resulted from the query. Refer to **Figure 4.4-2** for a representation of special-status plant and wildlife species documented in the CNDDB within a two-mile radius of the project site. None of these 31 special-status plant species are expected to occur within the BSA due to a lack of habitat to support them. The BSA lacks suitable habitat for the establishment of those species, as it contains primarily impermeable, paved surfaces with landscaped areas containing non-native ornamental vegetation.

Figure 4.4-1
PROJECT BOUNDARY AND BIOLOGICAL STUDY AREA (BSA)

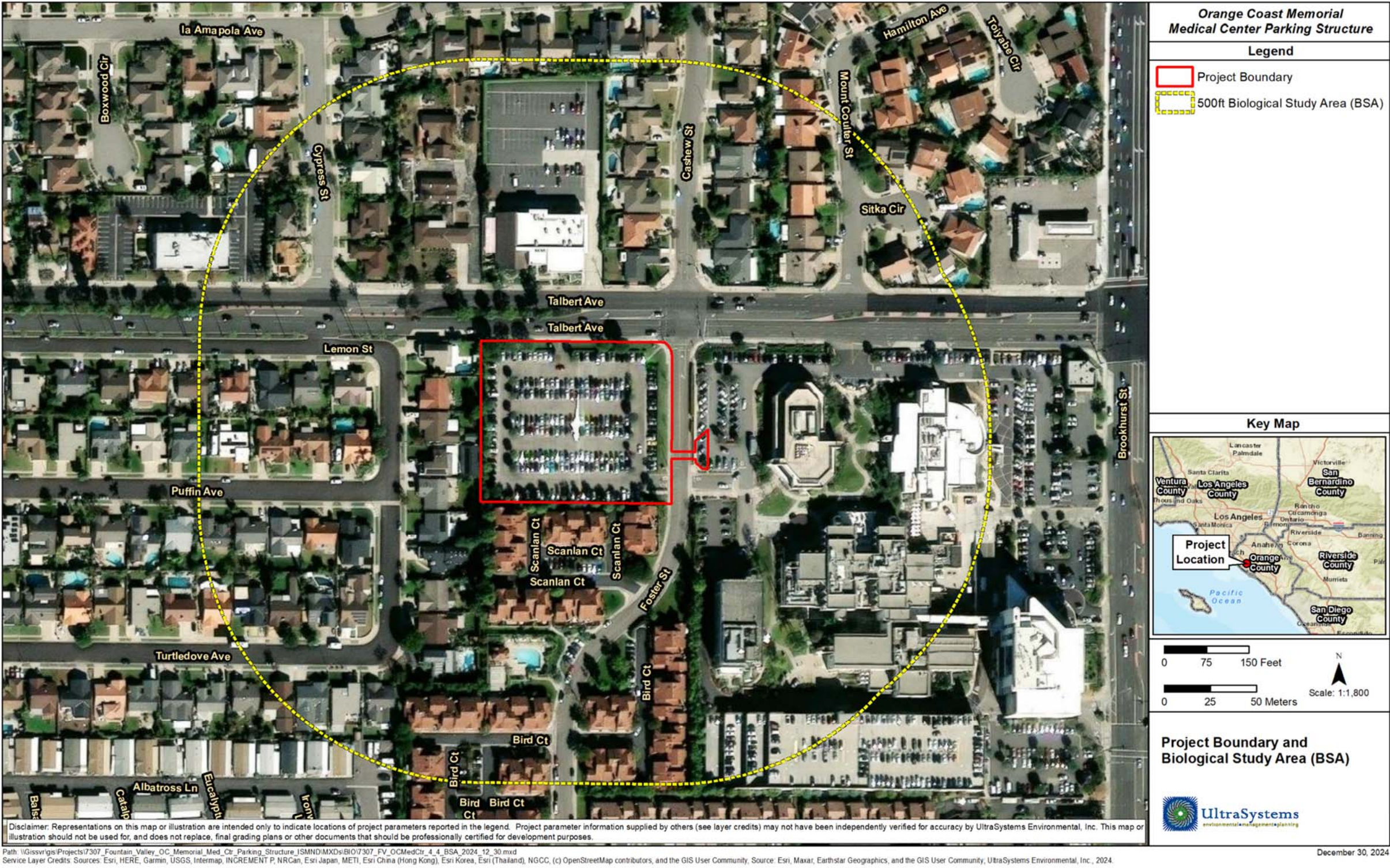
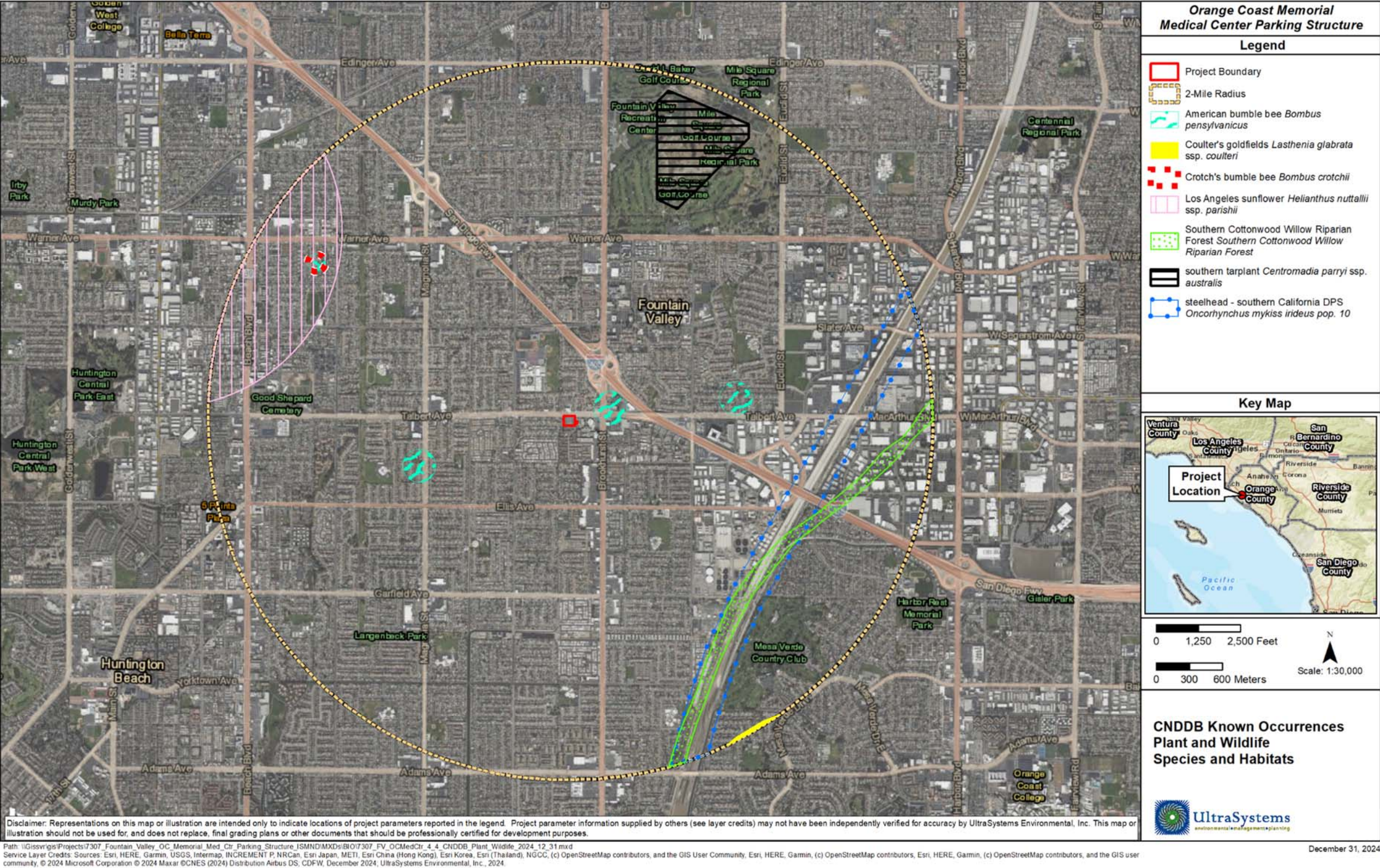


Figure 4.4-2
CNDDb KNOWN OCCURANCES PLANTS AND WILDLIFE SPECIES AND HABITATS





The BSA may also not be located within the species' reported distribution or elevation range, or a combination of the abovementioned factors. Due to several physical and biological factors within the BSA, it was determined that special-status plant species identified in the 10-mile radius database query are not expected to occur in the BSA (Calflora, 2025; CNDDDB, 2025a, b; CNPS, 2025; Google Earth Pro, 2025; Soil Survey Staff, 2025; USFWS, 2025a, b). Refer to **Appendix C**, Special-Status Species Occurrence Potential Determination, for a list of all species evaluated in the species inventory and for all federal, state and other agencies special-status species designations.

Wildlife

Based on a literature review and query from publicly available databases for reported occurrences within a 10-mile radius of the project site, 18 listed and 36 sensitive wildlife species had documented historical observations within 10 miles of the BSA or are recognized as occurring based on previous surveys or knowledge of the area (CNDDDB, 2025a; USFWS, 2025a). Refer to Figure 4.4-2 for a representation of special-status plant and wildlife species documented in the CNDDDB within a two-mile radius of the project site. Of those 54 total species, one sensitive species, Monarch butterfly (*Danaus plexippus*), was determined to have a low potential to occur and another species, American bumble bee (*Bombus pensylvanicus*), was determined to have a moderate potential to occur within the BSA. However, the project site lacks suitable habitat to support either of these species and neither one of them are expected to occur within the project site. Thus, development of the project is expected to result in less than significant impacts to special-status wildlife species.

Due to several biological and physical factors within the BSA, it was determined that there is a lack of suitable habitat conditions to support 52 of the 54 special-status wildlife species identified in the 10-mile radius database query (CNDDDB, 2025a; USFWS, 2025a). The 54 wildlife species that were evaluated were determined to have no potential to occur or are not expected to occur because the BSA lacks suitable habitat for foraging, nesting or breeding, the BSA does not lie within the species reported distribution or elevation range, there are no recent occurrences within a 10-mile radius of the project (CNDDDB, 2025a), the BSA undergoes significant disturbances and the species may not be adaptive to urbanized settings, or a combination of these factors (Nafis, 2025; CNDDDB, 2025a, c; Cornell Lab of Ornithology, 2025; eBird, 2025; Google Earth Pro, 2025; iNaturalist, 2025; Soil Survey Staff, 2025; USFWS, 2025a, b). Refer to **Appendix C** *Special-Status Species Occurrence Potential Determination* for more information including applicable status ranking definitions.

American Bumble Bee (*Bombus pensylvanicus*)

Ornamental flowering plants in the BSA could provide a suitable nectar source for this species. However, the BSA is primarily developed and undergoes significant, frequent disturbances that compromise the suitability of the BSA for this species. While this bumble bee prefers open grasslands and prairies with native wildflowers, urbanized or heavily disturbed areas generally do not provide optimal foraging or nesting conditions (NRCS, 2025; USFS, 2025).

The project site itself does not provide suitable habitat for this species, and therefore project activities are not anticipated to significantly impact this bee species. Although the American Bumble is not expected to nest there due to the lack of undisturbed soil, rodent burrows, or grassy thickets that could serve as ideal hive sites. During a remote survey of the site using Google Earth Pro aerial imagery, UltraSystems biologists found no evidence of potential burrows or nesting activity. The BSA consists primarily of developed and ornamental areas, which may support occasional foraging individuals but are unlikely to sustain a resident population.



Monarch butterfly (*Danaus plexippus*) FC: California overwintering population

Ornamental flowering plants in the BSA could provide a suitable nectar source for this species. However, the BSA is primarily developed and undergoes significant, frequent disturbances that compromise the suitability of the BSA for this species. The project site itself does not provide suitable habitat for this species, and therefore project activities are not anticipated to significantly impact this butterfly species.

Although the abovementioned species were determined to have a low potential to occur, it is not expected that these species would overwinter in the BSA due to lack of suitable overwintering habitat. The BSA is comprised of developed/ornamental areas. Occurrence of the species discussed above in the BSA would likely be restricted to passage and occasional foraging.

Migratory Birds

Trees onsite could provide foraging, nesting, and cover habitats to support multiple bird species. Most bird species occurring in California are protected by the federal Migratory Bird Treaty Act (MBTA) and by California Fish and Game Code § 3503, § 3503.5, and § 3513. Grading, excavation, grubbing and clearing of vegetation would result in the removal of potential nesting habitat. Development of the project is anticipated to result in significant impacts to migratory bird species. Implementation of mitigation measure **BIO-1** would reduce potential project impacts to migratory bird species to a less than significant level.

Mitigation Measure

BIO-1: Pre-Construction Breeding Bird Survey

If vegetation removal is scheduled within the nesting season, a qualified biologist will conduct a pre-construction nesting bird survey to maintain compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (§§ 3503 and 3503.5), which prohibit take of nesting birds and nests of migratory and non-game bird species. Nesting season is generally considered to be:

- January 1-July 30 for raptors.
- February 1-September 15 for non-raptors.

A qualified biologist will conduct pre-construction surveys no more than five days prior to when project activities (e.g., mobilization, excavation, grading, vegetation removal) are underway. Should a lapse in project activity be greater than five days, a qualified biologist will conduct additional surveys to maintain compliance. To maximize the detection of nesting birds, surveys must be conducted in work areas (e.g., staging, stockpiling, storage, equipment yards, access roads) during favorable weather conditions. A wide variety of shelters and resources are used by avian species; these include barren ground, grasses, forbs, shrubs, trees, rocky outcrops, and man-made structures (dependent on species and conditions). The qualified biologists will interpret physical signs for nesting structures (e.g., manipulation of materials like mud or grass) and direct signs of life (e.g., courtship behaviors, gathering, swooping, alarm calls, pellets).

If nests are encountered, a qualified biologist will consider individual species tolerance, proximity to construction activity, noise impacts, line-of-sight barriers, and distance (horizontal and vertical) to determine if planned construction activities would impact nesting success. The rate and duration of



❖ SECTION 4.4 – BIOLOGICAL RESOURCES ❖

construction activities will also be considered should the modification of scheduled activities be required to maintain healthy nesting outcomes.

If the qualified biologist determines construction activities will potentially adversely affect a nest, the biologist must immediately inform the construction manager to halt construction activities (i.e., establish a no-work zone) within a minimum exclusion buffer of 50 feet for songbird nests and 200-500 feet for raptor nests. If a federal or state protected bird species is observed occupying a nest during surveys, USFWS and CDFW will be consulted to determine the appropriate no-work zone to establish for the nest. The no-work zone lawfully avoids the “take” of nesting birds and the mortality of eggs and younglings. Construction activities within the no-work buffer may proceed after a qualified biologist determines the young have successfully fledged the nest and are no longer dependent upon the nest or parents.

Level of Significance After Mitigation

With implementation of mitigation measure **BIO-1**, the proposed project would have less than significant impacts on nesting birds.

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

No Impact

The project site is built out and no streams, rivers or sensitive natural communities are present onsite. The nearest riparian habitat to the project site mapped on the National Wetlands Mapper is approximately 0.5 mile to the south. There is no USFWS critical habitat in the BSA.¹² Project development would have no impact on riparian habitat or sensitive natural communities.

- c) Would the project 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 Impact

The project site is built out with commercial uses. The nearest stream to the project site mapped on the National Wetlands Mapper is Fountain Valley Channel, a constructed channel about 0.4 mile southeast of the project site (USFWS, 2024). Therefore, the project would not result in the direct removal, filling, hydrological interruption, or other direct impacts. No impact would occur.

¹² Critical habitat is the specific areas within the geographic area, occupied by the species at the time it was listed, that contain the physical or biological features that are essential to the conservation of endangered and threatened species and that may need special management or protection. Critical habitat may also include areas that were not occupied by the species at the time of listing but are essential to its conservation (USFWS, 2017).



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

No Impact

The project site and surrounding areas do not support resident or migratory fish species or wildlife nursery sites. The project site and its surrounding areas are currently developed, and therefore the project would not result in any new fragmentation of available habitat. As a result, the project would not interfere substantially with or impede: 1) the movement of any resident or migratory fish or wildlife species; 2) established resident or migratory wildlife corridors; or 3) the use of wildlife nursery sites.

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

No Impact

The project site is not located within a public right-of-way and is not subject to City ordinance protections for trees. Although § 12.04.040 of the City of Fountain Valley's Municipal Code, restricts trimming, pruning, or removing public trees, all of the trees within the project site are located within private property and thus are not subject to that ordinance.

The trees present within the project site consist of ornamental species used for landscaping on private property, none of which are subject to local protections. Therefore, project development would result in no impacts to resources protected under the City of Fountain Valley's tree protection ordinances.

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

No Impact

The project site is located within the general boundaries of the Orange County Transportation Authority (OCTA) Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP), specifically the Discrete Linear/Energy NCCP. The OCTA NCCP/HCP was developed to ensure that transportation projects (such as freeway expansions and road improvements) comply with both state and federal environmental laws while preserving high-priority habitat areas for endangered and threatened species. It allows OCTA to conduct mitigation efforts in advance rather than on a project-by-project basis, making the approval process more efficient.

Although the project site is located within OCTA's NCCP/HCP general boundary, it is not a transportation project, or located within the right-of-way of a public roadway, and thus is not subject OCTA NCCP/HCP. The project site is not in a conservation area/preserve established under the OCTA NCCP/HCP, the County of Orange (Central/Coastal) NCCP/HCP, or any other NCCP or HCP (Mastalir, 2024). Therefore, project development would result in no impacts to an NCCP or HCP.



4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Information from UltraSystems' Cultural Resources Inventory Report, dated January 15, 2025 (see **Appendix D**), prepared for the Orange Coast Memorial Medical Center Parking Structure Project, City of Fountain Valley has been included within this section.

4.5.1 Methodology

A cultural resources inventory was conducted for the Orange Coast Memorial Medical Center Parking Structure Project site (**Figure 4.5-1, Topographic Map**) that included a California Historic Resources Inventory System (CHRIS) records and literature search at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton. The SCCIC records search was conducted by Megan Doukakis, Assistant Project Archaeologist. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of their Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribal organizations and tribal representatives to contact. The NAHC request was made on November 26, 2024, and a reply was received on December 17, 2024; letters were sent to the listed tribes on December 17, 2024 and follow-up telephone calls were conducted following conclusion of the response period on January 2, 2025. A pedestrian field survey of the project site was conducted on January 1, 2025.

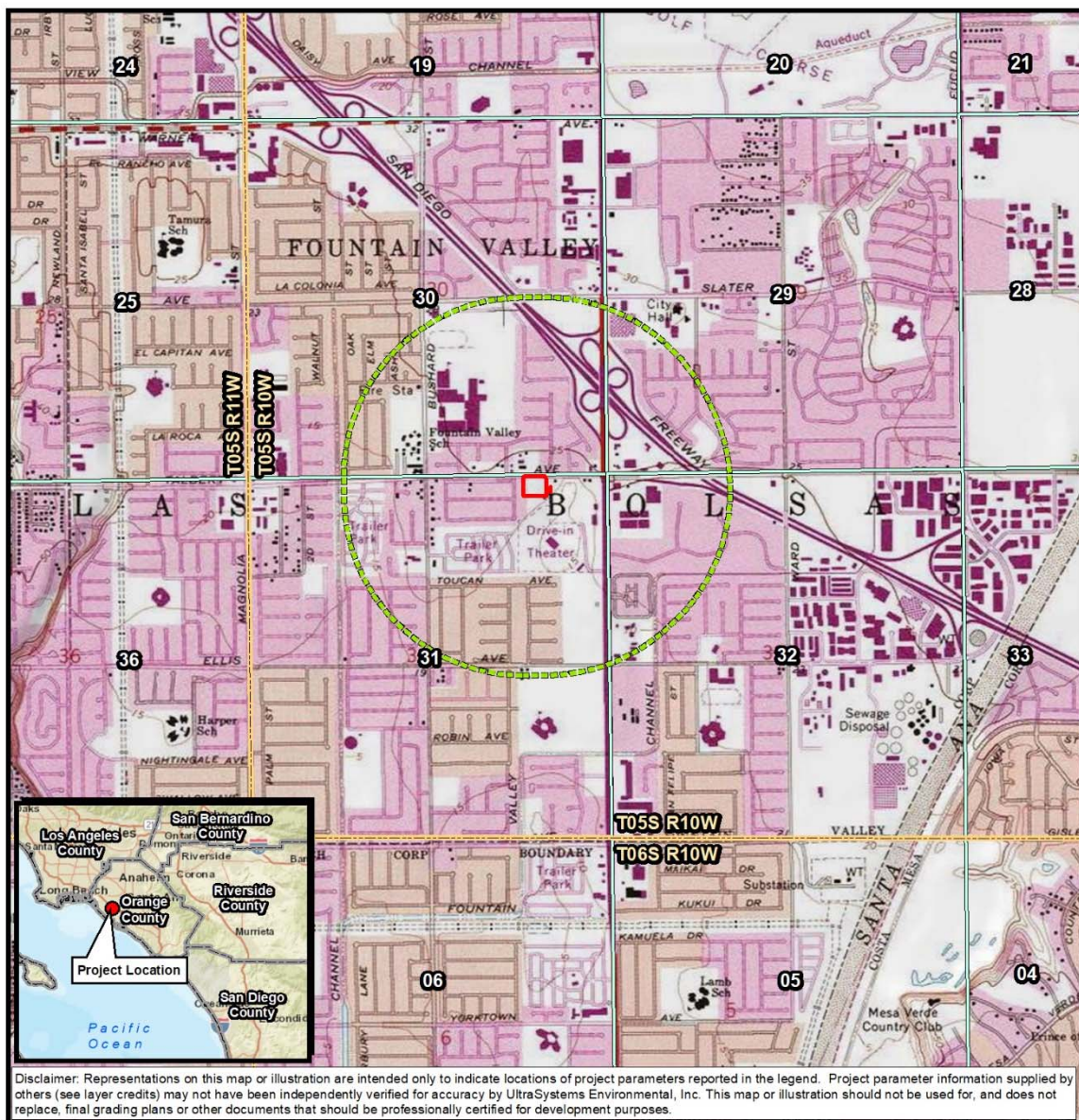
4.5.2 Existing Conditions

Based on the cultural records search, it was determined that no prehistoric or historic cultural resources have been identified previously within the project site boundary or within a 0.5-mile radius around the project site, defined as the Area of Potential Effect (APE). Within the 0.5-mile buffer zone, there are no recorded prehistoric or historic-era resources. No prior surveys included the project parcel (see Section 4.1.2 and Table 4.1-1 in **Appendix D**.)

The pedestrian field survey undertaken for this project noted that the project site is a paved parking lot that had been graded flat with landscape beds on all four sides (see Section 4.3 in **Appendix D**).



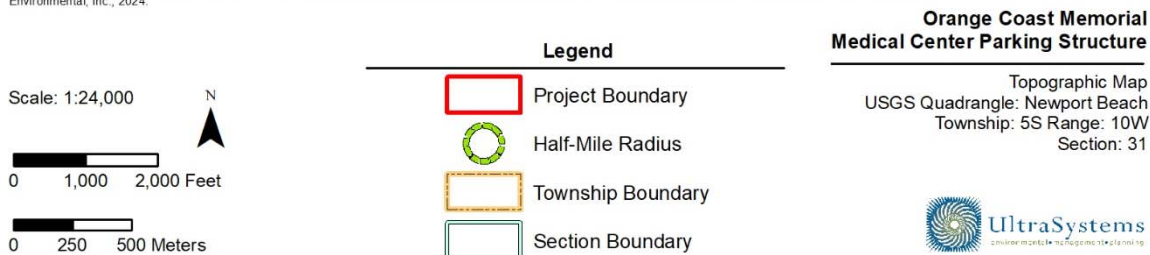
**Figure 4.5-1
TOPOGRAPHIC MAP**



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: I:\GIS\GIS\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure\JSMND\MXDs\7307_FV_OCMedCtr_4_5_Topo_2024_11_25.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Copyright © 2013 National Geographic Society, i-cubed, California Department of Conservation, 2019, UltraSystems Environmental, Inc., 2024

November 25, 2024





4.5.3 Impact Analysis

- a) **Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?**

No Impact

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in Code of Federal Regulations Title 36 Section 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of an historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

There are no historic resources within the project site or within the 0.5-mile radius.

A search of the Built Environmental Resource Directory (BERD) provided by the Office of Historic Preservation was conducted for this project. It was determined that the project APE does not have any resources present that have been evaluated under the NRHP. It was determined that within the 0.5-mile radius of the project area there is one historic-period property that has been evaluated under the NRHP, a commercial structure constructed in 1974. This was issued the same evaluation score code of 6Y, which denotes that the property has been determined ineligible for the NRHP by consensus through the Section 106 process. Code 6Y also indicates that the property has not been evaluated for the California Register or any other local listing. (See Section 4.4 in **Appendix D.**)

There would be no substantial adverse change in the significance of a historical resource pursuant to under § 15064.5, and therefore the proposed project would not adversely impact historical resources.



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

Less than Significant Impact with Mitigation Incorporated

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person.

The cultural resources records search conducted at the SCCIC determined that there are no prehistoric cultural resource sites or isolates recorded with the project boundary or within the 0.5-mile radius buffer area of the project APE (Section 4.1 in **Appendix D**).

A NAHC SLF search was conducted on and within a 0.5-mile buffer around the project site. The NAHC findings letter of December 17, 2024 was negative for the presence of a traditional cultural property within this area. Twenty representatives of eleven Native American tribes were contacted December 17, 2024 via letter and email, requesting a reply if they have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. (See Section 4.2 and Attachment C in **Appendix D**.) These tribes included:

- Cahuilla Band of Indians
- Gabrielino Band of Mission Indians – Kizh Nation
- Gabrielino/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians Acjachemen Nation – Belardes
- Juaneño Band of Mission Indians Acjachemen Nation – 84 A
- Pala Band of Mission Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

An email response was received on December 17, 2024 and December 23, 2024 from Brandy Salas and Chloe Soto, Admin Specialists for the Gabrieleño Band of Mission Indians – Kizh Nation (on behalf of Chairperson Andrew Salas and Secretary Christina Swindall Martinez) requesting the lead agency's contact information. Ms. Doukakis provided this information. An email response was received on December 17, 2024 from Patrick Sanchez, THPO and Shasta Gaughen, THPO for the Pala Band of Mission Indians (on behalf of Alexis Wallick, Assistant THPO and Christopher Najo, Legal Analyst/Researcher); the attached letter indicated that the Project is not within the boundaries of the tribe's Reservation and beyond the boundaries of the territory that the tribe considers its Traditional Use Area (TUA). An email response was received on December 17, 2024 from Vanessa Minott, Tribal Administrator for the Santa Rosa Band of Cahuilla Indians (on behalf of Steven Estrada, Tribal Chairman); she indicated that the tribe defers any comments to Soboba Band of Luiseno Indians cultural resource department.

Following letter and email contacts, telephone calls were conducted on January 2, 2025 to all the thirteen tribal contacts who had not already responded. Six telephone calls were placed with no answer and so messages were left describing the project and requesting a response. These were to



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Chairperson Anthony Morales with the Gabrielino/Tongva San Gabriel Band of Mission Indians; Christina Conley, Cultural Resources Administrator with the Gabrielino Tongva Indians of California Tribal Council; Chairperson Sandonne Goad with the Gabrielino/Tongva Nation; Sam Dunlap, Cultural Resource Director with the Gabrielino-Tongva Tribe; Joyce Perry, Cultural Resource Director with the Juaneño Band of Mission Indians Acjachemen Nation – Belardes; and Chairperson and THPO Heidi Lucero with the Juaneño Band of Mission Indians Acjachemen Nation – 84A. In the call to Chairperson Charles Alvarez with the Gabrielino-Tongva Tribe, his phone number was disconnected and so a message could not be left. There have been no responses to date.

In the call to Anthony Madrigal, Tribal Historic Preservation Officer and BobbyRay Esparza, Cultural Director with the Cahuilla Band of Indians, the tribal receptionist indicated that Mr. Madrigal and Mr. Esparza were not in the office but that Lorrie Gregory, Cultural Coordinator, was. The receptionist transferred the call to Ms. Gregory; there was no answer and a message was left. In the call to Erica Schenk, Chairperson for the Cahuilla Band of Indians, the Chairperson asked if we had contacted Mr. Madrigal and Mr. Esparza; she indicated that she would ask them to respond to our email. In the call to Chairperson Robert Dorame with the Gabrielino Tongva Indians of California Tribal Council, the Chairperson indicated that we should contact Ms. Conley for response, and that if she doesn't respond in a few days, we should call him back. On the call to Jessica Valdez, Cultural Resource Specialist with the Soboba Band of Luiseño Indians' Cultural Resources Department (on behalf of Joseph Ontiveros, THPO), she stated that the tribe would defer to closer tribes, specifically the Juaneño groups.

These contacts and replies are described in the Native American contact log in Attachment C of **Appendix D** to this IS/MND.

A pedestrian survey of the project site was conducted on January 1, 2025, by Mr. O'Neil. The survey consisted of walking over, visually inspecting, and photographing the exposed ground surface of the project site using standard archaeological procedures and techniques. The survey was conducted in the early afternoon from 1:45 to 3:00 p.m. with clear skies. The project site was accessed through the northern entrance off of Talbert Avenue.

The project site is bordered by landscape beds along all four sides open to Talbert Avenue and Foster Street on the north and east boundaries, and walls along the south and west boundaries with residences behind them. The entire parcel is a paved parking lot with no above-ground structures (see Attachment A, Map 2 in **Appendix D**). Rectangular in shape, it is approximately 285 feet north/south by 337.5 feet east/west at an elevation of approximately 20 feet AMSL with a slight slope to the east.

On the north and east project site borders the survey was conducted by walking both within and along the edge of the landscape beds, depending on if there was grass or shrubs present. The beds along Talbert Avenue and along Foster Street have concrete sidewalks along the street edge, then grass, and then a solid hedge; the landscaped area totals 20 feet wide on both sides. The grass was well-maintained with no ground visible through dry patches or rodent tunnels. Ground surface was visible within the hedge areas on both sides, as well within the non-grass spaces approximately nine feet diameter at the base of the several *Ficus* sp. trees along Talbert Avenue. There were five mature *Ficus* sp. trees along Talbert as well as five smaller ornamental trees along Foster Street. The hedges were of mature boxwood (*Boxus microphylla*) on both sides.

Along the south boundary the landscape bed is approximately six feet wide. This bed is occupied by smaller ornamental trees, privet (*Ligustrum japonicum*) shrubs, and ivy that fully obscures the ground surface. The west landscape bed is approximately 14 feet wide; this also has ornamental



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trees, a single species of shrubs and patches of ivy covering portions of the ground surface. Some areas of this bed could be walked over directly.

There are also six interior landscape beds within the parking lot itself, all six feet wide by 33 feet long. Each contained two ornamental trees, several shrubs, and occasional perennial flowering plants, leaving most or all of the ground surface visible.

Visibility of the ground surface through the project as a whole was poor, at approximately 10 percent. However, within the north and east shrub areas and the interior beds the visibility approached 90 percent which allowed a good assessment of the project site in general. The soil is greyish-brown silty loam with no rocks. The result of the pedestrian survey was negative for both prehistoric and historic sites, features and isolates (see Section 4.3 in **Appendix D**).

A search of the Built Environmental Resource Directory (BERD) provided by the Office of Historic Preservation (2024) was conducted and it was determined that the project area does not have any resources present that have been evaluated under the NRHP.

The past use of the project site was for agriculture, and in the 1980s it was graded and paved for a parking lot (see Section 2.2.3.3 in **Appendix D**). This suggests that the ground on the project site has been minimally disturbed, with native surface soil remaining. The cultural resources investigation conducted by UltraSystems, which included a CHRIS records search of the project site and buffer zone, a search of the SLF by the NAHC, and pedestrian field survey, suggests there is a low potential for undisturbed unique archeological resources to exist on the project site.

The cultural resource study findings suggest that there is a low potential for finding resources during the parking structure construction work. However, grading and trenching activities associated with development of the project would cause new subsurface disturbance and may result in the unanticipated discovery of unique historic and/or prehistoric archaeological resources. In the event of an unanticipated discovery, implementation of mitigation measures **CUL-1** and **CUL-2** described below would ensure that impacts on archeological resources would be less than significant.

Mitigation Measure

MM CUL-1 In the event of an unexpected discovery of a cultural resource, as defined by CEQA Guidelines § 15064.5, during any project-related earth-disturbing activities, all earth-disturbing activities within 60 feet of the find shall be halted and the City of Fountain Valley shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.

A Monitoring and Treatment Plan shall be prepared by a qualified archaeologist. The qualified archaeologist shall recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and



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afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.

MM CUL-2 Prior to the commencement of grading or excavation, workers conducting construction activities and their foremen will receive Worker Environmental Awareness Program (WEAP) training from a qualified archaeologist regarding the potential for sensitive archaeological and paleontological resources to be unearthed during grading activities. The workers will be directed to report any unusual specimens of bone, stone, ceramics or other archaeological artifacts or features observed during grading and/or other construction activities to their foremen and to cease grading activities in the immediate vicinity of the discovery until a qualified archaeologist or Native American cultural monitor is notified of the discovery by the Superintendent of the project site and can assess their significance. The WEAP shall be implemented to educate all construction personnel of the area's environmental conditions and the environmental protection measures that must be adhered to by all workers throughout the duration of project construction.

Training materials shall be language-appropriate for all construction personnel. Upon completion of the WEAP, workers shall sign a form stating that they attended the program, understand all protection measures, and shall abide by all the rules of the WEAP. A record of all trained personnel shall be kept with the construction foreman at the project field construction office and shall be made available to any resource agency personnel. If new construction personnel are added to the project later, the construction foreman shall ensure that new personnel receive training before they start working. The archaeologist shall provide hard copies of the WEAP presentation to the construction foreman.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM CUL-1** and **MM CUL-2** above, the project would result in less than significant impacts to archeological resources.

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

Less than Significant Impact with Mitigation Incorporated

As previously discussed in **Section 4.5.b)** above, the project would be built on lightly disturbed land that has been previously used for agriculture. The site was graded and paved for a parking lot in the 1980s and is in a suburban area. No human remains have been previously identified or recorded onsite.

The proposed project includes grading activities for the installation of infrastructure including water, sewer, and utility lines; and for construction of the proposed buildings. Grading would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. California Health and Safety Code § 7050.5 specifies the procedures to follow during the unlikely discovery of human remains. CEQA § 15064.5 describes determining the significance of impacts on archeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification process during the discovery



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of Native American human remains, descendants, disposition of human remains, and associated grave goods.

In the unlikely event of an unexpected discovery, implementation of mitigation measure **CUL-3** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

Mitigation Measure

MM CUL-3 If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

Level of Significance After Mitigation

With adherence to applicable codes and regulations protecting cultural resources and with implementation of Mitigation Measure **MM CUL-3** above, the proposed project would result in less than significant impacts to human remains.



4.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

- a) **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Less than Significant Impact

According to CEQA Guidelines § 15126.2(d), “uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.” Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Energy resources that will be consumed during project construction include electricity to power electric equipment and lighting, and petroleum to fuel onsite equipment and onroad passenger cars and trucks. Energy resources to be consumed during operation of the project include electricity for purposes such as lighting and fossil fuel primarily for employee commuting to and from the site. Medical personnel and staff will park in the new structure instead of onsite parking spaces that they currently use. No new onroad traffic will be generated. Therefore, onroad impacts on energy use will be negligible.

Electricity

Construction Use

Southern California Edison (SCE) will provide electric power for the proposed project. Temporary electric power for as-necessary lighting and electronic equipment will be provided by SCE. The amount of electricity used during construction would be minimal, as demand would stem primarily from use of electrically powered hand tools. The electricity used for construction activities would be



temporary and minimal; project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity. Therefore, impacts would be less than significant.

Operational Use

Project operation would require electricity for multiple purposes including, but not limited to, building lighting and elevator operation. Since the site is currently an existing parking lot, the project will not result in an increase in the number of employee commutes.

As part of the air quality and greenhouse gas emissions analyses, the California Emissions Estimator Model (CalEEMod) (refer to **Sections 4.3** and **4.8**) was used to estimate the electricity demand for proposed project, which is shown in **Table 4.6-1**. The per capita values were calculated using a service population of 862, the number of spaces previously planned to be available during operations (the number of spaces was subsequently reduced to 784; per-capita energy use is thus slightly conservative).

Table 4.6-1
ESTIMATED EXISTING OPERATIONAL ENERGY USE

Energy Type	Units	Value	Per Capita
Electricity Use	Kilowatt-hours per year	870,021	1,009

Source: calculated by UltraSystems with CalEEMod (2022.1.1.29) (CAPCOA, 2022); see **Appendix B**.

Natural Gas

Construction Use

Southern California Gas Company (SoCalGas) will provide natural gas for the proposed project. Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible and would not have an adverse effect; therefore, construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas, and impacts would be less than significant.

Operational Use

Natural gas will not be used during the project's operation. Natural gas is typically used for building heating and appliances, which a parking structure does not require.

Petroleum

Construction Use

Petroleum-based fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. Construction for the proposed project is anticipated



to take about 12 months, from January 2026 to December 2026. Because of the short-term nature of construction and relatively small scale of the project, the project's petroleum consumption would be negligible when compared to California's daily total use of approximately 1.8 million barrels of petroleum (Ring, 2024).

During project construction, trucks and construction equipment would be required to comply with the ARB's anti-idling regulations. The ARB's In-Use Off-Road Diesel Fueled Fleets Regulation (ARB, 2024c) would also apply. Vehicles driven to or from the project site (delivery trucks, construction employee vehicles, etc.) are subject to fuel efficiency standards established by the Federal Government. Therefore, project construction activities regarding fuel use would not result in wasteful, inefficient, or unnecessary consumption, and impacts would be less than significant.

Operational Use

During operations, most of the fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site, as well as fuels used for alternative modes of transportation that may be used by employees. Project operation is not expected to generate a net increase in vehicle trips to and from OCMC and thus is not expected to increase use of transportation fuels.

Continued use of energy resources is consistent with the anticipated growth within the city and the general vicinity and would not result in energy consumption that would require a significant increase in energy production for the energy provider. Based on the information provided above, the proposed project would have a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact

Title 24 California Green Building Standards Code

The City of Fountain Valley has adopted the California Green Building Code into the City's Code of Ordinances, Chapter 18.28 (ecode.com, 2024). The California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations), commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and non-residential buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The proposed project would be designed and built in compliance with the California Green Building Standards (CAL Green) Code.

Title 24 Building Energy Efficiency Standards

The initial Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations) were established in 1978 in response to a legislative mandate



to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction, and installation of certain systems, equipment, and building components that are installed in buildings.

The Title 24 standards are updated on a three-year schedule, with the most current (2025) standards adopted by the California Energy Commission (CEC) on September 11, 2024 and will go into effect on January 1, 2026. The 2025 Building Energy Efficiency Standards (Energy Code) apply to newly constructed buildings, as well as additions and alterations to existing buildings. They are a vital pillar of California's climate action plan. The 2025 Energy Code will produce benefits to support the state's public health, climate, and clean energy goals. It encourages installation of efficient electric heat pumps and replacing end-of-life heating, ventilation, and air-conditioning (HVAC) units, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The 2025 Energy Code is estimated to save \$4.8 billion in energy costs and reduce greenhouse gas emissions by four million metric tons. Buildings with permit applications applied for on or after January 1, 2026 must comply with the 2025 Energy Code. Public Resources Code §§ 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space (CEC, 2025).

The proposed project would comply with the California Green Building Standards (CALGreen) Code (California Code of Regulations, Title 24, Part 11), which includes mandatory measures for both residential and nonresidential site development, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality (ICC, 2022). Therefore, the proposed project would not conflict with or obstruct an applicable state or local plan for renewable energy or energy efficiency, and there would be a less than significant impact in this regard.



4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
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?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

The information in this section is based on the following two technical reports:

- Geotechnical Feasibility Report, New Multi-Level Parking Structure, MemorialCare Orange Coast Medical Center, Southwest Corner of Talbert Avenue and Foster Street, Fountain Valley,



❖ SECTION 4.7 – GEOLOGY AND SOILS ❖

California. Prepared by Tetra Tech. dated September 1, 2023. A complete copy of this report is included as **Appendix E1** to this IS/MND.

- Paleontological Records Search for the Orange Coast Memorial Medical Center Parking Structure Project in the City of Fountain Valley, Orange County. Prepared by Natural History Museum of Los Angeles County, dated December 8, 2024. A complete copy of this report is included as **Appendix E2** to this IS/MND.

- a) **Would the project 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.**

Less than Significant Impact

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. The project site is not in an Alquist-Priolo Earthquake Fault Zone; the nearest such zone to the site is along a portion of the Newport Inglewood Fault Zone located approximately 2.7 miles southwest, as shown in **Figure 4.7-1**. No active fault trace within the project site was identified during preparation of the Geotechnical Feasibility Report (Tetra Tech, 2023, p. 14).

The closest active faults to the site include the San Joaquin Hills fault located approximately 1.4 miles southeast of the site, the Newport Inglewood fault located approximately 2.7 miles southwest of the site as shown on **Figure 4.7-2**; in addition, the Compton fault is located approximately 6.2 miles west of the site (Tetra Tech, 2023, p. 10). Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low (Tetra Tech, 2023, p. 14). Impacts related to surface rupture of a known active fault would be less than significant.

- ii) **Strong seismic ground shaking?**

Less than Significant Impact

As shown in **Figure 4.7-2**, the project is located within a seismically active region of Southern California, and all structures in the region are susceptible to collapse, buckling of walls, and damage to foundations from strong seismic ground shaking. The geotechnical feasibility report identifies six faults within 20 miles of the project site; three of those faults are buried thrust faults not expressed at the earth's surface (Tetra Tech, 2023, pp. 10-11). The geotechnical feasibility report sets forth seismic design parameters for use in the project design. For instance, the design peak ground acceleration estimated for the project site is 0.362g, where g is the acceleration of gravity (Tetra Tech, 2023, p. 27).



❖ SECTION 4.7 – GEOLOGY AND SOILS ❖

Figure 4.7-1
ALQUIST PRIOLO FAULT ZONES

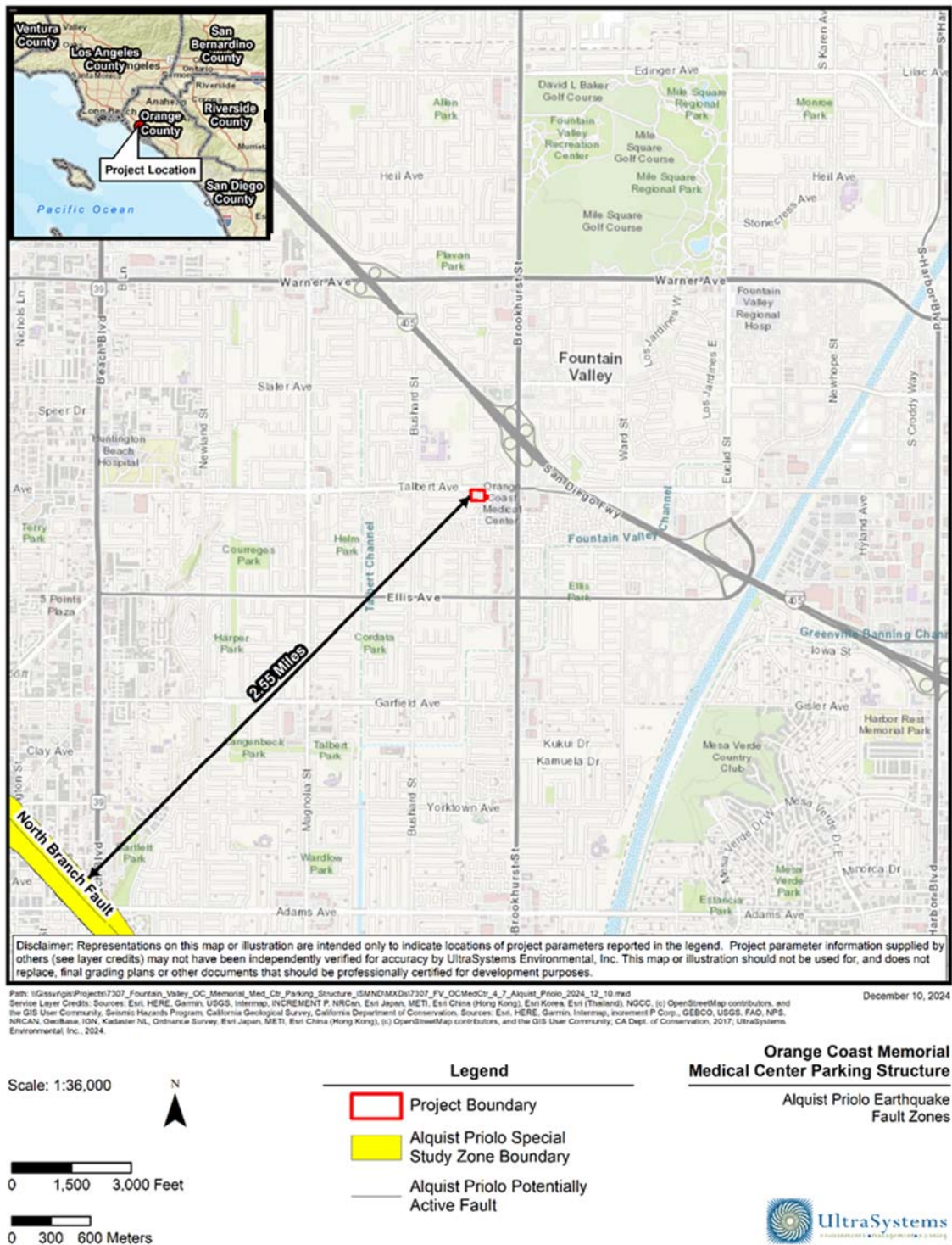


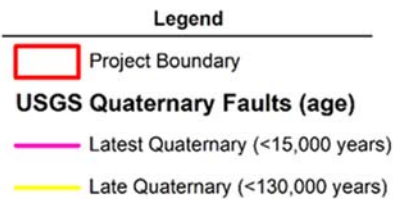
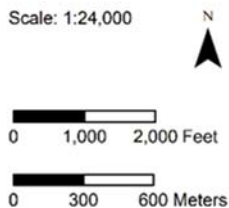


Figure 4.7-2
REGIONALLY ACTIVE FAULTS



Path: I:\Geographic\Project\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXD\7307_FV_OC_4.7_Active_Faults_2025_01_14.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community. Sources: Esri, HERE, Garmin, Intermap, INCREMENT P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; U.S./California Geological Survey, 2006; UltraSystems Environmental, Inc., 2025.

January 14, 2025



**Orange Coast Memorial
Medical Center Parking Structure**
Regionally Active Faults





The project would be constructed in accordance with the applicable 2022 California Building Code (CBC) issued by the California Building Standards Commission and used throughout the state (California Code of Regulations, Title 24, Part 2). In addition, the CBC is adopted as Chapter 18.04 of the City's Municipal Code (ecode360.com, 2024) and provides minimum standards to protect property and for public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site.

Although the project site is susceptible to occasional moderate/high ground shaking from active faults in the region, design and construction in accordance with the CBC would address issues related to potential seismic ground shaking at the site. For these reasons, impacts from strong ground shaking would be less than significant and mitigation is not required.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact

Liquefaction of soils can be caused by ground shaking during earthquakes and is generally known to occur in saturated or nearly saturated soils at depths shallower than about 50 feet. Loose, relatively clean granular soils and low plasticity silts are susceptible to liquefaction whereas the stability of clayey silts, silty clays and clays are not typically adversely affected by ground shaking (Tetra Tech, 2023, p. 14).

The project site is in a Zone of Required Investigation for Liquefaction mapped by the California Geological Survey (CGS, 2024), as shown in **Figure 4.7-3**. The depth to groundwater used in the liquefaction analysis conducted as part of the geotechnical feasibility study was four feet below ground surface (Tetra Tech, 2023, p.15). The on-site sandy silts and silty sands encountered at depths between approximately four to 60 feet below ground surface (bgs) are susceptible to liquefaction.¹³ The fine-grained soils at the site are not considered to be susceptible to liquefaction and related ground failure (Tetra Tech, 2023, p. 16). Project development could exacerbate hazards arising from liquefaction. The Geotechnical Evaluation Report recommends remedial grading and either shallow footing foundations or deep pile foundations; such recommendations were formulated in light of the liquefaction potential onsite (Tetra Tech, 2023, pp. 20-21 and 27-33). Impacts would be less than significant after implementation of relevant recommendations in the geotechnical feasibility report.

iv) Landslides?

No Impact

The site is not located in an Earthquake-Induced Landslide Hazard Zone (see **Figure 4.7-3**). The site is relatively level, and no evidence of landsliding was observed at or in the immediate vicinity of the site. Thus, an earthquake-induced landslide is not considered to be hazard at the site. No impact would occur.

¹³ Sand is soil with particle sizes from 2 mm to 0.05 mm diameter; and silt is soil ranging from 0.05 to 0.002 mm diameter. Silty sand is a mixture of sand and silt that is mostly sand, and sandy silt vice-versa (SSSA, 2025).



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

Less than Significant Impact

Construction

Construction of improvements would involve disturbance and exposure of substantial amounts of soil, leaving such soil susceptible to extensive erosion if effective erosion control measures were not used. To minimize the potential for water and wind erosion, the project would adopt construction best management practices (BMPs) in accordance with the City of Fountain Valley Stormwater Management Program. The City of Fountain Valley is a permittee on the municipal stormwater permit (MS4 permit) for the portion of the Santa Ana Watershed within Orange County (Order No. R8-2010-0062). The MS4 permit and its associated Technical Guidance Document incorporate Low Impact Development (LID) Best Management Practices to the maximum extent practicable (MEP) (SARWQCB, 2013, p. 1-2). LID is "...a stormwater management strategy that emphasizes conservation and the use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial and industrial setting." (SARWQCB, 2013, p. 1-2).

Categories of BMPs relevant to minimizing erosion are erosion control BMPs, that cover soil and/or bind soil particles together, to prevent soil particles from being detached from the ground surface, such as by water or wind; sediment control BMPs, barriers and/or filters that prevent soil particles from being transported offsite by water and being deposited elsewhere; wind erosion control BMPs; and tracking control BMPs, that prevent soil from being tracked offsite by vehicles. Construction impacts regarding soil erosion would be less than significant after implementation of relevant requirements in the MS4 permit and Technical Guidance Document.

Operation

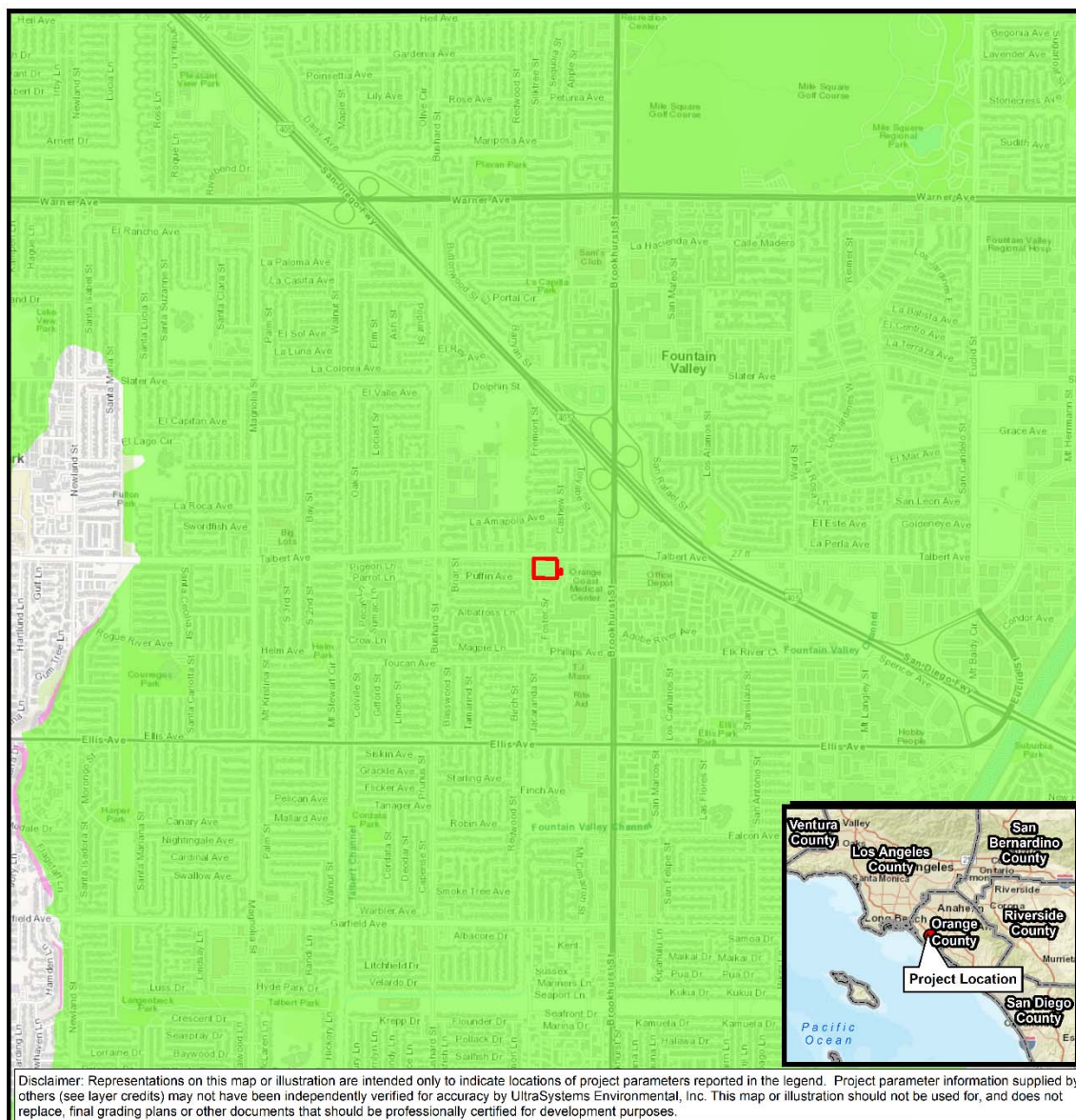
Most proposed improvements would be underground within roadways or storm channel rights-of-way. No erosion would be expected after trenches were backfilled and the previous land cover (typically, roadway pavement) replaced. Impacts would be less than significant.

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



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Figure 4.7-3
LANDSLIDES AND LIQUEFACTION



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: I:\GIS\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXD\7307_FV_OCMedCtr_4.7_Landslide_Liquefaction_2024_12_10.mxd
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December 11, 2024

Scale: 1:24,000



0 1,000 2,000 Feet

0 250 500 Meters

Legend

- Project Boundary
- Earthquake-induced Landslides
- Liquefaction

Note: The liquefaction and earthquake-induced landslide zones mapped here are zones of required investigation mapped by the California Geological Survey.

Orange Coast Memorial Medical Center Parking Structure

Landslides and
Liquefaction





Less than Significant Impact

Soils underlying the project site consist of artificial fill material comprised of black to olive brown sandy silt, sandy lean clay, and silty sand that were stiff to medium dense, and were generally moist; the fill also included some aggregate base and concrete debris. The artificial fill was underlaid by Quaternary-age alluvial soils to a depth of between about 58 and 63 feet and generally consisting of layers of soft to stiff sandy lean clay and silt with some very thin organic lenses interbedded with layers of very loose to dense silty sand and poorly-graded sands mostly in a wet condition (Tetra Tech, 2023, pp. 8-9).

Liquefaction and Landslides

Impacts related to liquefaction and landslides are discussed above in **Section 4.7 a)**.

Lateral Spreading

Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Due to the relatively level topography and the absence of free face slopes, lateral spreading is not considered to be a hazard at the site (Tetra Tech, 2023, p. 17). No impact would occur.

Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load. Collapse typically occurs in young, unconsolidated, low-density, loose, dry soils common in arid to semi-arid regions. Collapsible soils are usually composed of granular particles cemented together by clay bonds. When such soils become saturated the clay bonds dissolve, causing substantial shrinkage. Because the soils have been saturated in the past up to a depth of four feet and the consolidation test indicates some potential swelling, it is concluded that collapsible soils are not considered a hazard at the site (Tetra Tech, 2023, p. 18). Impacts would be less than significant.

Subsidence

Land subsidence is the lowering of the ground surface due to extraction or lowering of groundwater levels or other fluids (e.g., oil). The fluid withdrawal causes the alluvial sediments in the basin to compact. Furthermore, ground subsidence can be intensified where drainage of organics and peat horizons occur. Damage caused by subsidence can be visible soil cracks, fissures, or surface depression. The project site is in an area of subsidence mapped by the U.S. Geological Survey. Since only minimal accumulations of organics and peat soils were encountered beneath the project site, subsidence due to consolidation of peat is not considered a hazard at the site (Tetra Tech, 2023, p. 19). Impacts would be less than significant.

- d) **Would the project 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?**

Less than Significant Impact

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage. Measurements of expansion index in two subsurface



❖ SECTION 4.7 – GEOLOGY AND SOILS ❖

soil samples conducted as part of the geotechnical evaluation yielded expansion indices of 12 and 21, indicating no-to-low expansion potential. For design purposes the on-site fine-grained soils should be considered expansive per 2022 CBC, §1803.5.3 (Tetra Tech, 2023, p. 18). The Geotechnical Evaluation Report recommends remedial grading and either shallow footing foundations or deep pile foundations (Tetra Tech, 2023, pp. 27-29); such recommendations were devised in consideration of expansive soils identified onsite. Impacts would be less than significant after compliance with the above-referenced recommendations.

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

No Impact

The project does not propose fixtures (such as toilets and sinks) that would generate wastewater. Thus, no impacts associated with septic tanks or alternative wastewater disposal systems would occur.

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

Less than Significant Impact with Mitigation Incorporated

The project site boundary, and much of the eastern portion of the city of Fountain Valley, is encompassed entirely by a single geological deposit (Morton, 2004). The project site is underlain by “Young alluvial fan deposits” (Qyf) (Miller 2004). This deposit consists of unconsolidated deposits of alluvial fans and headward drainages of fans predominately of gravel, sand, and silt. This deposit dated to the Holocene (10,000 years ago to the present) and late Pleistocene.

The results of a Paleontological Resources Records Search at the Natural History Museum of Los Angeles County (NHMLA), conducted on December 8, 2024 by Dr. Alyssa Bell, indicated that there are no fossil localities that lie directly within the proposed project area, but there are fossil localities nearby from the same sedimentary deposits that may occur in the proposed project area, either at the surface or at depth (Bell, Alyssa, 2024). **Table 4.7-1** shows the closest known localities in the collection of the NHMLA.

Table 4.7-1
FOSSIL LOCALITIES IN THE PROJECT REGION

Locality Number	Location	Formulation	Taxa	Depth
LACM VP 7657 - 7659	Ellis Avenue & Patterson Lane, Huntington Beach	Unknown Formation (Pleistocene; gray siltstone)	School shark (<i>Galeorhinus</i>), eagle ray (<i>Myliobatus</i>), goby (<i>Lepidogobius</i> , <i>Leptocottus</i>), midshipmen (<i>Porichthys</i>), croaker (<i>Seriphus</i>), flatfish (<i>Citharichthys</i>), cusk-eel (<i>Otophidium</i>), skate (<i>Raja</i>),	150 - 350 ft bgs



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Locality Number	Location	Formulation	Taxa	Depth
			angelshark (<i>Squatina</i>), sculpin (<i>Cottidae</i>)	
LACM VP 6370 - 6371	Near the intersection of Superior Avenue & Pacific Coast Highway; Newport Beach	Terrace deposits (Pleistocene, silty sandstones)	Horse (<i>Equus</i>), other unspecified mammals; Invertebrates: clam (<i>Tivela</i> , <i>Donax</i> , <i>Luciniscia</i>), scaphopod (<i>Dentalium</i> , <i>Antalis</i>), marine gastropods (<i>Glossaulax</i> , <i>Chlorostoma</i>)	Unknown (found during grading for parking lot construction)
LACM VP 7366, 7422 - 7424, 7679; LACM IP 17427	The Huntington Beach Urban Center Sand Borrow Area, N of Pacific Coast Hwy and W of Huntington Dr	Unknown formation (Pleistocene, sands)	Legless lizard (<i>Anniella</i>), tree frog (<i>Hyla</i>), gopher snake (<i>Pituophis</i>), garter snake (<i>Thamnophis</i>), kingsnake (<i>Lampropeltis</i>), ring-necked snake (<i>Diadophis</i>), garter snake (<i>Thamnophis</i>), long-nosed snake (<i>Rhinocheilus</i>), coachwhip (<i>Masticophis</i>), salamander (<i>Enatina</i>), slender salamander (<i>Batrachoseps</i>), skinks (<i>Plestiodon</i>), alligator lizard (<i>Gerrhonotus</i>), toad (<i>Bufo</i>), side-blotched lizard (<i>Uta</i>), spiny lizard (<i>Sceloporus</i>), climbing salamander (<i>Aneides</i>), turtle (<i>Clemmys</i>); quail (<i>Callipepla</i>), rail (<i>Rallus</i>); vole (<i>Microtus</i>), pocket gopher (<i>Thomomys</i>), shrew (<i>Sorex</i>), kangaroo rat (<i>Dipodomys</i>), cottontail rabbit (<i>Sylvilagus</i>), mole (<i>Scapanus</i>), harvest mouse (<i>Reithrodontomys</i>), deer mouse (<i>Peromyscus</i>), pack rat (<i>Neotoma</i>), chipmunk (<i>Eutamias</i>), bat (<i>Chiroptera</i>), Mammoth (<i>Mammuthus</i>), horse (<i>Equus</i>), bison (<i>Bison</i>); stickleback (<i>Gasterosteus</i>), houndshark (<i>Triakis</i>); land snails (<i>Gastropoda</i>)	Unknown
LACM VP 65113	5092 Wintersburg Road;	Unknown formation (Pleistocene)	Mammoth (<i>Mammuthus</i>), bison (<i>Bison</i>); uncatalogued invertebrates	6 - 20 feet bgs



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Locality Number	Location	Formulation	Taxa	Depth
	Huntington Beach			
LACM IP 23657	Huntington Central Park West	Unknown formation (Pleistocene; sands)	Invertebrates (uncatalogued)	Surface
LACM VP 3267	Near intersection of 19th & Anaheim in Costa Mesa	Unknown Formation (Pleistocene)	Proboscidea	Unknown

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

Excavations or grading that extend into the uppermost layers of soil and deeper excavation into the Pleistocene sediments in the proposed project area may encounter significant fossil vertebrate and invertebrate remains. Any substantial excavations below the uppermost layers should be closely monitored to quickly and professionally collect any specimens. Grading and excavation activities associated with development of the proposed project would cause new subsurface disturbance and could result in the unanticipated discovery of paleontological resources, for which mitigation is required.

Mitigation Measure

MM GEO-1 Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Fountain Valley, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging



❖ SECTION 4.7 – GEOLOGY AND SOILS ❖

specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

Level of Significance After Mitigation

With implementation of **MM GEO-1**, potential impacts to paleontological resources would be reduced to a less than significant level.



4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

4.8.1 Background Information on Greenhouse Gas Emissions

Life on Earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90 percent of this heat is then absorbed by carbon dioxide (CO₂) and other greenhouse gases (GHGs) and radiated back toward the surface, which is warmed to a life-supporting average of 59 degrees Fahrenheit (°F) (NASA, 2024).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric CO₂. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make CO₂. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs (NASA, 2024).

GHGs are defined under the California Global Warming Solutions Act of 2006 as CO₂, methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) (AB 32, chapter 488). HFCs, PFCs, and SF₆ would not be emitted in significant amounts by the new activities in the proposed Orange Coast Memorial Medical Center Parking Structure project, so they will not be discussed further in this section.

Associated with each GHG species is a “global warming potential” (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of CO₂, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CO₂, CH₄, and N₂O are 1, 25, and 298, respectively (GMI, 2022). “Carbon dioxide equivalent” (CO₂e) emissions are calculated by weighting each GHG compound’s emissions by its GWP and then summing the products.

Carbon Dioxide (CO₂). Carbon dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO₂ is produced when an organic carbon material (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO₂ concentrations were stable at a range of 275 to 285 ppm (IPCC, 2007). The National Oceanic and Atmospheric Administration’s Earth



❖ SECTION 4.8 – GREENHOUSE GAS EMISSIONS ❖

System Research Laboratory indicates that the global concentration of CO₂ was 419.3 parts per million (ppm) in 2023 (NOAA, 2024). These concentrations of CO₂ exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH₄). Methane is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH₄ is combustible and is the main constituent of natural gas, a fossil fuel. CH₄ is released when organic matter decomposes in low-oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH₄. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N₂O). Nitrous oxide is a colorless, non-flammable gas with a sweetish odor, commonly known as “laughing gas,” and sometimes used as an anesthetic. N₂O is naturally produced in the oceans and in rainforests (USEPA, 2024). Manmade sources of N₂O include the use of fertilizers in agriculture, nylon, and nitric acid production; cars with catalytic converters, and the burning of organic matter. Concentrations of N₂O also began to rise at the beginning of the Industrial Revolution.

4.8.2 Regulatory Setting

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Board (ARB) regulates at the state level; and the South Coast Air Quality Management District (SCAQMD) regulates at the air basin level in the project area.

4.8.2.1 Federal Regulations

The USEPA collects several types of GHG emissions data. These data help policymakers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

EPA is also getting GHG reductions through partnerships and initiatives, evaluating policy options, costs, and benefits, advancing the science, partnering internationally and with states, localities, and tribes, and helping communities adapt.

Corporate Average Fuel Economy (CAFE) Standards

NHTSA's Corporate Average Fuel Economy (CAFE) standards regulate the distance vehicles must cover per gallon of fuel. The agency establishes CAFE standards for passenger cars and light trucks (referred to as light-duty vehicles), as well as separate guidelines for fuel consumption by medium- and heavy-duty trucks and engines. The latest CAFE standards were proposed by the NHTSA in July 2023 and finalized in June 2024 (NHTSA, 2024). Effective August 23, 2024, passenger cars and light trucks will see an increase of 2 percent annually for passenger cars in model years 2027–31. For light trucks, the increase will be 0 percent per year for model years 2027–28 and 2 percent per year for model years 2029–31. Additionally, NHTSA is setting final fuel efficiency standards for heavy-duty



pickup trucks and vans (HDPUVs) with a 10 percent annual increase for model years 2030–32 and further increases for model years 2033–35.

Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

On March 31, 2020, the USEPA and the NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program, which revoked California’s authority to set its own GHG emissions standards and set zero-emission vehicle (ZEV) mandates in California. The loss of the ZEV sales requirements would likely have resulted in additional gasoline-fueled vehicles being sold in the State and increases in criteria pollutant emissions. On April 30, 2020, USEPA and NHTSA issued the Final SAFE Rule (ARB, 2020), which relaxed the federal GHG emissions and CAFE standards and would probably have resulted in increased CO₂ emissions. However, this regulation was repealed on December 21, 2021, by the Biden administration (NHTSA, 2021).

4.8.2.2 State Regulations

Executive Order S 3-05

On June 1, 2005, the governor issued EO S 3-05, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

To meet these targets, the Climate Action Team (CAT)¹⁴ prepared a report to the governor in 2006 that contained recommendations and strategies to help ensure that the targets in EO S-3-05 would be met.

Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. AB 32 required that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also required that by January 1, 2008, the ARB determine what the statewide GHG emissions level was in 1990, and that it had to approve a statewide GHG emissions limit, so it could be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of CO₂e (MMTCO₂e), on December 6, 2007, in its Staff Report. Therefore, in 2020, emissions in California were required to be at or below 427 MMTCO₂e.

Under the “business as usual or (BAU)¹⁵” scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year, as noted below. It was estimated that the

¹⁴ The Climate Action Team (CAT) members are state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency (Cal/EPA). They coordinate statewide efforts to implement global warming emission reduction programs and the state’s Climate Adaptation Strategy.

¹⁵ A business-as-usual (BAU) scenario assumes that none of the Scoping Plan measures are implemented (ARB, 2022).



2020 estimated BAU of 596 MMTCO₂e would have required a 28 percent reduction to reach the 1990 level of 427 MMTCO₂e.

As part of the 2014 update, the ARB revised the 2020 Statewide limit to 431 million MT of CO₂e, an approximately one percent increase from the original estimate. The 2020 BAU forecast in the update is 509 million MT of CO₂e. The state would need to reduce those emissions by 15.3 percent to meet the 431 million MT of CO₂e 2020 limit.

2020 Emissions and Target Achievement

According to the ARB 2022 report on GHG emissions from 2000 to 2020, the state's actual emissions in 2020 were 369.2 MMTCO₂e, significantly below the 2020 target of 431 MMTCO₂e. The decrease in emissions was primarily driven by the impacts of the COVID-19 pandemic, which temporarily reduced emissions in sectors like transportation and industry (ARB, 2022a).

Climate Change Scoping Plan

The first AB 32 Scoping Plan (ARB, 2008) contained the main strategies to achieve the 2020 emissions cap. The GHG reduction strategies contained in the AB 32 Scoping Plan included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. In August 2011, the Scoping Plan was reapproved by the Board and included the Final Supplement to the Scoping Plan Functional Equivalent Document (ARB, 2011). The 2011 Scoping Plan expanded the list of nine Early Action Measures into a list of 39 Recommended Actions contained in Appendices C and E of the Plan. In May 2014, ARB developed, in collaboration with the CAT, the First Update to California's Climate Change Scoping Plan (Update) (ARB, 2014), which showed that California was on track to meet the near-term 2020 GHG limit and was well positioned to maintain and continue reductions beyond 2020 as required by AB 32. In November 2017, ARB published the 2017 Scoping Plan (ARB, 2017) which was built upon the former Scoping Plan and Update by outlining priorities and recommendations for the state to achieve its target of a 40 percent reduction in GHGs by 2030, compared to 1990 levels.

In December 2022, the ARB approved its Final 2022 Scoping Plan Update (ARB, 2022b), which adds carbon neutrality to the former Scoping Plan. The 2022 Plan identifies a technologically feasible, cost-effective path to reduce GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 or earlier. Through the lens of carbon neutrality, the 2022 Plan expands the scope to more meaningfully consider how our natural and working lands (NWL) contribute to our long-term climate goal through carbon capture. The 2022 Plan focuses on efforts to shift away from fossil fuels resulting in a 94 percent decrease in liquid petroleum demand, a 71 percent decrease in smog-related pollutants, a job increase of 4 million, and \$200 billion of health cost savings for Californians (ARB, 2022).

Renewables Portfolio Standard (Scoping Action E-3)

The California Energy Commission estimates that in 2000 about 12 percent of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current Renewables Portfolio Standard (RPS) was intended to increase that share to 33 percent by 2020. It was reported that in 2021, over 37 percent of California's retail electricity sales were provided by RPS-certified renewables (CEC, 2021). Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. In



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October 2015, Governor Brown signed Senate Bill (SB) 350, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Signed in 2018, SB 100 requires an increase in the RPS to 60 percent by 2030, along with a long-term goal of 100 percent of RPS and zero-carbon energy by 2045 (CEC, 2021).

Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008, and was signed by the governor on September 30, 2008. Per SB 375, the transportation sector is the largest contributor of GHG emissions and accounts for approximately 45 percent of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued EO B-30-15, which added an interim target of GHG emissions reductions to help ensure the State meets its 80 percent reduction by 2050, as set in EO S-3-05. The interim target is to reduce GHG emissions by 40 percent by 2030. It also directs State agencies to update the Scoping Plan, update the Adaptation Strategy every three years, and take climate change into account in their planning and investment strategies. Additionally, it requires the State's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects.

Title 24

Although not originally intended to reduce GHGs, California Code of Regulations Title 24 Part 6: California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. The California Energy Commission updates the standards every three years. The 2022 standard, effective January 1, 2023, encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more (CEC, 2024).

Title 24 Building Energy Efficiency Standards

During the 2021 Triennial Code Adoption Cycle, California state agencies reviewed the most recent edition of national model codes and standards and made amendments and additions to most parts of the California Building Standards Code. The latest version of Title 24 of the California Code of Regulations (Title 24) was published on July 1, 2022, and became effective on January 1, 2023 (State of California, 2023a). Below are modified chapters in Part 6 Building Energy Efficiency Standards that are relevant to the proposed project and would reduce GHG emissions (State of California, 2023a).

Administrative Regulations:



- Lighting controls and mechanical systems Acceptance Test Technician Certification Providers (ATTCPs) must record related Certificates of Compliance, Installation, and Acceptance Testing in an electronic database. § 10-103.1(c)3H and § 10-103.2(c)3H.¹⁶
- Energy Commission-approved community shared solar or renewable system and energy storage system qualification requirements updated. §10-115.¹⁷

Mandatory Requirements:

- Demand responsive lighting controls trigger changed to 4,000 watts or more, and requirements added for controlled receptacles. § 110.12 & § 160.5(b)4E.^{18,19}
- Mechanical ventilation systems of enclosed parking garages must meet the requirements of § 120.6(c). § 160.2(d).^{20,21}

Title 24 Part 11, California Green Building Standards Code

The California Green Building Standards Code (Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development.

In the 2021 Triennial Code Adoption Cycle, California state agencies made amendments and additions to most parts of the California Building Standards Code, Title 24 of the California Code of Regulations (Title 24) which became effective on January 1, 2023 (State of California, 2023a). Below are modified chapters in Part 11 California Green Building Standards Code that would reduce GHG emissions and are relevant to the proposed project.

4.8.2.3 South Coast Air Quality Management District (SCAQMD)

Over the past two decades, South Coast AQMD has advanced various programs to address climate change as part of its ongoing efforts to reduce local air pollution. These include initiatives focused on energy conservation, low-carbon fuel technologies (such as natural gas vehicles, electric-hybrids, hydraulic-hybrids, and battery-electric vehicles), renewable energy, vehicle miles traveled (VMT) reduction, and market-based incentive programs (SCAQMD, 2024). A few of the programs initiated by the SCAQMD are:

- The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program).
- Community Air Protection Program (CAPP) – Incentives.

¹⁶ 10-103 – Permit, Certificate, Informational, And Enforcement Requirements For Designers, Installers, Builders, Manufacturers, And Suppliers. Accessed online at <https://energycodeace.com/content/10-103-permit-certificate-informational-and-enforcement-r>.

¹⁷ 10-115 – Community Shared Solar Electric Generation System Or Community Shared Battery Storage System Compliance Option For On-Site Solar Electric Generation Or Battery Storage Requirements. Accessed online at <https://energycodeace.com/content/10-115-community-shared-solar-electric-generation-system-or>.

¹⁸ Section 110.12 – Mandatory Requirements For Demand Management. Accessed online at <https://energycodeace.com/content/section-11012-mandatory-requirements-for-demand-management>.

¹⁹ Section 160.5 - Mandatory Lighting Requirements for Indoor and Outdoor Spaces. Accessed online at <https://energycodeace.com/content/section-1605-mandatory-lighting-requirements-for-indoor-and>.

²⁰ Section 120.6 – Mandatory Requirements for Covered Processes. Accessed online at <https://energycodeace.com/content/section-1206-mandatory-requirements-for-covered-processes-n>.

²¹ Section 160.2 - Mandatory Requirements for Ventilation and Indoor Air Quality. Accessed online at <https://energycodeace.com/content/section-1602-mandatory-requirements-for-ventilation-and-ind>.



- Off-Road Diesel Engines (SOON Program).

Air Quality-Related Energy Policy

In 2011, the SCAQMD Board adopted an Air Quality-Related Energy Policy (SCAQMD, 2011) that integrates air quality, energy, and climate change issues in a coordinated and consolidated manner. The Energy Policy presents policies to guide and coordinate SCAQMD efforts and actions to support the policies.

For the proposed parking structure project, the following policies and actions from the SCAQMD Air Quality-Related Energy Policy are relevant to GHG emissions:

Relevant Policies:

Policy 1 – Promote zero and near-zero emission technologies to meet air quality, energy security, and climate change objectives through ultra-clean energy strategies.

Policy 2 – Promote zero and near-zero emission technologies in both stationary and mobile applications to the extent feasible.

Policy 4 – Promote demand-side management programs to manage energy demand growth. Such programs include but are not limited to energy conservation, energy efficiency, and load-shifting measures.

Policy 5 – Promote in-Basin distributed electricity generation, with emphasis on distributed renewable electricity generation, to reduce reliance on energy imports or central power plants, and to minimize the air quality, climate, and cross-media environmental impacts of traditional power generation.

Policy 9 – Educate and incentivize the public and businesses to shift toward the lowest emissions technologies, considering emissions of criteria pollutants, toxic air contaminants, greenhouse gases, energy efficiency, and the potential to create local jobs.

Policy 10 – Incorporate energy efficiency and conservation as an emissions reduction strategy for stationary and mobile sources through AQMD’s planning, rule-making, advocacy, and CEQA commenting activities.

Relevant Actions:

Action 1 – Advocate for studies on zero and near-zero emission technologies that reduce GHG emissions.

Action 3 – Develop an AQMD action plan to develop and deploy electrification and other zero and near-zero emissions measures for various sectors.

Action 9 – Partner with local utilities and local government stakeholders to promote energy conservation and efficiency.



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These policies and actions aim to reduce GHG emissions from the proposed project's energy use and operations, focusing on energy efficiency, electrification, and the adoption of low-emission technologies.

4.8.2.4 Local Regulations

The City of Fountain Valley's General Plan Update EIR (City of Fountain Valley, 2023) includes goals and policies in several elements that also reduce GHG emissions:

Open Space and Conservation Element

- **Policy OSC-3.2** Alternative fueled vehicles. Support and facilitate the expansion of infrastructure for alternatively fueled public and private automobiles and trucks to reduce vehicle emissions and improve local and regional air quality.
- **Policy OSC-3.3** Energy and water conservation. Encourage new development and substantial rehabilitation projects to exceed energy and water conservation and reduction standards set in the City's Municipal Code and the California Building Code.
- **Policy OSC-3.8** Renewable energy. Promote the use of renewable energy sources to serve public and private sector development to reduce reliance on fossil fuels and increase resiliency during prolonged and excessively high temperatures.

4.8.3 Impact Thresholds

The following thresholds of significance are based on criteria in **Appendix G** of the State CEQA Guidelines. A project has the potential to create a significant environmental impact if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHG.

4.8.4 Impact Analysis

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

Less than Significant Impact

California has enacted several laws related to GHG emissions and climate change. Much of this legislation sets aggressive goals for GHG reductions within the state. Per Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. However, neither a threshold of significance nor any specific mitigation measures are included or provided in these CEQA Guideline amendments.

GHG Significance Threshold

Neither the City of Fountain Valley, the SCAQMD, nor the State CEQA Guidelines Amendments has adopted quantitative thresholds of significance for addressing a project's GHG emissions. Nonetheless, § 15064.4 of the CEQA Guidelines serves to assist lead agencies in determining the



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significance of the impacts of GHGs. As required in § 15064.4 of the CEQA Guidelines, this analysis includes an impact determination based on (1) an estimate of the amount of GHG emissions resulting from the Project; (2) a qualitative analysis or performance-based standards; (3) quantification of the extent to which the Project increases GHG emissions as compared to the existing environmental setting; and (4) the extent to which the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

SCAQMD's guidance (SCAQMD, 2008) uses a tiered approach rather than a single numerical emissions threshold. If a project's GHG emissions "fail" the non-significance of a given tier, then one goes to the next tier.

The threshold selected for this analysis is Tier 3, which establishes a screening significance threshold level to determine significance using a 90 percent emission capture rate. For Tier 3, the SCAQMD estimated that at a threshold of approximately 3,000 metric tons (tonnes) CO₂e per year emissions would capture 90 percent of the GHG emissions from new residential or commercial projects.

The present analysis uses 3,000 tonnes of CO₂e per year as the significance threshold under the first impact criterion in **Section 4.8.3**.

Construction GHG Emissions

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment, the import or export of soil, and the disposal of construction waste. To be consistent with the guidance from the SCAQMD for calculating criteria pollutants from construction activities, only GHG emissions from onsite construction activities and offsite hauling and construction worker commuting are considered as project generated. As explained by the California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from the manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level; CEQA does not require an evaluation of speculative impacts (CEQA Guidelines § 15145). Therefore, the construction analysis does not consider such GHG emissions but does consider non-speculative onsite construction activities, and offsite hauling and construction worker trips. All GHG emissions are identified on an annual basis.

Estimated GHG emissions from the Orange Coast Memorial Medical Center Project's onsite and offsite project construction activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.29 (CAPCOA, 2024), which was described in **Section 4.3.7**. The results of this analysis are presented in **Table 4.8-1**. The total construction GHG emissions would be **525 metric tons**. Consistent with SCAQMD recommendations and to ensure that construction emissions are assessed in a quantitative sense, construction GHG emissions have been amortized over 30 years. The amortized value for the project is **17.5 MTCO₂e**.



Table 4.8-1
PROJECT CONSTRUCTION-RELATED GHG EMISSIONS

Year	Annual Emissions (MT)			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
2026	514	0.02	0.03	525

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2024).

Modeling results are in **Appendix B**. For each operational year, the amortized emissions of **17.5 MTCO₂e** would be far below the threshold of 3,000 MT of CO₂e per year and therefore would be less than significant. No mitigation is necessary.

Operational GHG Emissions

The proposed Project would build a five-level parking structure (one underground level, one at-grade level, and three above-ground levels, including the rooftop level) with 784 parking spaces; the site is currently developed with a surface parking lot with 231 spaces, which would result in operational emissions from area sources and energy demand.²² The project would not produce net regional mobile emissions because medical and support staff would be making the same number of trips whether they parked at existing lots on the medical center campus or in the new structure. Therefore, mobile source emissions were not included in the results. The same is true for solid waste generation. The operational GHG emissions calculated by CalEEMod Version 2022.1.1.29 (CAPCOA, 2024) are shown in **Table 4.8-2**. Total annual unmitigated emissions from the Project, including the amortized construction emissions, would be **235.16 MTCO₂e per year**.²³

Table 4.8-2
PROJECT OPERATIONAL GHG EMISSIONS

Emissions Source	Estimated Project Generated CO ₂ e Emissions (Metric Tons per Year)
Area Sources	6.28
Energy Demand (Electricity & Natural Gas)	211
Mobile (Motor Vehicles)	0
Solid Waste Generation	0
Water Demand	0.38
Construction Emissions ^a	17.5
Total	235.16

²² The GHG emissions modeling is based on 862 parking spaces, from a previous plan for the proposed project.

²³ Calculations are provided in **Appendix B**.



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Emissions Source	Estimated Project Generated CO ₂ e Emissions (Metric Tons per Year)
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^aTotal construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2024)

Therefore, under the first significance criterion, GHG emissions would be less than significant, and no mitigation is necessary.

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

Less than Significant Impact

The City of Fountain Valley does not have an adopted climate action plan. An approach to identifying potential conflict with GHG reduction plans, policies, or regulations is to examine the updated General Plan provisions that prescribe or enable GHG emissions control. The Final EIR for the General Plan Update (City of Fountain Valley, 2023) lists policies in the General Plan Update that reduce GHG emissions and help quantify emissions reductions. However, the policies prescribe actions to be taken by the City and not measures to be implemented by a project proponent. Nevertheless, the proposed project would not conflict with any of the GHG emission reduction policies. As was demonstrated in **Section 4.11**, the proposed project site has a general plan land use designation and zoning district of the Orange Coast Memorial Medical Center Specific Plan (Specific Plan). The proposed project would be developed in conformance with the goals and objectives of the Specific Plan as there would be no change of use, but continuation of the same medical uses as designated in the Specific Plan. Implementation of the proposed project would result in less than significant impacts in relation to consistency with local land use policies or regulations. Therefore, the project would not hinder the GHG emission reductions of the General Plan Update.

**4.9 Hazards and Hazardous Materials**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
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?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?			X	
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?				X
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?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

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

Less Than Significant Impact**Construction**

Construction of the project would involve the use of hazardous materials, including fuels, oils, greases, paints and other architectural coatings, fertilizers, and pesticides. These materials would be stored and used in compliance with existing regulations of several agencies, including the US Environmental Protection Agency (USEPA), US Department of Transportation, California Department of Toxic Substances Control, Occupational Health and Safety Administration, Division of Occupational Safety and Health, California Environmental Protection Agency (California EPA) and the Orange



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County Environmental Health Division (EHD).²⁴ Construction workers and contractors would be trained on the regulatory requirements for transporting, storing, using, and disposing of hazardous materials. Impacts would be less than significant.

Operation

As a parking structure, a minimal amount of hazardous materials such as paints, cleansers, and pesticides would be stored on site. These materials would be stored and used in accordance with the existing regulations of the agencies identified above. Impacts arising from routine transport, storage, and use of hazardous materials would be less than significant.

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

Less Than Significant Impact

Construction

Construction of the project would involve the use of hazardous materials. The project construction contractor would maintain equipment and supplies to contain and clean hazardous materials spills on site. The construction contractor would train construction workers on the containment and cleanup of small spills of hazardous materials and would notify the EHD immediately in case of a release of hazardous materials of quantity and/or toxicity that construction workers could not safely contain and clean up. The impacts resulting from accidental releases of hazardous materials would be less than significant.

Operation

As a parking structure, project operation would involve the use of only small amounts of hazardous materials for cleaning and maintenance purposes, such as paints, cleaners, solvents, pesticides, and fertilizers. Materials would be stored and disposed of according to the instructions on the product labels, which, in turn, would comply with the regulations of agencies such as the USEPA and the California EPA. Therefore, no hazardous material releases in quantity or toxicity that could pose substantial hazards to the public or the environment are expected to occur. Impacts would be less than significant.

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

Less Than Significant Impact

Fountain Valley High School, located at 17816 Bushard Street, is the only school within a one-quarter mile radius of the project site, located approximately 900 feet to the northwest. The construction and operation of the project would not emit hazardous emissions or handle hazardous materials that

²⁴ The Orange County Environmental Health Division (EHD) is the Certified Unified Program Agency (CUPA) for Orange County; the Certified Unified Program coordinates and makes consistent enforcement of several state and federal regulations governing hazardous materials.



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would pose substantial health hazards to people at Fountain Valley High School, due to the distance to the school from the site of the project. The impacts would be less than significant.

- d) **Would the project 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?**

Less than Significant Impact

Government Code § 65962.5 requires the Department of Toxic Substances Control (DTSC) to compile and update, at least annually, lists of the following:

- Hazardous waste and substances sites from the DTSC EnviroStor database.
- Leaking Underground Storage Tank (LUST) sites by county and fiscal year in the State Water Resources Control Board (SWRCB) GeoTracker database.
- Solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside waste management units.
- SWRCB Cease and Desist Orders (CDOs) and Cleanup and Abatement Orders (CAOs).
- Hazardous waste facilities subject to corrective action pursuant to 25187.5 of the Health and Safety Code, identified by DTSC.

These lists are collectively referred to as the “Cortese List.” The project site is not included on the Cortese List. Sites in the vicinity of the proposed project which are on the Cortese List are shown in **Table 4.9-1** below and mapped on **Figure 4.9-1** below.

Table 4.9-1
CORTESE SITES WITHIN 0.5 MILE OF THE PROJECT SITE

Site Name Address Distance and Direction from Permanent TMF site	Additional Information
GeoTracker	
Orange Coast Memorial Hospital 9920 Talbert Avenue 160 feet east	Permitted underground storage tank
Burke Comp/ Aluma System 11140 Talbert Avenue 640 feet east	Leaking Underground Storage Tank (LUST) site Release of other solvent- or nonpetroleum hydrocarbon- affected soil Case closed 2006
UNOCAL #4928 18025 Brookhurst Street 700 feet east	LUST site Gasoline release affected groundwater other than drinking water Case closed 1995
Chevron #9=7347 17971 Brookhurst Street 770 feet east	LUST site Gasoline release affected groundwater other than drinking water. Case closed 2007



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Site Name Address Distance and Direction from Permanent TMF site	Additional Information
Texaco 17966 Brookhurst Street 890 feet east	LUST site The release of gasoline, MTBE / TBA / other fuel oxygenates affected groundwater other than drinking water. Case closed 2016
	LUST site Release of waste oil / motor / hydraulic / lubricating affected groundwater other than drinking water. Case closed 1986
NB Oil Company, Inc., # 1 17966 Brookhurst Street 890 feet east	Permitted underground storage tank
Fountain Valley Fuels, Inc. 17971 Brookhurst Street 920 feet northeast	Permitted underground storage tank
Fountain Valley Plaza 18120 Brookhurst Street 1,150 feet southeast	Cleanup Program Site Contaminants of concern; Volatile Organic Compounds (VOCs) Media of concern unspecified Case closed 1996
Fountain Valley High School 17816 Bushard Street 1,580 feet north	LUST site See EnviroStor listing below (†)
Royal Cleaners 18449 Brookhurst Stret 1,630 feet south	Cleanup Program Site Case closed 2002
Fountain Valley Promenade 18449 Brookhurst Street 2,150 feet south	Cleanup Program Site Case open, remediation 2020
Arco #1912 18480 Brookhurst Street 2,500 feet south	LUST site Case open, remediation 2002
Beacon Bay Auto Wash 10035 Ellis St 2,580 feet southeast	LUST site Gasoline release affected groundwater other than drinking water Case closed 2006
Fountain Valley Brookhurst & Slater 17570 Brookhurst Street 2,580 feet northeast	Cleanup Program Site Case closed 2014
Arco #6116 17520 Brookhurst Street 2,650 feet northeast	LUST site Contaminants of concern gasoline, MTBE / TBA / other fuel oxygenates, waste oil / motor / hydraulic / lubricating; affected groundwater other than drinking water Case closed 2015
EnviroStor	



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Site Name Address Distance and Direction from Permanent TMF site	Additional Information
Fountain Valley Promenade 18449 Brookhurst Street 850 feet southeast	Voluntary Agreement Site Dry-cleaning business onsite Site may be contaminated with hazardous substances, including VOCs Assessment is underway
Fountain Valley High School (Non-UST Area) 17816 Bushard Street 1,100 feet north	School investigation Soil investigation for possible impacts from UST No further action 2005
Fountain Valley High School † (UST Area) 17816 Bushard Street 1,580 feet north	School investigation Soil investigation for possible impacts from UST No further action 2013

Sources: SWRCB, 2025; DTSC, 2025

Table 4.9-1 identifies 15 sites within 0.5 mile of the project site. However, none of the above-listed sites are considered to be environmental concerns for the project site: one assessment is currently underway at the Fountain Valley Promenade; remediation was conducted at Arco Station #1912 in 2002; three are permitted underground storage tanks; and nine are closed cases.²⁵ Therefore, impacts would be less than significant.

- 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 Impact

The nearest public-use airport to the project site is John Wayne Airport, approximately 5.3 miles to the southeast. The project site is outside of the John Wayne Airport zones where land uses are regulated to minimize aviation-related hazards to persons on the ground, and outside of noise compatibility contours for the airport (OCALUC, 2008). Proposed project development would not cause airport-related hazards or excessive noise to persons at the project site. No impact would occur.

²⁵ A *no further action* determination issued by DTSC signifies case closure.



❖ SECTION 4.9 – HAZARDS AND HAZARDOUS MATERIALS ❖

- f) Would the project affect the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

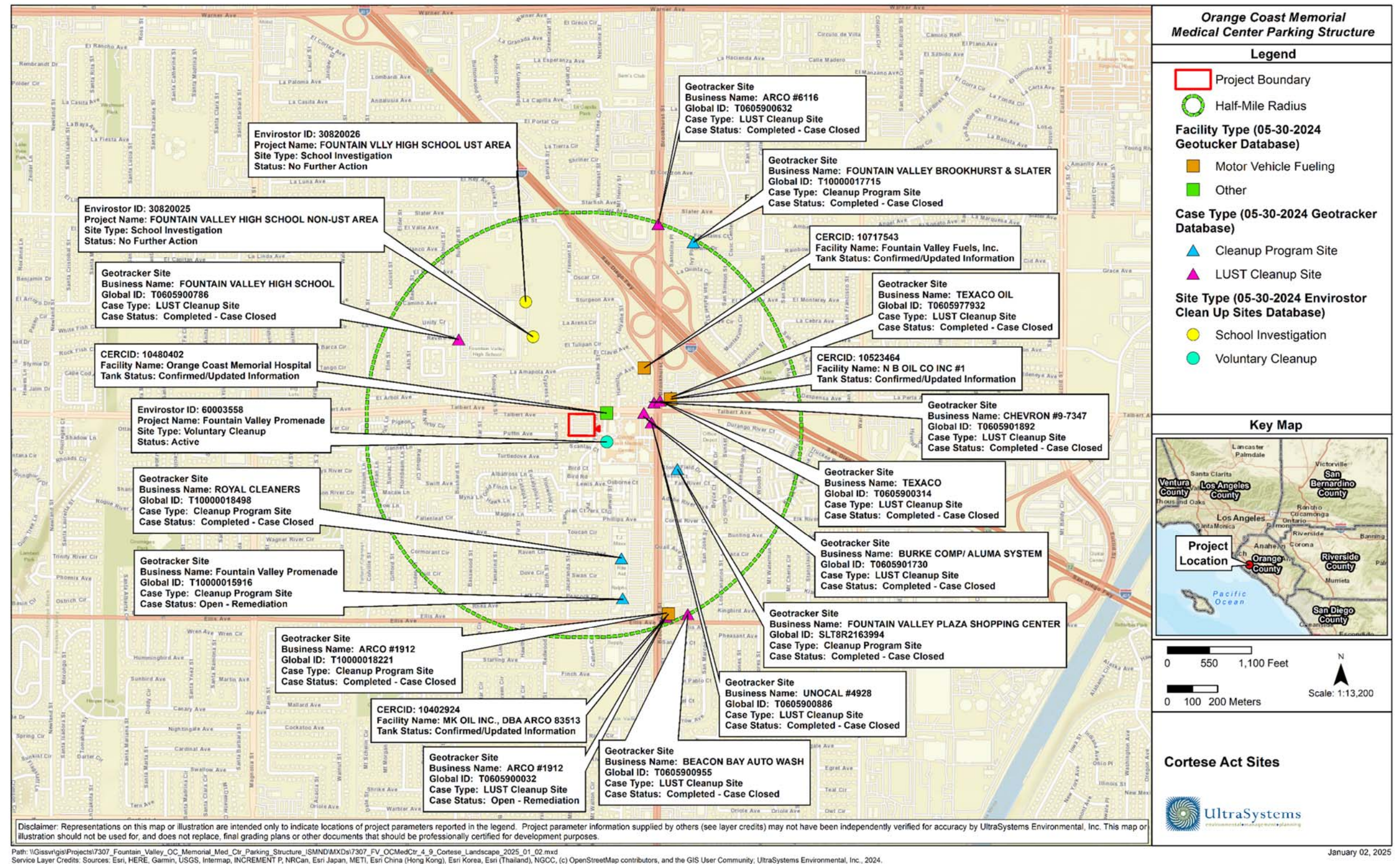
Less than Significant Impact

Construction

The Unified County of Orange and Orange County Operational Area Emergency Operations Plan (EOP) was adopted in February 2019. As detailed in **Section 4.17**, project-related construction on the right-of-way (ROW) of Talbert Avenue and/or Foster Street next to the project site could temporarily affect street traffic. The construction of the proposed project could temporarily reduce the number of lanes or close a portion of Talbert Avenue or Foster Street. The City requires that projects that perform construction work on City ROW obtain Encroachment Permits approved by the Public Works Engineering Division, which will ensure that emergency access will be maintained. Compliance with city requirements for traffic management during construction in the public ROW would ensure that the project would have a less than significant impact.



Figure 4.9-1
CORTESE SITES





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Operation

Project operation would not block traffic on Talbert Avenue or Foster Street. The proposed project would provide emergency access to the site in compliance with California Fire Code § 503. Therefore, the impacts would be less than significant.

- g) **Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?**

No Impact

The project site is not in or near a very fire hazard severity zone (VFHSZ) within a Local Responsibility Area (SRA), or within a State Responsibility Area (SRA) mapped by CAL FIRE, and as reviewed in **Section 4.20**. The nearest VFHSZ in LRA to the project site is approximately 7.2 miles southeast of the project site, with the nearest SRA in the City of Newport Beach approximately 11.5 miles southeast. Therefore, the proposed project would have no impact.



❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:			X	
i) result in substantial erosion or siltation on or offsite;			X	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
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			X	
iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

The information in this Section is based on the following two technical reports:



❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

Preliminary Water Quality Management Plan, Orange Coast Memorial Medical Center Parking Structure. Prepared by Tait & Associates, Inc., dated March 11, 2024. Prepared for Orange Coast Memorial Medical Center. A complete copy of this Report is included as **Appendix F**.

Hydrology Summary, Orange Coast Memorial Medical Center Parking Structure. Prepared by Tait & Associates, Inc., dated March 11, 2024. Prepared for Orange Coast Memorial Medical Center. A complete copy of this Report is included as **Appendix G**.

Less than Significant Impact

The California State Water Resources Control Board requires its nine Regional Water Quality Control Boards (RWQCBs) to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions (RWQCB 1995). In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. The proposed project is under the jurisdiction of the Santa Ana (Region 8) RWQCB.

As shown in **Figure 10.4-1, USGS Surface Waters and Watersheds**, the project site is located within the USGS Greenville Banning Channel-Santa Ana River Subwatershed (HU Code 180702031003). The Santa Ana River Watershed drains portions of San Bernardino, Riverside, and Orange counties, and a small part of eastern Los Angeles County, extending from portions of the San Bernardino and San Gabriel Mountains to the Pacific Ocean, spanning approximately 2,650 square miles. The Santa Ana River, over 100 miles in length, discharges into the Pacific Ocean at the City of Huntington Beach (USEPA, 2022). Under existing conditions, stormwater generated on the project site drains to a parkway drain in the northwest corner of the site and a catch basin in the northeast part of the site, both of which discharge into a storm drain in Talbert Avenue north of the site (Tait and Associates, 2024, p. 2). The storm drain in Talbert Avenue is tributary to Talbert Channel, which discharges into the Pacific Ocean (Tait and Associates, 2024, p. 1).

Development of the project has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation. Temporary soil disturbance would occur during project construction due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality of receiving waters through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be carried by stormwater into storm drains which discharge eventually to the Pacific Ocean.

Spills and mishandling of construction materials and waste may also potentially leave the project site and negatively impact water quality. The use of construction equipment and machinery may cause contamination from petroleum products, hydraulic fluids, and heavy metals. Contamination from building preparation materials such as paints and solvents, and landscaping materials such as fertilizers, pesticides, and herbicides, may also degrade water quality during project construction.



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Trash and demolition debris may also be carried into storm drains and discharged into receiving waters.

Construction Pollutants Control

The project proponent is required by the California State Water Resources Control Board (SWRCB) to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2022-0057-DWQ, as authorized by Section 402 of the Clean Water Act, National Pollution Discharge Elimination System [NPDES] for projects which will disturb one or more acres of soil during construction). The Construction General Permit requires potential dischargers of pollutants into Waters of the U.S. (WOUS) to prepare a site-specific Stormwater Pollution Prevention Plan (SWPPP), which establishes enforceable limits on discharges, requires effluent monitoring, designates reporting requirements, and requires construction BMPs to reduce or eliminate point and non-point source discharges of pollutants. Additionally, BMPs must be maintained, inspected before and after each storm, and repaired or replaced as necessary. Construction BMPs are grouped in the following six categories:

- **Erosion Control BMPs:** prevent detachment of soil particles from soil surface by covering soil or adding binders to soil.
- **Sediment Control BMPs:** Filter out soil particles that have been detached and transported in water; and barriers blocking sediment from entering waterways and storm drains.
- **Wind Erosion Control BMPs:** BMPs include watering; other BMPs are similar to erosion control BMPs.
- **Tracking Control BMPs:** Minimize the tracking of soil offsite by vehicles; BMPs include stabilized construction roadways and entrances/exits, and tire washes.
- **Non-Storm Water Management Control BMPs:** Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct operations in ways that minimize non-stormwater discharges and contamination of any such discharges.
- **Waste Management and Control BMPs:** Management of materials and wastes to avoid contamination of stormwater (CASCA, 2023).

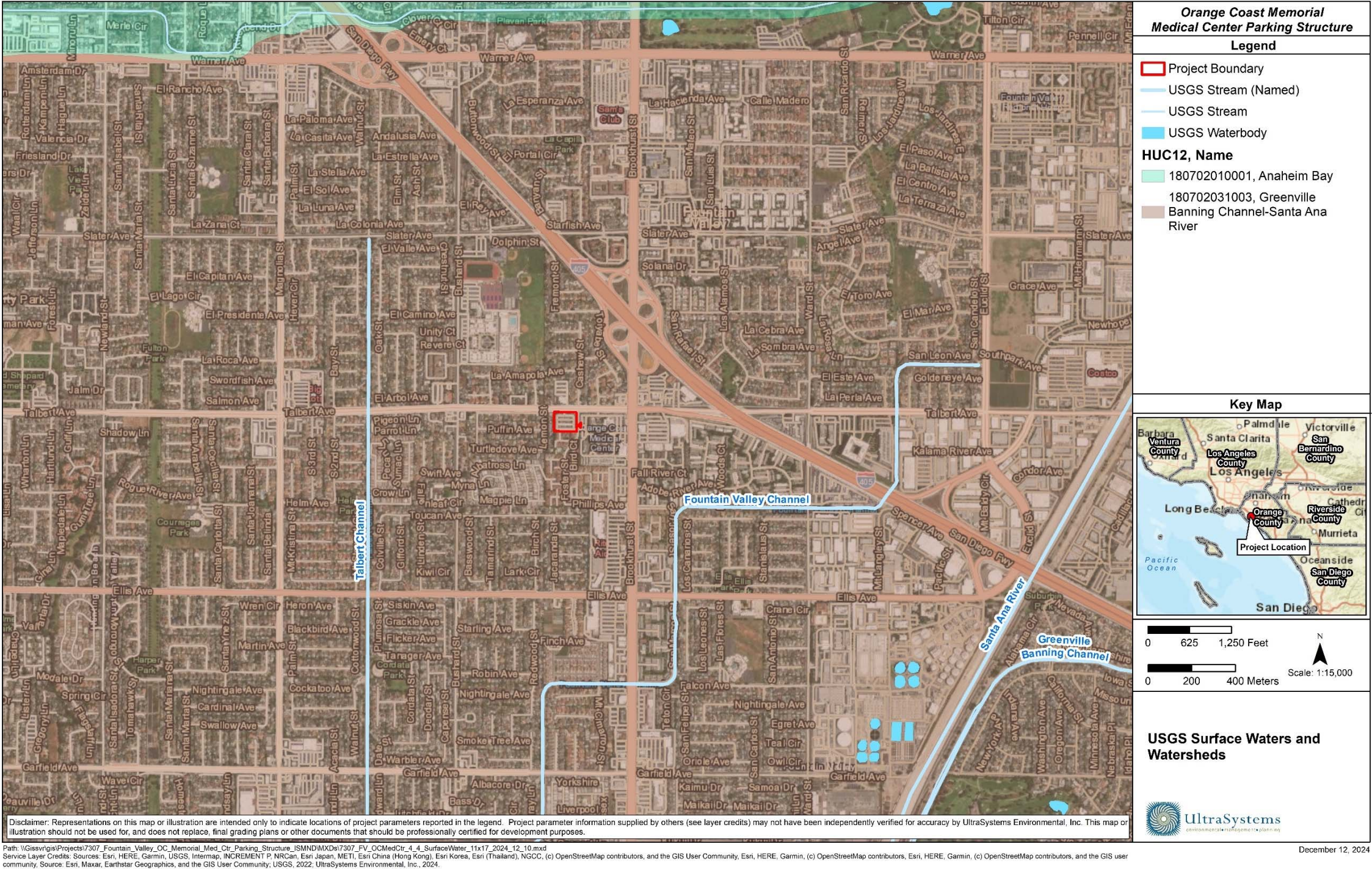
Because the project is required by the SWRCB to comply with all applicable conditions of Construction General Permit Order 2022-0057-DWQ, potential violations of water quality standards or waste discharge requirements during project construction would be less than significant.

Operational Pollutant Controls

The Orange County NPDES Permit (NPDES No. CAS618036) and Waste Discharge Requirements Area Wide Urban Storm Water Runoff Management Program regulates, through Order No. R8 2010 0062, the discharge of pollutants into Waters of the U.S. (WOUS) through stormwater and urban runoff conveyance systems, including flood control facilities. These conveyance systems are commonly referred to as municipal separate storm sewer systems (MS4s), or storm drains. Thus, the NPDES Permit is also referred to as an MS4 Permit.



Figure 4.10-1
USGS SURFACE WATERS AND WATERSHEDS





❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

Pursuant to the MS4 Permit, Principal Permittees (i.e., Orange County and the Orange County Flood Control District) and Co-Permittees (the City of Fountain Valley is a Co-Permittee) must regulate discharges of pollutants in urban runoff from man-made sources into storm water conveyance systems within their jurisdiction.

New development and redevelopment can significantly increase pollutant loads in stormwater and urban runoff, because increased population density results in proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage wastes, household hazardous wastes, fertilizers, pet waste, trash, and other pollutants (RWQCB, 2010). The Orange County MS4 Permit requires new development and significant redevelopment projects to incorporate post construction low impact development BMPs into project design to comply with the local Water Quality Management Plan (WQMP) to reduce or eliminate the quantity, and improve the quality of, stormwater being discharged from the project site.

A preliminary WQMP (Tait and Associates, 2024) has been prepared for the proposed project and is included herein as **Appendix F**. The MS4 and the associated WQMP require the implementation of Low Impact Development (LID) features to ensure that most stormwater runoff is treated and retained onsite. BMPs prescribed by the WQMP are summarized below.

Structural Source Control BMPs

Source control BMPs reduce the potential for pollutants to enter runoff. Source control BMPs are divided into two categories: structural and nonstructural. Structural source control BMPs prescribed for the project include storm drain system stenciling; use efficient irrigation systems and landscape design, water conservation, smart controllers, and source control; and dispersal of impervious areas (that is, use of roof drains to separate drainage from the roof of the parking structure from drainage from other impervious areas onsite) (Tait and Associates, 2024a, pp. 10 and 16-17).

Nonstructural Source Control BMPs

The WQMP also contains non-structural source control BMPs including BMP maintenance, litter/debris control, employee training, catch basin inspection program, street sweeping of private streets and parking lots, and complying with all applicable NPDES permits (Tait and Associates, 2024a, p. 14).

Biotreatment BMP

The project WQMP prescribes use of a biotreatment BMP, a modular wetland system in the northeast corner of the site. Drainage from the roof drains will be conveyed underground to the modular wetland system (Tait and Associates, 2024, p. 2). Biotreatment BMPs are highly effective at removing sediment, trash, metals, bacteria, oil and grease, and organics, and moderately effective at removing nutrients (CASQA, 2003, p. TC-32-1).

With implementation of construction and operational BMPs, potential impacts to water quality would be less than significant and mitigation is not required.



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

Less than Significant Impact

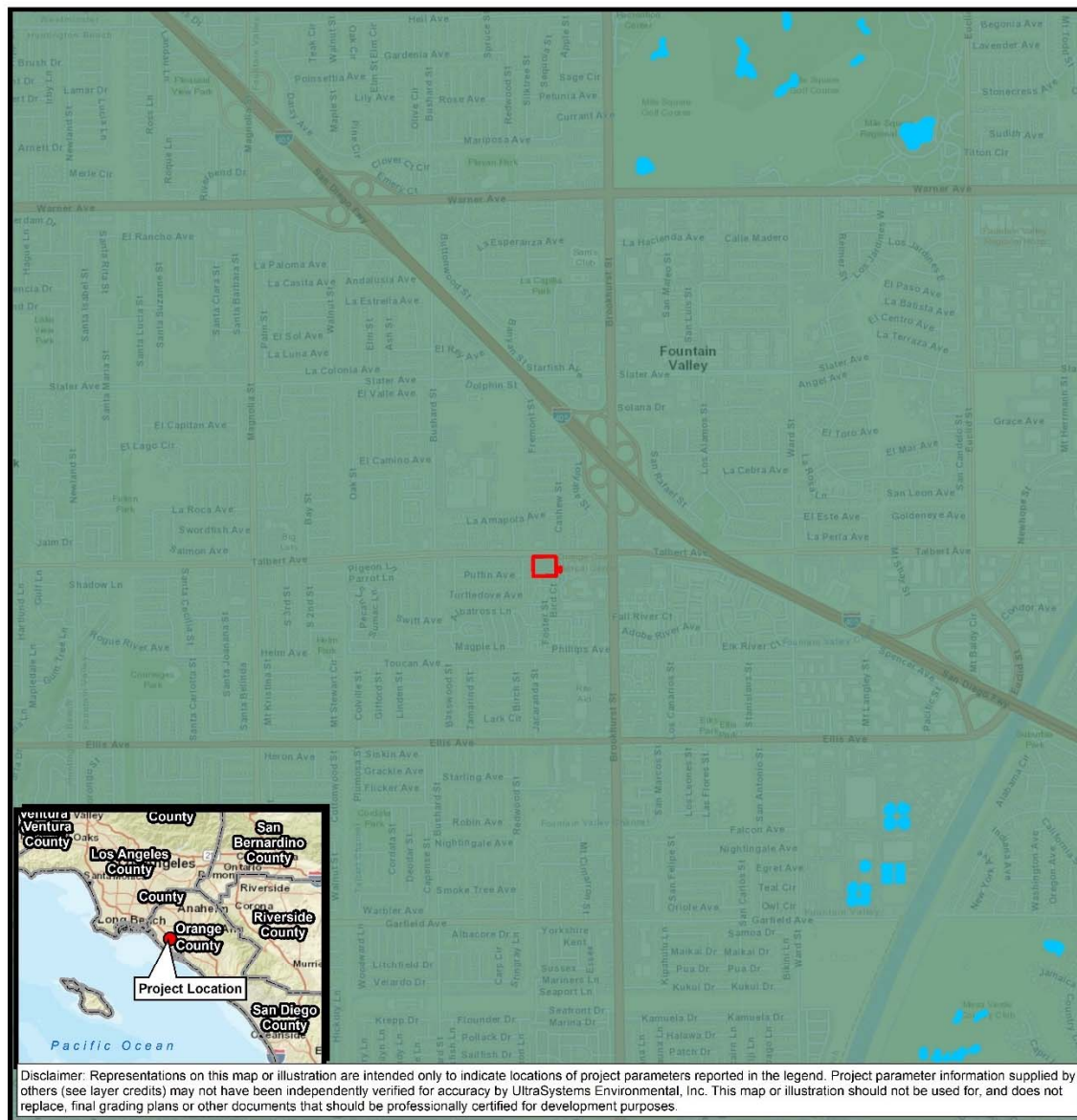
The project site is in the Coastal Plain of Orange County Groundwater Basin (Basin; DWR, 2024), as shown on **Figure 4.10-2**. The City of Fountain Valley provides water to OCMC. The City of Fountain Valley's water sources consist of imported water, local groundwater, and recycled water (City of Fountain Valley, 2021, p. 6-1). The City forecasts that it will have sufficient water supplies to meet demands over the 2025-2045 period (City of Fountain Valley, pp. 7-8 through 7-10). Groundwater levels in the Basin are managed within a safe basin operating range to protect the long-term sustainability of the Basin and to protect against land subsidence. OCWD regulates groundwater levels in the Basin by regulating the annual amount of pumping (City of Fountain Valley, 2021, p. 6-13). The project would not include fixtures, such as kitchens and restrooms, that would use potable water. Project operation would use a small amount of water for landscape irrigation. Project development would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. The project would have a less than significant impact in this regard and mitigation is not required.

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



❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

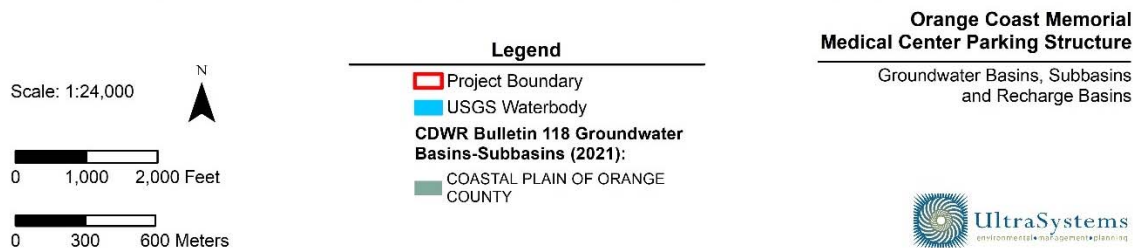
Figure 4.10-2
GROUNDWATER BASIN



Disclaimer: Representations on this map or illustration are intended only to indicate locations of project parameters reported in the legend. Project parameter information supplied by others (see layer credits) may not have been independently verified for accuracy by UltraSystems Environmental, Inc. This map or illustration should not be used for, and does not replace, final grading plans or other documents that should be professionally certified for development purposes.

Path: \\Gissvr\gis\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXDs\7307_FV_OCMedCtr_4_10_Groundwater_Basins_Recharge_2024_12_10.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community; California Department of Water Resources 2021-(Bulletin 118, 2021); UltraSystems Environmental, Inc., 2024.

December 10, 2024





i) Result in substantial erosion or siltation on or offsite;

Less Than Significant Impact

Project development would not substantially alter the existing drainage pattern onsite. The project site is relatively flat, with elevations ranging from approximately 22 to 24 feet above mean sea level (amsl) [Tetra Tech, 2023, p. 4]. Existing site drainage is via sheet flow to a parkway drain and a catch basin, both at the north edge of the site, and both of which discharge into an existing storm drain in Talbert Avenue north of the site (Tait and Associates, 2024b, p. 2). At project completion drainage from the proposed parking structure would sheet flow to roof drains that would discharge at grade and flow to a Modular Wetland System in the northeast corner of the project site. The Modular Wetland System will discharge to the existing catch basin at the northeast of the site, and then to the existing storm drain north of the site in Talbert Avenue (Tait and Associates, 2024b, p. 2). As shown below in **Table 4.10-1**, discharges from the Modular Wetland system would be at slightly lower rates than the existing runoff rate from the site.

Table 4.10-1
DRAINAGE FLOW RATES, CUBIC FEET PER SECOND (cfs)

	2-year storm	25-year storm
Existing Conditions	3.14	6.97
Post-Project Conditions	2.91	6.62

Source: Tait & Associates, 2024b

Construction

Project site grading and project construction would involve extensive soil disturbance and thus could cause severe erosion if effective erosion control measures were not used. Erosion control, sediment control, and wind erosion control BMPs that would be used during project construction are described above in Section 4.10.a. Impacts would be less than significant after implementation of BMPs during project construction.

Operation

At project completion the entire site would be developed with the parking structure, driveways, landscaping, and walkways. No land would be left bare and susceptible to erosion. Project operation would not cause substantial erosion, and impacts would be less than significant.



❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

- 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?**

Less than Significant Impact

The project site is in Federal Emergency Management Agency (FEMA) Shaded Zone X flood hazard area, indicating that the area is protected from 100-year floods by a levee (FEMA, 2024). Existing site drainage is via sheet flow to a parkway drain and a catch basin, both at the north edge of the site, and both of which discharge into an existing storm drain in Talbert Avenue north of the site (Tait and Associates, 2024b, p. 2). At project completion the proposed parking structure would sheet flow to roof drains that would discharge at grade and flow to a Modular Wetland System in the northeast corner of the project site. The Modular Wetland System will discharge to the existing catch basin at the northeast of the site, and then to the existing storm drain north of the site in Talbert Avenue (Tait and Associates, 2024b, p. 2).

The peak flow rate from the project site from a two-year, 24-hour storm would be reduced from 1.80 cubic feet per second (cfs) in existing conditions to 1.67 cfs in post-project conditions, and the drainage volume from such a storm would be reduced from 4,992 cubic feet in existing conditions to 4,058 cubic feet in post-project conditions (Tait and Associates, 2024b, p. 4). Project development would not cause flooding on- or off-site and would not exceed the capacity of existing or planned drainage systems.

Project development would not provide substantial additional sources of polluted runoff, as substantiated above in Section 4.10.a.

- iv) **Impede or redirect flood flows?**

No Impact

The project site is in Federal Emergency Management Agency (FEMA) Shaded Zone X flood hazard area, indicating that the area is protected from 100-year floods by a levee; see **Figure 4.10-3** (FEMA, 2024). The project site is outside of 100-year flood zones and project development would not impede or redirect flood flows. No impact would occur, and mitigation is not required.

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

No Impact

The project site is in Federal Emergency Management Agency (FEMA) Shaded Zone X flood hazard area, indicating that the area is protected from 100-year floods by a levee (FEMA, 2024). The project site is outside of 100-year flood zones and project development would not risk release of pollutants due to site flooding.



❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

Tsunami

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is outside of tsunami inundation zones, and the nearest such zone is about two miles south of the site in the Santa Ana River channel (CGS, 2024).

Seiche

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. No water bodies are close enough to the project site that project development would risk release of pollutants due to site flooding, and no impact would occur.

- e) **Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

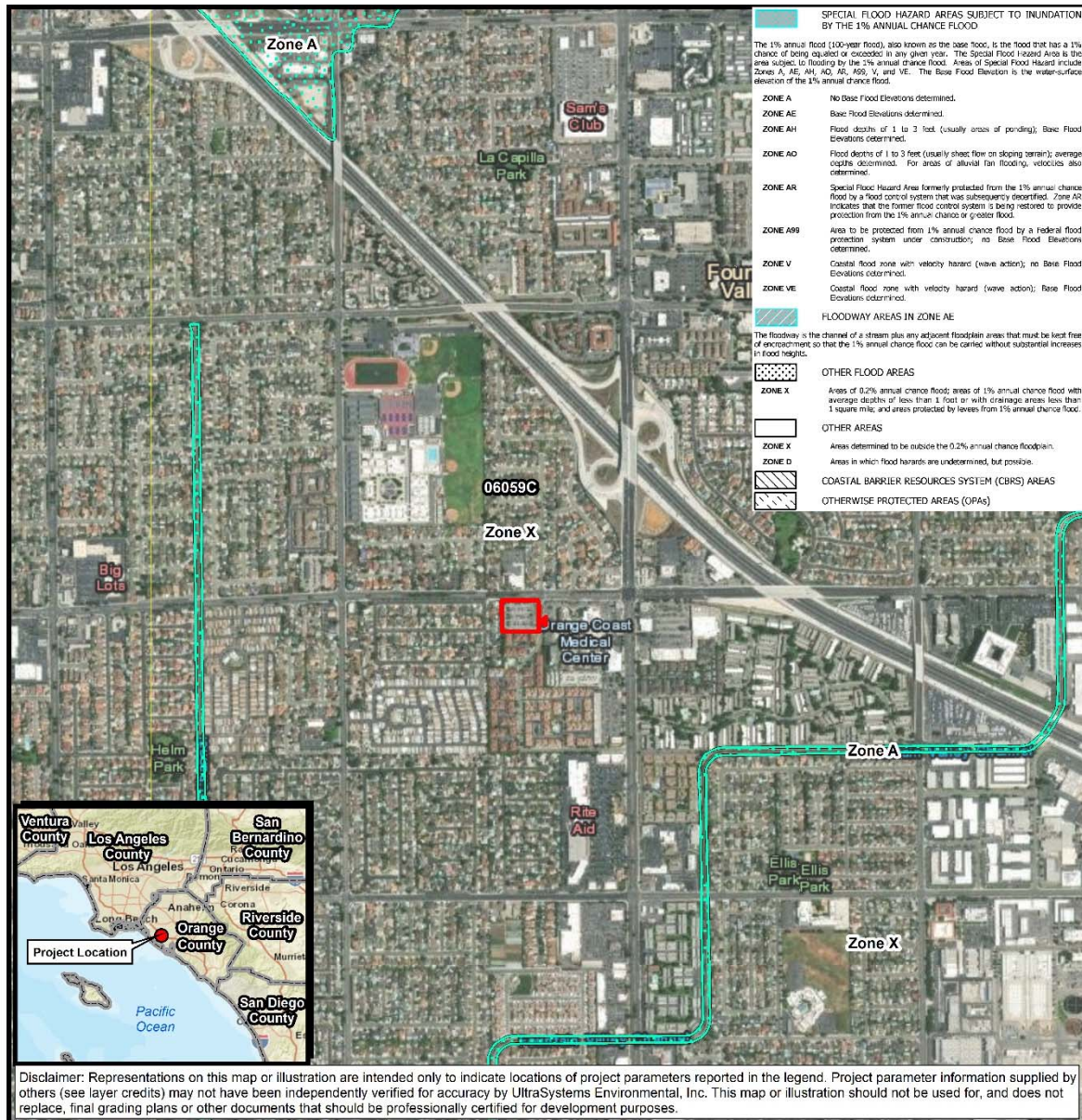
Less than Significant Impact

The water quality control plan in effect for the project region is the Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin issued by the Santa Ana RWQCB in 2019. The project applicant would comply with the Basin Plan through implementation of the Preliminary WQMP described above. In 2017, the agencies within the Coastal Plain of Orange County Groundwater Basin led by the Orange County Water District collaborated to submit an Alternative to a Groundwater Sustainability Plan titled the “Basin 8-1 Alternative” to meet Sustainable Groundwater Management Act compliance. Project impacts on groundwater supplies and recharge would be less than significant, as substantiated above in Section 4.10.b.

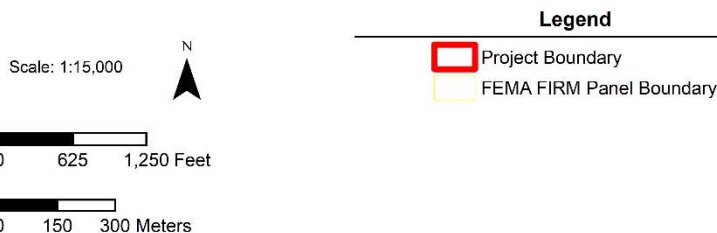


❖ SECTION 4.10 – HYDROLOGY AND WATER QUALITY ❖

**Figure 4.10-3
FEMA FLOOD ZONES MAP**



December 12, 2024



**Orange Coast Memorial
Medical Center Parking Structure**
FEMA FIRM Map





4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
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?			X	

a) Would the project physically divide an established community?

No Impact

The project site is bordered by single-family residences to the west, additional single-family residences, and a church are located to the north across Talbert Avenue, a parking lot associated with Orange Coast Medical Center (OCMC) to the east, and multi-family residential properties to the south. The site is a surface parking lot that is secured with fencing on the western and southern boundaries and does not serve as access between the adjacent residential neighborhoods. Therefore, the proposed project will not result in the physical division of an established community, and no significant impacts are anticipated.

b) Would the project 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?

Less than Significant Impact

The project site has a general plan land use designation and zoning designation of Orange Coast Memorial Medical Center Specific Plan (Specific Plan). The proposed project would be implemented in accordance with the Specific Plan.

The Specific Plan considers the current facilities, the potential for expansion or redevelopment of certain structures, and the additional facilities that are slated for construction in the near and distant future. The Specific Plan functions as a strategic framework to guide the physical development of the project area by regulating new construction and establishing mechanisms to guarantee consistent execution. The following goals have been defined for the Specific Plan:

- Continue to meet the needs of the community and region by providing for appropriate facility expansion, new programs, and services;
- Plan and locate new uses to ensure compatibility with other existing medical facilities;
- Provide for future permitted uses which respond to anticipated needs;
- Ensure that an adequate supporting infrastructure exists to service future development;
- Provide a logical and efficient on-site circulation system, including parking to appropriate service facilities;



❖ SECTION 4.11 – LAND USE AND PLANNING ❖

- Establish a cohesive and efficient signage program to facilitate on-site circulation and ease of use by medical center patrons;
- Establish a cohesive landscape program that improves the visual appearance of the medical center;
- Provide development standards in support of Specific Plan concepts; and
- Implement the goals, objectives, and policies of the City of Fountain Valley (City of Fountain Valley, 2007, p. 3).

The Specific Plan Development Program contains three major components:

1. A Conceptual Land Use Development Plan
2. A Conceptual Circulation Plan
3. A Conceptual Landscape Plan

Conceptual Land Use Development Plan

The Specific Plan Area is delineated into three planning areas, with the proposed project located in Planning Area 3. This area consists of a 2.3-acre surface parking lot. Currently, the Medical Center has four surface parking lots that provide a total of 537 parking spaces (City of Fountain Valley, 2007).

The proposed project involves the construction of a three-story parking structure, which is designed to accommodate a total of 784 parking spaces. The existing surface lot includes 231 parking spaces; project development would involve the loss of three additional parking spaces, for a total loss of 234 spaces. The project would result in a net increase of 550 parking spaces, increasing the parking capacity to meet current and projected demands. As previously indicated, the proposed project includes an amendment to the Orange Coast Memorial Medical Center Specific Plan to allow the relocation of the Specific Plan's parking structure expansion from Planning Area 1 to Planning Area 3 with an increase of 185,867 square feet in parking structure gross floor area (from 107,456 square feet to 293,323 square feet). The amendment is in conformance with the goals of the specific plan as outlined above; therefore, no impact would occur.

Conceptual Circulation Plan

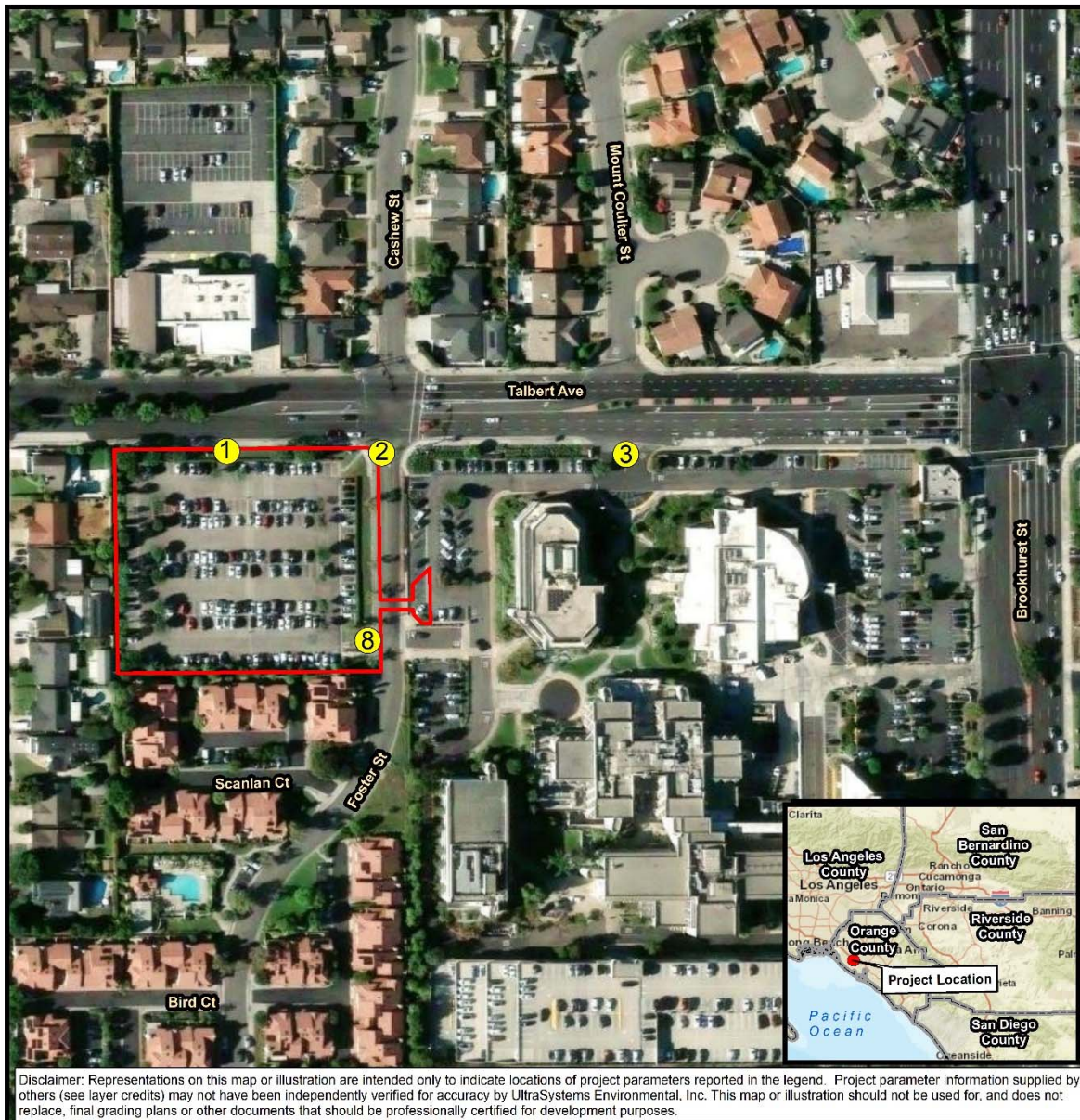
Roads used by development within the Specific Plan Area include Brookhurst Street, Talbert Avenue, Bushard Street, Ellis Avenue, Slater Avenue, and Ward Street. The project will utilize Talbert Avenue, an east-west six-lane divided roadway, classified as a primary arterial and Foster Street (local roadway) within the City of Fountain Valley General Plan Circulation Element.

Currently, there are three access points to the medical center along Talbert Avenue (see **Figure 4.11-1**). Only the western access point, Access Point 1, is affected by the proposed project. It is located approximately 950 feet west of Brookhurst Street and currently allows right-turn ingress movement into the medical center from Talbert Avenue and right-turn only egress.

The Conceptual Circulation Plan also incorporates two access points off Foster Street. Only Access Point 8 is affected by the project. Access Point 8 located approximately 250 feet south of Talbert Avenue on the west side of Foster Street allows right- and left-turn movements into and out of the medical center from Foster Street.



Figure 4.11-1
SELECTED OCMC ACCESS POINTS



Path: G:\Projects\7307_Fountain_Valley_OC_Memorial_Med_Ctr_Parking_Structure_ISMND\MXDs\7307_FV_OCMedCtr_4.11_OCMC_Access_Points_2026_02_16.mxd
Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community; UltraSystems Environmental, Inc., 2026.

February 16, 2026

Scale: 1:2,100



0 87.5 175 Feet

0 13 26 Meters

Legend

-  Project Boundary
-  Access Points

**Orange Coast Memorial
Medical Center Parking Structure**

OCMMC Selected Access Points





❖ SECTION 4.11 – LAND USE AND PLANNING ❖

The proposed access to the project will be via a two-lane driveway connecting to Foster Street for ingress, with egress occurring through a two-lane, right-out-only driveway leading onto Talbert Avenue. The existing ingress access from Talbert Avenue would be restricted. A pedestrian bridge will provide a connection from the third floor of the parking structure to an elevator and stairs located on the opposite (east) side of Foster Street. The project is located a short distance west of the medical office building at 9900 Talbert Avenue, within the OCMC campus.

Pedestrian travel between the parking structure and the larger campus of OCMC is facilitated by two designated pedestrian pathways; the pedestrian bridge and a crosswalk located on the south side of the intersection of Foster Street and Talbert Avenue.

The project would comply with all the requirements of the Conceptual Circulation Plan of the Specific Plan and is reviewed in more detail in **Section 4.17** of this Initial Study. Therefore, the project would have a less than significant impact.

Conceptual Landscape Plan

The landscape concept for the Orange Coast Memorial Medical Center Specific Plan is designed to establish a unified visual identity that not only complements, but also enhances, the existing landscape characteristics of the facility. The Specific Plan details the following requirements related to the project site.

“Talbert Avenue project edge: All development occurring along this north boundary shall maintain a landscaped edge having a minimum depth of 15 feet. Measurement shall be from the street right-of-way. Landscape improvements to the Talbert Avenue related to any new development shall be consistent with the existing theme along Talbert Avenue, or with the approval from the Planning Department” (City of Fountain Valley, 2007, p. 9).

As outlined in **Section 3.0** of this Initial Study, a comprehensive landscape plan will be implemented along the perimeter of the project site. This landscaping will consist of a variety of trees, shrubs, and grasses placed within designated setbacks. A setback width measuring 23 feet along Talbert Avenue is proposed, exceeding the minimum required 15-foot setback laid out in the Specific Plan. Therefore, there would be a less than significant impact.



4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
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?				X

- a) **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**
- b) **Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

No Impact

The City of Fountain Valley is designated as MRZ-3, which is an area where the available geologic information indicates that while mineral deposits are likely to exist, the significance of the deposit is undetermined. No mineral resources sectors and active or inactive mines are present in the City, and there are no areas in the City designated for mineral resources (City of Fountain Valley, 2007b, p. 12). The mineral land classification report for Orange County is dated 1995 (CGS, 1995); thus, the information presented above from the 2007 EIR for the Orange Coast Memorial Medical Center is still current. The project site is a surface parking lot on a hospital campus; is surrounded by residences to the west and south; and is thus not available for mining. The proposed project would have no significant direct, indirect, or cumulative impact relating to mineral resources.



4.13 Noise

Would the project result in:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
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?				X

4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micro pascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq} , the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.
- L_{90} is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of “background” noise.



- L_{max} is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. L_{max} is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 4.77-dBA “penalty” added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Hendriks, 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.
- L_{dn} , the day-night average noise, is a 24-hour average L_{eq} with an additional 10-dBA “penalty” added to noise that occurs between 10:00 p.m. and 7:00 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

4.13.3 Existing Noise

Roadway traffic is the primary noise source in the City of Fountain Valley. The largest traffic noise source is Interstate 405, which runs southeast-northwest through the city. In addition, a large number of arterials are spread uniformly throughout the city. As defined by the state, noise sensitive receptors include, but are not limited to, residential areas containing schools, hospitals, rest homes, long-term medical or mental care facilities, or any other land use areas deemed noise sensitive by the local jurisdiction (LCAI, 2017, p. 136). Additionally, the City’s Municipal Code has applicable noise standards for construction noise, interior noise, and exterior noise (City of Fountain Valley Municipal Code, 2021). The closest sensitive receptors to the project site include a single-family neighborhood 69 feet west of the project site, and single-family homes located 18 feet south of the project site (Google Earth Pro, 2024). Sensitive receptors in the general project area are shown in **Figure 4.13-1**. **Table 4.13-1** summarizes information about sensitive receivers selected for the noise analysis.

Table 4.13-1
SENSITIVE RECEIVERS IN PROJECT AREA

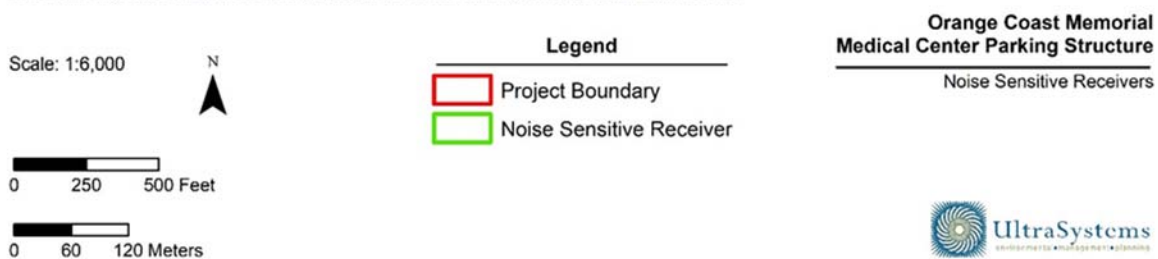
Description	Location	Distance From Site Boundary (feet)	Nearest Ambient Sampling Point ^a
Living Waters Christian Fellowship	9801 Talbert Avenue	119	1
Single-family Residence	18070 Scanlan Court	18	2
Single-family Residence	18016 Lemon Street	69	3
Edinger Medical Group	9900 Talbert Avenue	118	4

^aSee **Figure 4.13-2** for locations of ambient noise sampling points.

Figure 4.13-1
SENSITIVE RECEPTORS NEAR THE PROJECT SITE



December 18, 2024





On December 20, 2024, UltraSystems obtained 15-minute ambient noise level samples at four locations in the general area of the project. Sampling locations are shown in **Figure 4.13-2**. Measurements were made between 11:22 a.m. and 1:19 p.m. As shown in **Table 4.13-2**, average short-term ambient noise levels (L_{eq}) ranged from 51.1 to 67.6 dBA L_{eq} . The 67.6-dBA noise level was along Talbert Avenue, in front of the Living Waters Christian Fellowship. All monitored noise levels were within the range considered typical for the nearby land uses.

Table 4.13-2
AMBIENT NOISE MEASUREMENT RESULTS

Point	Data Set	Sampling Time	Address	Sound Level (dBA)			Notes
				L_{eq}	L_{max}	L_{90}	
1	S001	1122-1137	9801 Talbert Avenue	67.6	81.6	54.8	In front of Living Waters Christian Fellowship north of the project site
2	S004	1240-1255	18070 Scanlan Court	51.1	68.0	43.4	In front of a single-family residence south of the project site
3	S002	1150-1205	18016 Lemon Street	60.7	69.7	52.2	In front of a single-family residence south of the project site
4	S005	1304-1319	9900 Talbert Avenue	55.0	75.5	49.6	In front of Edinger Medical Group east of the project site.
Source: UltraSystems, 2024.							



Figure 4.13-2
AMBIENT NOISE MEASUREMENT LOCATIONS





4.13.4 Regulatory Setting

State of California

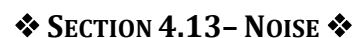
The California Department of Health Services (DHS) Office of Noise Control has studied the correlation of noise levels with effects on various land uses. (The Office of Noise Control no longer exists.) The most current guidelines prepared by the state noise officer are contained in the “General Plan Guidelines” issued by the Governor’s Office of Planning and Research in 2003 and reissued in 2017 (Governor’s Office of Planning and Research, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable:** Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable:** May require some mitigation, as established through a noise study.
- **Normally Unacceptable:** Requires substantial mitigation.
- **Clearly Unacceptable:** Probably cannot be mitigated to a less-than-significant level.

The types of land uses addressed by the state standards, and the acceptable noise categories for each, are presented in **Table 4.13-3**. There is some overlap between categories, which indicates that some judgment is required in determining the applicability of the numbers in a given situation.

Table 4.13-3
CALIFORNIA LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES

Land Use Category	Noise Exposure (dBA, CNEL)					
	55	60	65	70	75	80
Residential – Low-Density Single-Family, Duplex, Mobile Homes						
Residential – Multiple Family						
Transient Lodging – Motel, Hotels						
Schools, Libraries, Churches, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						



Source: Governor's Office of Planning and Research, 2017.

The Public Facilities and Safety (PFS) Element of the City of Fountain Valley General Plan identifies sources of noise in the city and provides objectives and policies that ensure that noise from various sources would not create an unacceptable noise environment. The PFS Element has the following applicable goals and associated policies for addressing noise issues in the community:

Policy PFS-5.1 Land use compatibility. Approve development and require mitigation measures to ensure existing and future land use compatibility as shown in the City's Noise Control Ordinance and state interior and exterior noise standards.

Policy PFS-5.3 New nonresidential. When new nonresidential development is proposed adjacent to land designated for residential uses, require the developer to assess the potential noise impacts and fund feasible noise-related mitigation measures.

Policy PFS-5.4 Transportation noise. Minimize potential transportation noise through proper roadway design, coordination of commercial vehicle routing, and other traffic control or abatement measures.



Policy PFS-5.5 Noise from businesses and events. Minimize persistent, periodic, or impulsive noise impacts of business operations as well as special events to reduce and avoid noise impacts on surrounding neighborhoods.

City of Fountain Valley Municipal Code § 21.06.040 Noise

A. Noise Impact Evaluation for Residential Uses.

- 1 All new residential projects to be constructed near existing sources of non-transportation noise (including commercial facilities, public parks with sports activities) shall demonstrate through an acoustical study by a registered engineer that the indoor noise levels will be consistent with the provisions of the city's noise ordinance (§ 21.16.040 of this code).
- 2 A noise impact evaluation may be required for other projects if determined necessary by the environmental review committee. Should noise abatement be necessary, the city shall require the implementation of mitigation measures based on a detailed acoustical study prepared by a registered engineer.

B. Compliance with Noise Standards.

- 1 Prior to development approval, new commercial, industrial or any redevelopment project or proposed development near existing residential land use shall demonstrate compliance with the city's noise ordinance (§ 21.16.040 of this code).
- 2 New developments shall be allowed only if appropriate mitigation measures are included so that the applicable noise standards are met.

The following activities shall be exempted from the provisions of this chapter:

- 1 Noise sources associated with the construction, repair, remodeling or grading of any real property, provided said activities take place between the hours of seven a.m. and eight p.m. Monday through Friday, nine a.m. through eight p.m. on Saturday and at no time on Sunday or any legal holiday. For purposes of this exception the use of saws, buffers, sanders, drills, and sprayers shall be included, as shall similar activity;

4.13.5 Significance Thresholds

Two criteria were used for judging noise impacts. First, noise levels generated by the proposed project must comply with all applicable relevant federal, state, and local standards and regulations. Noise impacts on the surrounding community are limited by local noise ordinances, which are implemented through investigations in response to nuisance complaints. It is assumed that all existing regulations for the construction and operation of the proposed project will be enforced. In addition, the proposed project should not produce noise levels that are incompatible with adjacent noise-sensitive land uses.

The second measure of impact used in this analysis is a significant increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people. The proposed project would have a significant noise impact if it would:



- Expose persons to or generate noise levels in excess of standards prescribed by the City of Fountain Valley Municipal Code.
- Include construction activities within the hours prohibited by the Municipal Code, without a permit.
- Expose sensitive receptors to 80 dBA L_{eq} or more (FTA, 2018, p. 179).
- Contribute, with other local construction projects, to a significant cumulative noise impact; or
- Increase operational exposures at sensitive receivers (mainly because of an increase in traffic flow) by 5 dBA CNEL or more.

4.13.6 Impact Analysis

- a) **Would the project result in generation of 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?**

Less than Significant Impact

Noise impacts associated with parking lots include short-term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated offsite operational noise sources. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

Construction

Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. For this analysis, it was estimated that the proposed project would be built in one phase, which would have the subphases listed in **Table 4.13-4**. Construction is anticipated to run 12 months from January 2026 to December 2026.

The types and numbers of pieces of equipment to be deployed during each construction phase were determined as part of the air quality and greenhouse gas emissions analysis for this project. For each equipment type, **Table 4.13-4** shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a “usage factor,” which is an estimated percentage of operating time that the equipment would be producing noise at the stated level.

Using calculation methods published by the Federal Transit Administration (FTA 2018), UltraSystems estimated the average hourly exposures at the nearest sensitive receiver for each construction subphase. The receivers evaluated included various single-family residences surrounding the project site and religious land uses (see **Figure 4.13-1**). The distances used for the calculation were measured from the receivers to the approximate center of activity of each construction phase, since that would be the average location of construction equipment most of the



time. **Table 4.13-5** shows the relationships between the receivers, the noise sources, and the nearest ambient measurement points.

Table 4.13-5 summarizes the estimated construction-related short-term noise exposures at the nearest sensitive receiver for each construction phase. An intervening building provides 5 dBA of attenuation for sensitive receiver 2, while a wall on the west side of the project site reduced the exposure at sensitive receiver 3 by 7.3 dBA. Residential noise exposures due to construction activities would be about 62.1 to 74.3 dBA L_{eq} . Construction noise would not lead to significant impacts and mitigation would not be necessary.

Operational Noise

Onsite

Onsite noise sources from the proposed parking structure project would include motor vehicles accessing, driving in, and exiting the parking structure. The number of parking spaces on the project site would increase from 231 to 784; this would bring parking vehicles closer to the sensitive receptors directly west of the new parking structure. Using the Institute of Transportation Engineers' hourly distribution of trip generation for land use code 610 (hospitals) (ITE, 2022) and taking into account the distance from the parking structure to the nearest residence and sound attenuation from the aforementioned wall, we estimated that the long-term exposure from onsite parking would increase from 26.2 dBA CNEL to 31.9 dBA CNEL.^{26,27} Two things decrease the significance of the impact:

- Apart from the wall, whose sound attenuation has been taken into account, there is currently no shielding of traffic noise from the parking lot. In contrast, most of the noise generation from the proposed parking structure would occur inside the structure and thus would be attenuated by some of the walls of the building.
- Even if one does not account for the parking structure's noise attenuation, the exposures at the nearest residence would be barely heard or perceptible.

Using the ambient measurement data for the nearest sensitive receiver, we estimate that the current 24-hour average exposure is 61.0 dBA CNEL. The future contribution from the parking structure would be 31.9 dBA CNEL, as noted above. The total exposure at the residence would be 61.1 dBA CNEL. The increase of 0.1 dBA CNEL is far below the significance threshold of 5 dBA CNEL.

Therefore, the change in noise from onsite sources would be less than significant.

Speakers at Parking Structure Entrance Gates

The speaker would operate rarely (compared to a fast-food drive through speaker that addresses every vehicle in the drive-through); and would be at a volume to be audible by driver only (compared to fast-food drive-through speaker that has to be audible by everyone in the vehicle). UltraSystems

²⁶ The noise analysis was based on 862 parking spaces in the structure, based on a previous site plan. The number of spaces was subsequently reduced to 784; thus, the analysis is slightly conservative.

²⁷ 20 dBA is the sound level of leaves rustling or a ticking watch; 30 dBA is that of a whisper (MDHearing.com, 2026).



Table 4.13-4
CONSTRUCTION EQUIPMENT CHARACTERISTICS

Subphase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet
1 - Demolition	Rubber-Tired Dozers	247	1	0.4	87.66
	Concrete Saws	158	1	0.14	
	Tractor/Loader/Backhoe	97	3	0.37	
2 - Site Preparation	Graders	235	1	0.4	84.45
	Rubber Tired Dozers	247	1	0.4	
	Tractor/Loader/Backhoe	97	1	0.37	
3- Grading	Graders	235	1	0.4	85.87
	Rubber-Tired Dozers	247	1	0.4	
	Tractor/Loader/Backhoe	97	2	0.37	
4-Building Construction	Forklifts	89	1	0.3	82.51
	Crane	65	1	0.4	
	Tractor/Loader/Backhoe	97	1	0.37	
	Generator Sets	87	1	0.37	
	Welders	85	3	0.45	
3 - Paving	Paving Equipment	132	1	0.5	86.33
	Rollers	80	1	0.1	
	Cement and Mortar Mixer	158	1	0.14	
	Pavers	80	1	0.1	
	Tractor/Loader/Backhoe	97	1	0.37	
4-Architectural Coating	Air Compressors	37	1	0.48	77.81

Table 4.13-5
ESTIMATED ONE-HOUR CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE RECEIVERS

Site	Sensitive Receiver	Distance (feet) ¹	1-Hour Leq (dBA)					
			Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating
1	9801 Talbert Avenue	261	73.3	70.1	71.6	68.2	72.0	63.5
2	18070 Scanlan Court	209	70.2	67.0	68.5	65.1	68.9	60.4



Site	Sensitive Receiver	Distance (feet) ¹	1-Hour Leq (dBA)					
			Demolition	Site Preparation	Grading	Building Construction	Paving	Architectural Coating
3	18038 Lemon Street	199	68.3	65.1	66.7	63.2	67.0	58.5
4	9900 Talbert Avenue	344	70.9	67.7	69.2	65.8	69.6	61.1

¹ Distances are from center of each respective construction phase, since that would be the average location of construction equipment most of the time.

Source: Calculated by UltraSystems.

will add a project design feature limiting the volume of the speaker. For the random and temporary noise disturbances with conversation at the call box if an employee arrived without their fob: the hospital would manage the structure, they have the ability to manage employees' habits and take measures for employees that habitually do not have a fob. The hospital would have much more control of the operations than a parking structure open to the public.

Mobile Sources

Given the logarithmic nature of the decibel, traffic volume needs to be doubled in order for the noise level to increase by 3 dBA (ICF Jones & Stokes, 2009), the minimum level perceived by the average human ear. A doubling is equivalent to a 100 percent increase in traffic volumes. The project will not generate onroad traffic trips, but rather will redistribute parking of medical and administrative staff from one area of the medical center to another. Because net increase in traffic, if any, on any local road segment would be far below 100 percent, the increase in roadway noise experienced at sensitive receivers would not be perceptible to the human ear. Therefore, roadway noise associated with project operation would not expose a land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

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

Less than Significant Impact

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the RMS velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in dB is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 vibration decibels (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources



within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Construction Vibration

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate through the ground and diminish in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

Pile drivers or other major vibration sources will not be used for construction of the Orange Coast Memorial Medical Center Parking Lot project. The question is whether the equipment that will be deployed will have significant vibration impacts. The FTA (2018) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction related vibration levels for the nearest sensitive receivers for major construction phases are shown in **Table 4.13-6**. These calculations were based on the distances from the construction activity to the closest sensitive receivers.

Table 4.13-6
VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet (in/sec)	Vibration Decibels at 25 feet (VdB)	PPV at 189 feet (in/sec)	Vibration Decibels at 189 feet (VdB)	PPV at 69 feet (in/sec)	Vibration Decibels at 69 feet (VdB)
Loaded trucks	0.076	86			0.025	73
Jackhammer	0.035	79	0.0038	53		
Small bulldozer	0.003	58	0.00032	32		
Large bulldozer	0.089	87	0.0096	61		

Sources: Data at 25 feet from (FTA, 2006, p. 12-12); calculations by UltraSystems.

As shown in **Table 4.13-6**, the PPV of construction equipment at the nearest sensitive receiver (69 feet) is at most 0.025 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum VdB are 73 VdB, which are below the FTA threshold for human annoyance of 80 VdB. Unmitigated vibration impacts would therefore be less than significant.

Operational Vibration

The project involves the operation of a parking structure and would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large manufacturing



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and industrial projects. Groundborne vibrations at the project site and immediate vicinity currently result from heavy-duty vehicular travel (e.g., refuse trucks and transit buses) on the nearby local roadways, and the project would not result in a substantive increase of these heavy-duty vehicles on the public roadways. Therefore, vibration impacts associated with operation of the project would be less than significant.

- 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 Impact

The closest active public airport is the John Wayne Airport, located approximately 5.3 miles southeast of the project site (Google Earth Pro, 2022). The project site is located outside of the airport's influence area boundary and noise contours (John Wayne Airport, 2022). Therefore, no impact related to the exposure of people residing or working in the proposed project area to excessive airport-related noise levels is anticipated.



4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

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

No Impact

The proposed project is the development of a three-story parking structure (including three levels plus rooftop above ground) for the Orange Coast Medical Center (OCMC). Use would be limited to parking for OCMC staff and employees, including physicians. The project does not involve an expansion of the OCMC, such as patient care or medical office spaces; thus, project development would not generate increased operational employment at OCMC. Project construction would generate a small number of temporary construction jobs. The unemployment rate in Orange County in November 2025 was 4.1 percent (EDD, 2025). It is expected that construction employment would be absorbed from the regional labor force and would not attract workers to move into the region. The project would not remove existing constraints to growth, add housing or employment, or result in population growth in the area directly or indirectly; therefore, no impacts would occur.

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

No Impact

The proposed project site is currently a surface parking lot and does not have any existing residential uses on-site. The proposed project would not displace people or necessitate the construction of replacement housing elsewhere; therefore, no impact would occur.

**4.15 Public Services**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, 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:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Parks?				X
e) Other public facilities?				X

a) Fire protection?**Less than Significant Impact**

The Fountain Valley Fire Department (FVFD) provides fire protection and emergency medical services to the City of Fountain Valley. FVFD operates two fire stations, Fire Station 1 at 17737 Bushard St, and Fire Station 2 at 16767 Newhope St (Fountain Valley, 2024b). The nearest existing fire station to the project site is Fountain Valley Fire Station 1, approximately 0.7 mile to the northeast. Station 1 has daily staffing of three and is equipped with one medic engine and one battalion command unit (Fountain Valley, 2024c).

Demands for fire protection and emergency medical services are generated by the numbers of people and the total building area in a fire department's service area. The proposed parking structure would be limited to use by Orange Coast Medical Center (OCMC) staff only. The project does not include an increase in patient care space or office space at OCMC and thus is not expected to generate an increase in the number of people on the OCMC campus. Operation of the proposed parking structure is not expected to generate substantial demand for fire protection and emergency medical services. Project development would not require the City to build a new or expanded fire station and impacts would be less than significant.

b) Police protection?**Less than Significant Impact**

The Fountain Valley Police Department (FVPD) provides police protection to the city, operating from its station at 10200 Slater Ave, about 0.6 mile northeast of the project site. FVPD is organized into two divisions: the Patrol Division and Support Services Division. The Patrol Division comprises of Patrol Officers, K-9 Officers, Traffic Officers, Police Services Officers, SWAT Team Members, School Resource Officer, Community Resource Officer, a Field Training Program and Senior Officer Program. The Support Services Division includes the Record Bureau, Dispatch Center, Detective Bureau, Crime



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Suppression Unit, CSI Unit, Crime Analyst, Property and Evidence Unit, Personnel and Training, and Crime Prevention (FVPD, 2022).

FVPD target response times for Priority 1 is 3 minutes 28 seconds for emergency calls like subject not breathing, shots fired, and other immediate risk to life/safety (FVCSP Revised Final EIR,, 2018).

Demands for police protection are generated by the numbers of people and the total building area in a police department's service area. The proposed parking structure would be limited to use by OCMC staff only. The project does not include an increase in patient care space or office space at OCMC and thus is not expected to generate an increase in the number of people on the OCMC campus. Operation of the proposed parking structure is not expected to generate substantial demand for police protection. Project development would not require the City to build a new or expanded police station and impacts would be less than significant.

c) Schools?

No Impact

Demand for school facilities is generated by the number of households within school attendance boundaries. The project does not propose new housing, and thus project development would not generate students. Therefore, no impact on schools would occur.

d) Parks?

No Impact

Demands for parks are generated by the population within park service areas. The project would not generate any additional demand for parks because the project does not involve new residential development. Therefore, there would be no impact.

e) Other Public Facilities?

No Impact

Impacts on libraries are based on the population increase the project would create. As an infrastructure project, the project would not induce a population increase. Therefore, there would be no impact on other public facilities such as libraries.



4.16 Recreation

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

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

No Impact

Recreational services in the City of Fountain Valley are provided by the City's Department Park and Recreation, which maintains 20 parks, sports facilities, and community centers (Fountain Valley, 2024a). Demand for parks is generated by the population within the parks' service areas. Development of the proposed parking structure, for use by OCMC staff only, would not increase population on or near the project site. Thus, project development would not generate an increase in demand for parks. No impact would occur.

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

No Impact

The project does not propose new or expanded recreational facilities that could have adverse effects on the environment. Therefore, no impact would occur.

**4.17 Transportation**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

The following analysis is based in part, upon the Parking Study for the Orange Coast Memorial Medical Center, Fountain Valley, California, prepared by LLG and dated May 23, 2024; a complete copy of this Report is included as **Appendix I1**, and the Vehicle Miles Traveled (VMT) Screening Analysis Memorandum for the proposed Orange Coast Memorial Medical Center (OCMMC) Parking Structure Project (VMT Analysis), prepared by LLG and dated January 9, 2025; a complete copy of this Memorandum is included as **Appendix I2**.

- a) **Would the project conflict with a program plan, ordinance or policy addressing circulation system, including transit, roadway, bicycle and pedestrian facilities?**

Less than Significant Impact**Applicable Plans, Ordinances, and Policies****Orange Coast Memorial Medical Center Specific Plan - Conceptual Circulation Plan**

The roadways within the Specific Plan area comprise Brookhurst Street, Talbert Avenue, Bushard Street, Ellis Avenue, Slater Avenue, and Ward Street. The proposed project will utilize Talbert Avenue, a six-lane divided roadway-oriented east-west, classified as a primary arterial with a right-of-way of 100 feet, as well as Foster Street, which is designated as a local roadway in the City of Fountain Valley General Plan Circulation Element.

Currently, there are three access points to the medical center along Talbert Avenue. The westernmost access point, referred to as Access Point 1, is the only access point impacted by the proposed project. This access point is approximately 950 feet west of Brookhurst Street, permitting right-turn ingress from Talbert Avenue and right-turn egress only.

The Conceptual Circulation Plan includes two access points from Foster Street; however, only Access Point 8 is affected by this project. Access Point 8 is located 250 feet south of Talbert Avenue on the west side of Foster Street, allowing right and left turn movements into and out of the medical center.

The proposed project will feature a two-lane driveway providing ingress from Foster Street. Egress will be facilitated via a two-lane, right-out-only driveway that connects to Talbert Avenue. The existing ingress access from Talbert Avenue will be restricted as part of this project. Additionally, a



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pedestrian bridge will connect the third floor of the parking structure to an elevator and stairs located in the medical office building at 9900 Talbert Avenue, on the east side of Foster Street.

Pedestrian movements between the parking structure and the larger OCMC campus will be supported by two designated pathways: the aforementioned pedestrian bridge and a crosswalk located on the south side of the intersection of Foster Street and Talbert Avenue.

The proposed project would conform to all the requirements of the Conceptual Circulation Plan of the Specific Plan. Therefore, the project would have a less than significant impact.

Project Trip Generation

The proposed project is intended to address the current parking demand by OCMC staff without introducing any additional traffic into the area. The project is not of the nature to increase the volume of vehicular trips. However, it will alter local traffic patterns.

OCMC currently employs 1,300 staff members, averaging 600 employees per shift. Nursing personnel typically work two 12-hour shifts from 7:00 AM to 7:00 PM and 7:00 PM to 7:00 AM. Other departments generally operate eight-hour shifts from 8:00 AM to 5:00 PM.

The parking study identified peak traffic times based on employee shift schedules and entry/exit data. The morning peak is recorded between 7:00 am and 8:00 am. There are two peak traffic times in PM; the afternoon peak is between 3:30 PM to 4:30 PM and evening peaks occur between 6:30 PM to 7:30 PM (see Table 4.17-1) (LLG, 2024, pp. 3-4).

Table 4.17-1
PEAK HOUR TRAFFIC

Day of the Week	Shift Change / Time Period	Employees			
		Arrival		Departure	
		Percent	Number	Percentage	Number
Weekday AM	6:00 AM	11.36 %	148	---	---
	6:30 AM	---	---	4.19 %	54
	7:00AM*	28.22%	367	---	---
	7:30 AM*	---	---	11.43%	149
	8:00 AM*	14.38%	187	---	---
	8:30 AM	---	---	0,11%	1
	9:00 AM	7.33%	95	---	---
Weekday PM	3:00 PM	2.57%	33	---	---
	3:30 PM*	---	---	11.40%	148
	4:00 PM*	2.59%	34	---	---
	4:30 PM*	---	---	13.27%	173
	5:00 PM	0.68%	9	---	---
	5:30 PM	---	---	9.33%	121
	6:00 PM	3.53%	46	---	---
	6:30 PM*	---	---	7.8%	101
	7:00 PM*	11.36%	148	---	---
	7:30 PM*	---	---	17.11%	222

Note: Bold * = peak hour.

Source: LLG, 2024



Traffic Impact Analysis Requirements

Based on the City of Fountain Valley Transportation Impact Assessment Guidelines for Land Use Project in CEQA and for General Plan Consistency, the City requires that a Traffic Impact Analysis (TIA) be prepared, including a Level of Service (LOS) analysis.

- When either the AM or PM peak hour trip generation is expected to exceed 100 vehicle trips from the proposed development,
- For projects on the Arterial Highway System which generate 1,600 Average Daily Trips (ADT),
- For projects that will add 51 or more trips during either the AM or PM peak hours to any intersection, and
- For any project, variations from the standards and guidelines provided in the City's guidelines are being proposed.

According to the City's guidelines, an LOS report is not required for the proposed project, as it will not generate any increase in the number of daily trips on weekdays or during peak hours. However, the proposed project will modify existing travel patterns in the vicinity of the site. Project development would not conflict with a plan or policy addressing the circulation system, and impacts would be less than significant.

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

Less than Significant Impact

CEQA Guidelines § 15064.3(b) pertains to the use of vehicle miles traveled (VMT) as a method of determining the significance of transportation impacts.

The Fountain Valley's Transportation Impact Assessment Guidelines for Land Use Projects in CEQA and General Plan Consistency (TIA Guidelines) states that three types of screening that can be applied to screen projects from project-level assessment. These screening steps are:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

As described previously, the proposed project consists of the construction of a new parking structure for staff. As documented in the VMT Analysis, OCMC will not be increasing hospital staffing, services, or intensifying uses. The implementation of the proposed project is to accommodate existing OCMC parking demand and will not generate any new trips to the area. Therefore, given that the proposed project will not generate any new trips, it will screen out per Step 3: Project Type Screening of the TIA Guidelines, since it will generate less than 110 daily trips (LLG, 2024, p. 6). Therefore, the proposed project would be consistent with CEQA Guidelines § 15064.3(b), and any impact would be less than significant.



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

Less than Significant Impact

Vehicular access to the proposed project will be provided through two primary entry points: a "full access" driveway located on Foster Street and a "right-turn in/out only" driveway situated on Talbert Avenue. Additionally, pedestrian access has been designed, featuring a marked crosswalk on Foster Street on Talbert Avenue, as well as a bridge over Foster Street next to the primary driveway into the proposed parking structure. Both pedestrian pathways connect to the established sidewalk system of the main OCMC campus, allowing safe movement for all pedestrians who access the facility.

The intersections of the driveways with Talbert Avenue and Foster Street would be perpendicular and would not cause hazards due to a geometric design feature. The proposed project's circulation system, including driveways and parking areas, would be designed to meet the development standards and would not result in uses or design features that would create traffic hazards.

Peak Project-Generated Traffic Hours on Foster Street

Project operation would shift some project-generated arriving vehicle trips to Foster Street that now access existing parking facilities via Talbert Avenue and Brookhurst Street. However, some patient/visitor parking now being done in the surface parking lot on the project site would be shifted to other facilities, most likely the existing parking structure. The existing parking lot onsite contains 126 staff parking spaces and 105 patient/visitor spaces. Operation of the proposed parking structure would shift trips to 658 staff parking spaces toward the proposed structure (784 proposed parking spaces less 126 existing staff spaces) and trips to 105 patient/visitor spaces toward other parking facilities, for a net increase of 553 parking spaces (658 staff spaces less 105 patient/visitor spaces). It is understood that many of these spaces would be used more than once per day (for instance, by two shifts of nursing staff or by patients and visitors); thus, the analysis here counts parking spaces and not trips.

The analysis of project impacts on staff vehicle trips using Foster Street only addresses arriving trips, as trips departing the proposed structure would exit to Talbert Avenue and would not use Foster Street.

The peak hours for arriving staff are the 7:00 to 8:00 a.m. hour (554 trips) and the 7:00 to 8:00 p.m. hour (148 trips). Arriving trips would be southbound on Foster Street to the parking structure entrance driveway. Most trips generated by the residential uses west of the hospital campus that would use Foster Street during the morning peak hour would be outbound (northbound) trips that would not be affected by arriving (southbound) trips on Foster Street. During the evening peak hour of staff arrivals, 7:00 to 8:00 p.m., trips generated by the residential uses would be returning home (southbound on Foster Street). However, the peak staff arrival hour is after the general afternoon peak hour (4:00 p.m. to 6:00 p.m.). Thus, trips by staff arriving in the evening are not expected to constrain access to the residences west of the campus.



Queuing

Arrival Queuing

The two-lane entrance driveway would have queuing capacity for 23 cars. The northerly lane of the entrance driveway would be 235 feet 4 inches long (stacking for 11 cars), and the southnerly lane of the driveway would be 255 feet 2 inches long (stacking for 12 cars). Supposing that each car would dwell for 10 seconds just outside of the entrance gate (for the driver to hold the badge near the proximity reader, and the gate to raise and lower), that means that 12 cars could be processed through the entrance gate per minute (two lanes at six per lane). The average rate of vehicles arriving during the 7:00 a.m. to 8:00 a.m. hour would be about 9.25 per minute (554 trips in 60 minutes). It is understood that the rate of vehicles arriving would vary. However, it is expected that the entrance driveway would have capacity for most arriving vehicles, with only occasional and sporadic queuing extending onto Foster Street.

Departure Queuing

Departures would be somewhat more spread out over time than arrivals would. The largest number of departures in a half-hour period would be at 7:30 p.m. with 222 departures. That is after the general afternoon traffic peak hour (4:00 p.m. to 6:00 p.m.); thus, exiting vehicles are not expected to cause congestion on Talbert Avenue during that hour. The second largest number of departures per half-hour period is 173 at 4:30 p.m. That is an average rate of about six vehicles per minute. The exit driveway would be right-out-only onto eastbound Talbert Avenue. The eastbound half of Talbert Avenue fronting the project site consists of three through lanes plus a left turn lane for turns onto Cashew Street. Exiting vehicles from the parking structure averaging six per minute are not expected to cause substantial congestion on Talbert Avenue. Therefore, the impacts regarding any hazards due to geometric design features or incompatible uses would be less than significant.

Parking Displacement

Operations

Project development would involve a loss of 234 surface parking spaces: 231 in the parking lot in the main part of the project site, and three spaces in the parking lot where the east landing of the proposed pedestrian bridge would be built. The proposed parking structure would contain 784 spaces, for a net increase of 550 parking spaces. The existing OCMC off-street parking supply is 1,353 spaces. OCMC required off-street parking per City of Fountain Valley municipal code is 1,585 spaces, for an existing deficit of 232 spaces. After the net increase in spaces arising from project development is accounted for, OCMC would have a surplus of 318 spaces; or 379 spaces with continued use of valets.

Construction

Project construction would involve the temporary loss of the 234 surface parking spaces mentioned above in the operations analysis. Memorial Health Services (MHS), the parent company of OCMC, operates office uses at 17330, 17360, and 17390 Brookhurst Street, about 0.6 mile north of the project site. Parking available for use at the 17330-17390 Brookhurst Street property amounts to 1,730 spaces including 1,400 at the Brookhurst Street property and 330 at 10101 Slater Avenue, immediately to the south of the Brookhurst Street property. Memorialcare proposes to use available parking capacity at MHS' Brookhurst Street facilities and Slater Avenue parking lot to accommodate



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parking demand temporarily displaced from the project site. A letter from John Somers, Memorialcare Vice President Real Estate and Facilities, regarding use of parking at the Brookhurst Street facilities and Slater Avenue lot is included as **Appendix A2**.

This parking analysis is for information only, as parking demand is no longer considered to be an environmental impact under CEQA.

d) Would the project result in inadequate emergency access?

Less than Significant Impacts

Construction

Project construction could involve temporary closure of segments of a lane on Talbert Avenue and/or Foster Street or an entire segment of the roadway(s). Any plans for construction activity on the roadway right-of-way would require an encroachment permit from the City of Fountain Valley Public Works Engineering Division (Public Works). Public Works would review any encroachment permit applications to ensure that such construction did not impede emergency response to the project site or other nearby properties; and would not create traffic hazards. Compliance with any conditions set forth in an encroachment permit would be a required condition of the permit. After Public Works approval and compliance with all conditions set forth in any encroachment permit, impacts would be less than significant.

Operation

The proposed project would comply with applicable city regulations, such as the city's fire code to provide adequate emergency access, as well as the California Building Standards Code. Prior to the issuance of building permits, the City of Fountain Valley would review the proposed project site plans, including location of the parking structure, fences, access driveways, and other features that may affect emergency access. The site design includes access and fire lanes that would accommodate emergency ingress and egress by fire trucks, police units, and ambulance/paramedic vehicles. All access and sight distances onsite would comply with all applicable design requirements. The City's review process and compliance with applicable regulations and standards would ensure that adequate emergency access would be provided. Therefore, the proposed project would not result in inadequate emergency access and would have a less than significant impact.

**4.18 Tribal Cultural Resources**

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?				X
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?		X		

Information from UltraSystems' Phase I Cultural Resources Inventory draft dated January 15, 2025 for the proposed project (refer to **Appendix C**) is included in the analysis below.

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is 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 § 5020.1(k)?**

No Impact

No traditional cultural sites in the project area were documented in the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) search (refer to Attachment C: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix C** to this IS/MND). No prehistoric archaeological resources were observed during the archaeological field survey conducted January 1, 2025 as part of the cultural resources investigation (see Section 4.3 in **Appendix C** to this IS/MND). No precontact period archaeological sites were found within the project APE with the CHRIS records search conducted at the SCCIC (see Section 4.1 in **Appendix C** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs). No specific tribal resources have been identified by local tribes responding to inquiries for the Cultural Resources Inventory (see Section 4.2 in **Appendix C** to this IS/MND).

No tribal cultural resources onsite are 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 § 5020.1(k). Therefore, the project would have no impact in this regard.



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- b) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?**

Less than Significant Impact with Mitigation Incorporated

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA, 2007).

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

Senate Bill 18 (SB 18) requires meaningful consultation with California Native American Tribes on potential impacts on tribal cultural resources (TCRs) that may result from zoning and master plan changes. The State of California Governor's Office of Planning and Research developed these Tribal Consultation Guidelines in order to provide guidance to cities and counties on the process for consulting with Native American Indian tribes during the adoption or amendment of local general plans or specific plans (defined in Government Code § 65450 et seq.). SB 18 requires local agencies to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process, thereby providing tribes an opportunity to participate in local land use decisions at an early planning stage.

The City of Fountain Valley (the lead agency) initiated AB 52 and SB 18 outreach to local tribes for the OCMC Parking Structure Project following formal submittal of the project to the City's Planning Department. The City Planning Department prepared and sent letters to the several tribes on their list for AB 52 and SB 18 contact on May 22, 2025, informing them of the project. The letters convey that the recipient has 30 days from the receipt of the letter to request AB 52 consultation and 90 days to request SB 18 consultation regarding the project. The letters were sent through email and certified mail to the following tribes:

- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians - Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians Acjachemen Nation- Belardes
- Juaneño Band of Mission Indians Acjachemen Nation 84A
- Pala Band of Mission Indians



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- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

The City of Fountain Valley has received two responses.

The Gabrieleño Band of Mission Indians–Kizh Nation responded by email on June 20, 2025 and indicated that Fountain Valley is situated within the ancestral territory of the tribe and that in the vicinity of modern-day Fountain Valley contains two major Kizh village settlements: *Pasbenga* and *Lupukungna*. Due to this, the tribe requested the implementation of Mitigation Measures provided with their letter. Following review by the City of Fountain Valley, it was determined that the Kizh Nation's suggested mitigation measures would be incorporated as applies only to the Gabrielino-Kizh Nation as one of the Native American monitors for the project, and should human remains be discovered and if the NAHC should choose the Kizh Nation to be the Most Likely Descendants (MLD). Mitigation measures **MM TCR-1** through **MM TCR -3** below pertain to the Gabrielino-Kizh Nation only.

The Juaneño Band of Mission Indians, Acjachemen Nation- Belardes responded by email on June 26, 2025 that they would like to consult on the project. Following review by the City of Fountain Valley, it was determined that the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes's suggested mitigation measures would be incorporated as applies only to the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes as one of the Native American monitors for the project, and should human remains be discovered and if the NAHC should choose the Kizh Nation to be the Most Likely Descendants (MLD). Mitigation measures **MM TCR-4** through **MM TCR -6** below pertain to the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes only.

No traditional cultural resource sites were documented in the Native American Heritage Commission's SLF search. No specific tribal resources have been identified during tribal outreach conducted by UltraSystems. No precontact or archaeological resources were observed during the field survey. The results of previous cultural resources surveys within the half-mile buffer zone were negative for cultural resources. (See **Appendix C** to this IS/MND.)

Land at the project site has remained relatively undisturbed due to use for farming into the late 20th century, and then shallow grading for a parking lot in the mid-1980s. No human remains have been previously identified or recorded onsite. Therefore, while the potential for subsurface prehistoric cultural deposits is considered to be low, the relatively undisturbed nature of the land in a region known to have been heavily used for habitation and natural resource gathering by the local Gabrielino tribe (see Section 2.2.2 and Section 6.0 in **Appendix C**) suggests the potential for the presence of cultural material.

The proposed project includes grading as well as excavation to approximately 14.5 feet for a basement level parking below grade and equipment for an elevator in the southeast corner. Grading activities associated with development of the project would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measures **MM-TCR-2 and TCR-4** dealing with Tribal Cultural Resource Objects and **TCR-3 and TCR-6** dealing with human remains and associated funerary objects are recommended to ensure that impacts related to the accidental discovery of human remains would be less than significant.



Mitigation Measures

Measures MM TCR-1 through MM TCR-3 would pertain to the Gabrielino-Kizh Nation only.

MM TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

MM TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe’s sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.



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MM TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

A. Native American human remains are defined in PRC 5097.98 (d)(1) as a inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code § 5097.98, are also to be treated according to this statute.

B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.

C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.

E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Measures MM TCR-4 through MM TCR-6 concern protection of TCRs and potential human remains only as they relate to the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes.

MM TCR-4: Retention of a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

a) The Project applicant shall retain a Native American Monitor from or approved by the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes. The monitor shall be retained prior to the commencement of any ground-disturbing activity for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

b) A copy of the executed monitoring agreement shall be submitted to the (City) prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence ground disturbing activity.

c) The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered tribal cultural resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native



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American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project applicant upon written request to the Tribe.

d) On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Tribe or Tribal monitoring agency from a designated point of contact for the Project applicant that all ground-disturbing activities and phases that may involve the Project are complete; or (2) a determination and written notification by the Tribe or Tribal monitoring agency to the Director of Community Development, or designee that no future, planned construction activity and/or development/construction phase at the Project site possesses the potential to impact TCRs.

MM- TCR-5: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

a) Upon discovery of any tribal cultural resources (TCRs), all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American Monitor. The Tribe or Tribal monitoring agency will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

MM-TCR-6: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.

a) Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

b) If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.

c) Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).

d) Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.

e) Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Level of Significance After Mitigation

MM TCR-1 through **TCR-3** pertains to the Gabrielino–Kizh Nation if they are chosen to conduct tribal monitoring and if they are chosen to be the MLD by the NAHC if human remains are discovered. **MM-TCR-4** through **TCR-6** pertain to the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes



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if they are chosen to conduct tribal monitoring and if they are chosen to be the MLD by the NAHC if human remains are discovered.

These MMs require monitoring of ground-disturbing activities during project construction by a Native American monitor, halting construction activities if the unanticipated discovery of a TCR and their evaluation by the Native American and a qualified archaeologist, describing the treatment of human remains if found, and the disposition of TCRs if found. With the implementation of **MM TCR-1** through **TCR-6**, potential project impacts on TCRs



4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
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?			X	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?				X
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?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

- a) **Would the project 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?**

Less than Significant Impact

The proposed project would require installation of an electrical conduit connecting to an existing conduit under the project site.

Wastewater Treatment and Conveyance – The City of Fountain Valley operates and maintains sewers in the city including the project site vicinity. Wastewater from Fountain Valley is conveyed to two Orange County Sanitation District treatment plants, one in Fountain Valley and the second in



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Huntington Beach. The proposed project does not include facilities that would generate wastewater, and project development would have no adverse impact on wastewater treatment or conveyance.

Water – The project site is in the City of Fountain Valley water service area. The City’s water sources are water imported from northern California and the Colorado River and purchased through the Municipal Water District of Orange County, local groundwater from the Coastal Plain of Orange County Groundwater Basin, and recycled water (City of Fountain Valley, 2021, p. 6-1). Project operation would use a small amount of water for landscape irrigation. As analyzed in Threshold 4.19 b) below, the project would result in a nominal increase in water demand compared to existing conditions and therefore, the project would have a less than significant impact regarding water supplies.

Water Treatment – Imported water purchased through the Municipal Water District of Orange County is treated at the Metropolitan Water District of Southern California’s Diemer Filtration Plant in the city of Yorba Linda, which has capacity of 520 million gallons per day (MWDh20.com, 2024).

Stormwater – Existing site drainage is via sheet flow to a parkway drain and a catch basin, both at the north edge of the site, and both of which discharge into an existing storm drain in Talbert Avenue north of the site (Tait and Associates, 2024, p. 2). At project completion drainage from the proposed parking structure would sheet flow to roof drains that would discharge at grade and flow to a Modular Wetland System in the northeast corner of the project site. The Modular Wetland System will discharge to the existing catch basin at the northeast of the site, and then to the existing storm drain north of the site in Talbert Avenue (Tait and Associates, 2024, p. 2). Refer to **Section 4.10** of this document for a discussion of the proposed project impacts regarding hydrology and water quality.

Electric Power: Electric power for the City of Fountain Valley is provided by Southern California Edison (SCE). The proposed project is in a developed area, and infrastructure for providing electric power to the area is well established. SCE typically utilizes existing utility corridors to reduce environmental impacts and has energy-efficiency programs to reduce energy usage and maintain reliable service throughout the year (Southern California Edison, 2018, p. 45). Total electricity consumption in SCE’s service area is forecast to be 111,672GWh in 2022 and 122,931 GWh in 2030 (CEC, 2020, Form 1.2); one GWh is equivalent to one million kilowatt-hours.

The project includes installation of an electric conduit connecting to an existing conduit under Foster Street. Project development would not necessitate the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

Natural Gas: The proposed development would not include fixtures powered by natural gas.

Telecommunications Facilities: The project does not include telecommunications services and thus no impact to telecommunications facilities would occur.



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- b) Would the project have sufficient water supplies available to serve the and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact

Water Supplies and Demands

The City of Fountain Valley provides water to residents and businesses within the city, including the project site. The City's water sources include water imported from northern California and the Colorado River and purchased through the Municipal Water District of Orange County, local groundwater from the Coastal Plain of Orange County Groundwater Basin, and recycled water (City of Fountain Valley, 2021, p. 6-1). The City forecasts that it will have sufficient water supplies to meet demands over the 2025-45 period as shown below for normal-water years and single-dry-years in **Table 4.19-1**, and in multiple-dry-years in **Table 4.19-2** (City of Fountain Valley, 2021, pp. 7-9 – 7-11).

Table 4.19-1
CITY OF FOUNTAIN VALLEY WATER SUPPLIES AND DEMANDS, AFY
NORMAL AND SINGLE-DRY-YEAR CONDITIONS

	2025	2030	2035	2040	2045
Normal Water Year					
Supply totals	9,989	9,911	10,024	10,118	10,118
Demand totals	9,989	9,911	10,024	10,118	10,118
Difference	0	0	0	0	0
Single Dry Year					
Supply totals	10,588	10,505	10,625	10,725	10,725
Demand totals	10,588	10,505	10,625	10,725	10,725
Difference	0	0	0	0	0

Source: City of Fountain Valley, 2021

AFY= Acre-Feet per Year

Table 4.19-2
CITY OF FOUNTAIN VALLEY WATER SUPPLIES AND DEMANDS, AFY
MULTIPLE-DRY-YEAR CONDITIONS

		2025	2030	2035	2040	2045
First Year	Supply totals	10,487	10,572	10,529	10,645	10,725
	Demand totals	10,487	10,572	10,529	10,645	10,725
	Difference	0	0	0	0	0
Second Year	Supply totals	10,513	10,555	10,553	10,665	10,725
	Demand totals	10,513	10,555	10,553	10,665	10,725
	Difference	0	0	0	0	0
Third Year	Supply totals	10,538	10,539	10,577	10,685	10,725
	Demand totals	10,538	10,539	10,577	10,685	10,725
	Difference	0	0	0	0	0
Fourth Year	Supply totals	10,563	10,522	10,601	10,705	10,725



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		2025	2030	2035	2040	2045
	Demand totals	10,563	10,522	10,601	10,705	10,725
	Difference	0	0	0	0	0
Fifth Year	Supply totals	10,588	10,505	10,625	10,725	10,725
	Demand totals	10,588	10,505	10,625	10,725	10,725
	Difference	0	0	0	0	0

Source: City of Fountain Valley, 2021

AFY= Acre-Feet per Year

Project operation would use water for landscape irrigation. The proposed net increase in landscaped area is approximately 5,248 square feet, from the existing 17,857 square feet to the proposed 23,105 square feet. The proposed project includes low-water-demand landscape plantings. Thus, any net increase in irrigation water demand is expected to be very slight. Project construction would use water for uses including concrete mixing and dust control for the construction period, which is estimated to last about one year.

The City of Fountain Valley forecasts that it will have adequate water supplies to meet demands over the 2025-2045 period. Project impacts on water supplies would be less than significant.

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

No Impact

The proposed project does not include installation of fixtures that would generate wastewater; thus, project development would not cause any impacts on wastewater treatment capacity.

- d) Would the project 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 Impact

The proposed parking structure is intended to accommodate existing staff parking demand at OCMC. The proposed project does not include expansion of land uses at OCMC (hospital or medical office) that would increase solid waste generation. Therefore, project development would not generate solid waste exceeding state or local standards or exceeding the capacity of landfills serving the city of Fountain Valley.

- e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

No Impact

Project construction would involve demolition of the existing parking lot and thus would generate demolition debris. Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2022 California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations,



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Part 11) requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. City of Fountain Valley Municipal Code Chapter 6.09, Recycling and Diversion of Waste from Construction and Demolition, requires diversion of demolition and construction waste from landfills at the minimum percentage specified in CALGreen (ecode360.com, 2024). Project construction would comply with requirements for diversion of demolition debris, and no adverse impact would occur.

Project operation would not cause a net increase in solid waste generation by OCMC and thus would have no impact on laws and regulations governing solid waste reduction.

**4.20 Wildfire**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
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?				X
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?				X
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?				X

- a) **If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?**

No Impact

As shown in **Figure 4.9-2 in Section 4.9 of this IS/MND**, the project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA), that is, where cities or counties are responsible for the costs of wildfire prevention and suppression. The nearest VHFHSZ in LRA to the project site is about 7.2 miles southeast of the project site in the neighborhood of San Joaquin Hills in the City of Newport Beach. The project site is not located in a State Responsibility Area (SRA), i.e., where the State is responsible for the costs of wildfire prevention and suppression. The nearest SRA to the project site is in the City of Newport Beach approximately 11.5 miles to the southeast (see **Figure 4.9-3**; CAL FIRE, 2021). Therefore, the proposed project would have no impact in this regard.

- b) **If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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 Impact

The project site is not located in or near a VHFHSZ. The project site is developed as a surface parking lot; is in a built-out urban region; and is thus not subject to wildfire hazard. Wildfire potential in Orange County is highest in August through October due to dry vegetation and hot, dry Santa Ana winds (City of Fountain Valley, 2023). However, Fountain Valley is no more prone to Santa Ana winds than are most other lowland places in southern California. Thus, the project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, the proposed project would have a no impact in this regard.

- c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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 Impact

The project site is not located in an SRA (CAL FIRE, 2022), nor is the project site in or near a VHFHSZ. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. The project would include installation of electricity conduits for lighting, and water laterals for landscape irrigation, both of which would be underground. Therefore, the proposed project would have no impact in this regard.

- d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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 Impact

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones. The project site is flat, is not in an area with high slopes or unstable ground conditions and is not within a landslide hazard zone (see Section 4.7, *Geology and Soils*). The proposed 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. Therefore, the project would have no impact in this regard.



4.21 Mandatory Findings of Significance

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

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

Less Than Significant Impact with Mitigation Incorporated

The project site is in an urbanized area and most of the site is developed with a surface parking lot. Vegetation onsite is ornamental landscaping subject to disturbances from parking lot and roadway uses next to the landscaped areas, and from occasional landscape maintenance. No sensitive species were observed onsite. No sensitive species are expected to occur onsite due to lack of suitable habitat as well as disturbances in and next to the landscaping.



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Trees onsite could provide habitat, including nesting habitat, for birds. Most bird species occurring in California are protected by the federal Migratory Bird Treaty Act (MBTA) and by California Fish and Game Code §§ 3503 et seq. Project development would remove vegetation and, thus, nesting habitat. This impact would be significant. Implementation of mitigation measure **BIO-1** would reduce this impact to a less than significant level. Project development would not substantially reduce fish or wildlife habitats or populations, threaten to eliminate a plant or animal community, or substantially reduce the population or range of a rare or endangered plant or animal species.

No archaeological resources were identified onsite in the cultural resources investigation that included a records search, inquiries of Native American tribal representatives regarding the potential presence of Native American archaeological resources onsite, and a pedestrian survey.

No historic resources were identified onsite or within 0.5 mile of the project site. Project development would not eliminate an important example of the major periods of California history or prehistory.

The site was previously used for agriculture, and then was developed with a paved parking lot in the 1980's. This suggests that the ground on the project site has been minimally disturbed; thus, the potential for archaeological resources to be present onsite is considered low. Project development would involve ground disturbance and thus could damage archaeological resources. This impact is potentially significant; implementation of mitigation measure **CUL-1** would reduce this impact to a less than significant level.

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

Less than Significant Impact

In the short term, there would be potential for cumulative effects on traffic, air quality, and noise if other development projects were implemented concurrently with the project. The City of Fountain Valley Planning Division is not currently processing applications for any other projects within one mile of the proposed project site; nor are any such projects under construction (Jenkins, 2026). Proposed project impacts would not be cumulatively considerable.

As the proposed project is consistent with the City's General Plan, and there is no zone change associated with the proposed project, long term impacts would be less than significant.

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

Less than Significant Impact with Mitigation Incorporated

Project site clearance would remove vegetation that could be used as habitat by birds protected under federal and state laws; this impact would be significant; implementation of mitigation measure **BIO-1** would reduce this impact to less than significant.

Archaeological resources may be buried in site soil and could be damaged by project ground-disturbing activities. This impact would be potentially significant without mitigation. Implementation of mitigation measure **CUL-1** would reduce this impact to less than significant.



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Fossils could be buried in site soils. Project ground-disturbing activities could damage fossils. Implementation of mitigation measure **GEO-1** would reduce this impact to less than significant.

Implementation of mitigation measures **TCR-2**, dealing with associated funerary objects, and **TCR-3**, dealing with human remains, are recommended to ensure that impacts related to the accidental discovery of human remains would be less than significant. Tribal cultural resources could be buried in site soils. Project site grading and project construction could damage such resources. Implementation of mitigation measures **TCR-1** through **TCR-3** would reduce these impacts to less than significant.



5.0 REFERENCES

- ARB, 2008. Climate Change Scoping Plan: a framework for change. California Air Resources Board. December 2008.
- ARB, 2011. Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document. California Air Resources Board. August 19, 2011.
- ARB, 2014. First Update to the Climate Change Scoping Plan, Building on the Framework. California Air Resources Board. May 2014.
- ARB, 2017. California's 2017 Climate Change Scoping Plan. California Air Resources Board. November 2017. URL: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf.
- ARB, 2019. Ambient Air Quality Standards. California Air Resources Board. Accessed online at <https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf>. 2024.
- ARB, 2022a. California Greenhouse Gas Emissions for 2000 to 2020. Accessed online at https://ww2.arb.ca.gov/sites/default/files/classic/cc/inventory/2000-2020_ghg_inventory_trends.pdf, on February 21, 2025.
- ARB, 2022b. California's 2022 Scoping Plan. Accessed online at <https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf> on January 15, 2025.
- ARB, 2024. iADAM Air Quality Data Statistics. California Air Resources Board. <http://www.arb.ca.gov/adam>. Accessed July 2024.
- ARB, 2023a. Maps of State and Federal Area Designations. Accessed online at <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>, on December 31, 2024.
- ARB, 2023b. iADAM: Air Quality Data Statistics. Accessed online at <https://www.arb.ca.gov/adam/>, on December 31, 2024.
- ARB, 2024a. Carbon Monoxide & Health. Accessed online at <https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health>, on December 31, 2024.
- ARB, 2024b. Inhalable Particulate Matter and Health (PM2.5 and PM10). Accessed online at <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>. On December 31, 2024.
- ARB, 2024c. In-Use Off-Road Diesel-Fueled Fleets Regulation. Accessed online at <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation> on November 25, 2024.
- Bell, Alyssa, 2024. Paleontological resources for the Orange Coast Memorial Medical Center Parking Structure Project (7307). December 8, 2024. Research and Collections, Natural History Museum Los Angeles County, Los Angeles, California.



❖ SECTION 5.0 – REFERENCES ❖

- Calflora, 2020. Information on California plants for education, research and conservation. Observation Search. Available at <https://www.calflora.org/entry/observ.html>. Accessed on July 14, 2020.
- California Department of Housing and Community Development (CDHC). 2021. California Green Building Standards Code—CALGreen. Accessed online at: <https://www.hcd.ca.gov/building-standards/calgreen/index.shtml> on August 5, 2021.
- California Department of Transportation (Caltrans), 2009. Technical Noise Supplement. Division of Environmental Analysis, Sacramento, California (November), http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf.
- California Department of Transportation (Caltrans), 2013. Technical Noise Supplement to the Caltrans Traffic Noise Analysis Protocol. Division of Environmental Analysis, Sacramento, California (September). http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013A.pdf.
- California Geological Survey (CGS). 2008a. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special Report 206, Plate 1. Accessed online at: http://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR206_Plate1.pdf, on March 22, 2022.
- California Geological Survey (CGS). 2008b. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Accessed online at: http://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR_206_Text.pdf, on March 22, 2022.
- California Geological Survey (CGS). 2008c. Updated Aggregate Resource Sector Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption Region, San Bernardino and Riverside Counties, California. Special report 206, Plate 2. Accessed online at: http://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_206/SR206_Plate2.pdf, on March 22, 2022.
- City of Fountain Valley, 2023. General Plan. Accessed online at https://www.fountainvalley.gov/DocumentCenter/View/19654/Fountain_Valley_2045_General_Plan on January 6, 2025.
- CEC, 2024. Electricity Consumption by County. Accessed online at <https://ecdms.energy.ca.gov/elecbycounty.aspx>, on November 4, 2024.
- CEC, 2022. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings: For the 2022 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations in Part 1. Accessed online at <https://www.energy.ca.gov/publications/2022/2022-building-energy-efficiency-standards-residential-and-nonresidential>, on October 10, 2024.
- CEC, 2025. 2025 Building Energy Efficiency Standards. Accessed online at <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency> on January 7, 2025.



❖ SECTION 5.0 – REFERENCES ❖

- California Natural Resources Agency (CNRA), 2007. The California Environmental Quality Act (CEQA). Guidelines for Implementation of the California Environmental Quality Act. Electronic document.
- CAPCOA, 2022. California Emissions Estimator Model®, Version 2022.1.1.29. California Air Pollution Control Officers Association. Accessed online at <https://www.caleemod.com/>, on December 31, 2024.
- CARB (California Air Resources Board), 2024. National Ambient Air Quality Standards. Accessed online at <https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards>, on December 26, 2024.
- CASGEM (California Statewide Groundwater Elevation Monitoring Program). 2022. Well Details for State Well Number 01N05W32N001S. Available at <https://www.casgem.water.ca.gov/>. Accessed on March 8, 2022.
- CASQA (California Stormwater Quality Association). 2003. Stormwater Best Management Practice Handbook: New Development and Redevelopment. Available by subscription from California Stormwater Quality Association, casqa.org.
- CASQA (California Stormwater Quality Association). 2023. California Construction Best Management Practices Handbook. Available by subscription from California Stormwater Quality Association, casqa.org.
- CBWCD (Chino Basin Water Conservation District) 2022. Where Does Our Water Come From? <https://www.cbwcd.org/386/Where-Does-Our-Water-Come-From>.
- CEMA, CGS, and USC (California Emergency Management Agency, California Geological Survey, and University of Southern California). 2009. Tsunami Inundation Map for Emergency Planning: County of Los Angeles, California. Scale 1:24,000. Available at <https://www.conservation.ca.gov/cgs/tsunami/maps>.
- Calflora, 2025. Information on California plants for education, research and conservation. [web application]. Berkeley, California: The Calflora Database [a non-profit organization]. Available at <https://www.calflora.org/>. Accessed on February 12, 2025.
- California Geological Survey (CGS). 2025. Data Viewer. Accessed online at: <https://maps.conservation.ca.gov/cgs/DataViewer/>, on January 15, 2025.
- CGS (California Geological Survey). 1995. Generalized Mineral Land Classification Map of Orange County. Open File Report 94-15, Plate 1. [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR 94-15/OFR 94-15 Plate 1.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/OFR_94-15/OFR_94-15_Plate_1.pdf).
- "Chapter 12.04: Trees, Shrubs, and Plants." Municipal Code Corporation, 2025, <https://ecode360.com/42934664>. Accessed 10 Feb. 2025.
- Chico, T. and Koizumi, J., 2008. Final Localized Significance Threshold Methodology. South Coast Air Quality Management District, Diamond Bar, California. June 2003. Revised July 2008. URL: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance->



❖ SECTION 5.0 – REFERENCES ❖

- [thresholds/final-lst-methodology-document.pdf?sfvrsn=2](#). Accessed on December 31, 2024.
- City of Fountain Valley, 2019. Zoning Map. Accessed online at <https://www.fountainvalley.gov/DocumentCenter/View/492/Fountain-Valley-Zoning-Map?bidId=>, on December 26, 2024.
- City of Fountain Valley. 2021. 2020 Urban Water Management Plan. Accessed online at: https://wuedata.water.ca.gov/public/uwmp_attachments/4498700797/Fountain%20Valley%202020%20UWMP%20FINAL%2D2021.06.22.pdf, on December 11, 2024.
- City of Fountain Valley, 2023a. 2045 General Plan. Accessed online at https://www.fountainvalley.gov/DocumentCenter/View/19654/Fountain_Valley_2045_General_Plan, on December 26, 2024.
- City of Fountain Valley, 2023b. 2045 General Plan Environmental Impact Report. Accessed online at <https://www.fountainvalley.gov/DocumentCenter/View/19301/GPU-EIR>, on December 26, 2024.
- City of Fountain Valley. 2025. Current Projects List. Accessed online at: <https://www.fountainvalley.gov/409/Current-Projects>, on March 6, 2025.
- CNDDDB (California Natural Diversity Database). 2025a. RareFind 5 (Internet). California Department of Fish and Wildlife (5.3.0). Available at <https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed on February 11, 2025.
- CNDDDB (California Natural Diversity Database). 2025b. Special Vascular Plants, Bryophytes, and Lichens List. January 2025. California Department of Fish and Wildlife. Sacramento, CA. Available at: <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>. Accessed on February 11, 2025.
- CNDDDB (California Natural Diversity Database). 2025c. Special Animals List. January 2025. California Department of Fish and Wildlife. Sacramento, CA. Available at <https://wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>. Accessed on February 11, 2025.
- CNPS (California Native Plant Society), 2025. Rare Plant Program. Rare Plant Inventory (online edition, v9.5.1a). Available at: <https://www.rareplants.cnps.org>. Accessed on February 5, 2025.
- Cornell Lab of Ornithology. 2025. All About Birds. Cornell Lab of Ornithology, Ithaca, New York. Available at <https://www.allaboutbirds.org>. Accessed on Feb 21, 2025.
- Department of Toxic Substances Control (DTSC). 2021. Glossary of Environmental Terms. Accessed online at: <https://dtsc.ca.gov/glossary-of-environmental-terms/>, on March 17, 2021.
- DTSC (Department of Toxic Substances Control). 2025. EnviroStor. Accessed online at: <http://www.envirostor.dtsc.ca.gov/public/>, on January 2, 2025.
- Digalert.com. 2022. Utilities contact lookup. Accessed online at: <https://newtinb.digalert.org/direct/>, on March 24, 2022.



❖ SECTION 5.0 – REFERENCES ❖

- DLRP (Division of Land Resource Protection). 2023b. California Williamson Act Enrollment 2023. Accessed online at: <https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html>, on January 9, 2025.
- Division of Mine Reclamation (DMR). 2020. Mines Online. Accessed online at: <https://maps.conservation.ca.gov/mol/index.html>, on March 22, 2022.
- DOC, 2014. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the Temescal Valley Production Area, Riverside County, California (Special Report 231, Plate 1). Received via email from California Geological Survey, March 5, 2021.
- DOC, 2016. California Important Farmland Finder. Accessed online at: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed in December 24, 2024.
- DOC, 2024. Important Farmland Categories. Accessed online at: <https://www.conservation.ca.gov/dlrp/fimmp/Pages/Important-Farmland-Categories.aspx> on January 2, 2025.
- DOC, 2024. Earthquake Zones of Required Investigation. Accessed online at <https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/>, on December 26, 2024.
- Division of Mine Reclamation (DMR). 2022. Mines Online. Accessed online at: <https://maps.conservation.ca.gov/mol/index.html>, on March 22, 2022.
- DWR (California Department of Water Resources). 2024. SGMA [Sustainable Groundwater Management Act] Data Viewer. Accessed online at: <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>, on December 11, 2024.
- DWR (California Department of Water Resources). 2003. Bulletin 118: California's Groundwater, Upper Santa Ana Valley Groundwater Basin (Groundwater Basin Number 8-002). Available at <https://water.ca.gov/Programs/Groundwater-Management/Bulletin-118>. Accessed on March 9, 2022.
- DWR (California Department of Water Resources). 2022. Division of Safety of Dams, California Dam Breach Inundation Maps. Available at <https://fmds.water.ca.gov/maps/damim/>. Accessed on March 11, 2022.
- eBird, 2025. A global database of bird observations and citizen science platform for birdwatchers. [web application]. Ithaca, New York: Cornell Lab of Ornithology. Available at <https://ebird.org/home>. Accessed on Feb 3, 2025.
- ecode360.com. 2022. City of Fountain Valley Municipal Code Chapter 6.09. Accessed online at: <https://ecode360.com/42930332?highlight=construction,debris&searchId=15122187104953335#42930311>, on December 16, 2024.
- ecode360.com. 2024. City of Fountain Valley Municipal Code Chapter 18.28. Accessed online at: <https://ecode360.com/42936144>, on December 16, 2024.



❖ SECTION 5.0 – REFERENCES ❖

EDD (Employment Development Department). Monthly Labor Force Data for Counties. Accessed online on January 20, 2026 at: <https://labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf>.

FEMA (Federal Emergency Management Agency). 2008. Flood Insurance Rate Map (FIRM) for San Bernardino County, California and Incorporated Areas (Map Number 06071C7915H). Effective August 28, 2008. Available at <https://msc.fema.gov/portal/search?AddressQuery=6697%20Citrus%20Avenue%2C%20Fontana%2C%20CA%00#searchresultsanchor>, on March 10, 2022.

FEMA (Federal Emergency Management Agency) 2022. National Flood Hazard Layer (NFHL) Viewer. Available at: <https://www.fema.gov/flood-maps/national-flood-hazard-layer>, Accessed on March 10, 2022.

Federal Emergency Management Agency (FEMA). 2024. Flood Map Service Center. Accessed online at: <https://msc.fema.gov/portal/home>, on December 11, 2024.

Fountain Valley. 2024a. About Fountain Valley. Accessed online at: <https://www.fountainvalley.gov/640/About-Fountain-Valley#:~:text=Since%20its%20incorporation%20in%201957,ages%2C%20great%20weather%20throughout%20the>, on January 2, 2025.

Fountain Valley. 2024b. Facilities. Accessed online at: <https://www.fountainvalley.gov/Facilities?clear=False>, on January 2, 2025.

Fountain Valley. 2024c. Facilities - Fire Station 1. Accessed online at: <https://www.fountainvalley.gov/Facilities/Facility/Details/Fire-Station-1-21>, on January 2, 2025.

FTA (Federal Transit Administration), 2018. Transit Noise and Vibration Impact Assessment Manual (FTA Report No. 0123). Washington, DC. September 2018. Internet: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

FVCSP (Fountain Valley Crossing Specific Plan), 2024. Public Services. Accessed online at: <https://www.fountainvalley.gov/DocumentCenter/View/7207> on January 2, 2025.

FVPD, 2024. Department History. Accessed online at: <https://www.fountainvalley.gov/884/Department-History#:~:text=Headed%20by%20the%20Police%20Chief,detection%20and%20investigations%20of%20crime>, on January 2, 2025.

Google Earth Pro. 2025. Version 7.3.6.10201 (January 13, 2025). Talbert Ave, Orange County, California. 33.701207°, -117.957634°. Eye altitude 3281 feet. Imagery Date: December 4, 2023. ©Google 2025. Accessed on February 12, 2025.

Governor's Office of Planning and Research, 2017. General Plan Guidelines. Appendix D. Noise Element Guidelines. Sacramento, California. http://opr.ca.gov/docs/OPR_Appendix_D_final.pdf.



❖ SECTION 5.0 – REFERENCES ❖

- Hendriks, R., Rymer, B., Buehler, D., And Andrews, J., 2013. Technical Supplement to the Caltrans Traffic Noise Analysis Protocol. Division of Environmental Analysis, Sacramento, CA. Available at <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Nongame Heritage Program, California Department of Fish & Game, Sacramento, Calif. 156 pp.
- IPCC, 2007a. Historical Overview of Climate Change. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- IPCC, 2007b. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. Intergovernmental Panel on Climate Change. Core Writing Team; Pachauri, R.K; Reisinger, A., eds., 2007. ISBN 92-9169-122-4.
- ICC, 2022. 2022 California Green Building Standards Code, Title 24, Part 11 (CALGreen). Accessed online at <https://codes.iccsafe.org/content/CAGBC2022P1> on November 25, 2024.
- iNaturalist, 2025. iNaturalist Community. Observations of Special-Status Plant and Wildlife Species from Fountain Valley, California, United States observed on/between February 5 to February 11, 2025, Available at <https://www.inaturalist.org>. Accessed on February 3, 2025.
- ITE (Institute of Transportation Engineers), 2022. Trip Generation. Vehicle Time of Day Distribution for ITETripGen Appendices. May 2. Accessed online at <https://www.ite.org/tripgenappendices/>. Accessed on January 7, 2025.
- LCAI (Governor's Office of Land Use and Climate Innovation), 2017. General Plan Guidelines. Accessed online at: https://lci.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf, on February 16, 2026.
- Mastalir, Diane. 2024. "Conservation Plan Boundaries – HCP and NCCP [ds 760]." 08 February, 2024. Biogeographic and Information System (BIOS). Calif. Dept. of Fish and Wildlife. Available at Biogeographic Information and Observation System (BIOS). Accessed on March 17, 2025.
- MDHearing.com, 2026. Decibel Chart: All You Need to Know. Accessed online at: <https://www.mdhearingaid.com/blog/decibel-chart/?srsltid=AfmBOopSEyTpSeTpJcQCM4eLDhYuA0Uup2U6OyTjn7JfjV0N1tvECf2y>, on February 16, 2026.
- Morton, Douglas M., and Fred K. Miller, Compiled by. 2006. Geologic Map of the San Bernardino and Santa Ana 30' x 60' Quadrangles, California. United States Geological Survey, U. S. Department of the Interior.



❖ SECTION 5.0 – REFERENCES ❖

- MWDSC (Metropolitan Water District of Southern California). 2024. Water Quality and Treatment. Accessed online at: <https://www.mwdh2o.com/your-water/water-quality-and-treatment/>, on December 13, 2024.
- Nafis, G. 2025. California Herps – A Guide to the Amphibians and Reptiles of California. Available at <https://californiaherps.com/>. Accessed on February 3, 2025.
- NASA, 2018. Global Climate Change: Vital Signs of the Planet. National Air and Space Administration. Accessed online at: <https://climate.nasa.gov/evidence/>. Accessed in August 2020.
- NRCS (National Resources Conservation Service). 2025. American Bumble Bee (*Bombus pensylvanicus*) – Landowner Guide (website). <https://www.fws.gov/sites/default/files/documents/American%20Bumble%20Bee%20Landowner%20Guide.pdf>. Accessed on February 11, 2025.
- OCTA (Orange County Transportation Authority), 2016. OCTA M2 Natural Community Conservation Plan/ Habitat Conservation Plan. October, 2016. Available at <https://www.octa.net>. Accessed on July 15, 2020.
- OCTA, 2019a. Congestion Management Program Preparation Manual. Orange County Transportation Authority. Accessed online at <https://www.octa.net/pdf/2019CMP.pdf?n=201911> , accessed on December 12, 2019.
- OCTA, 2019b. Orange County Master Plan Arterial Highways. Accessed online at <https://www.octa.net/News-and-Resources/Open-Data/MPAH-Overview/>, accessed on June 1, 2020.
- Quinn, N. M. et al. 2018. Pest Notes: Ground Squirrels. UC ANR Publication 7438, revised December 2018. University of California Agriculture and Natural Resources. Statewide Integrated Pest Management Program. Available at <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7438.html>. Accessed on August 9, 2021.
- Ring, 2024. California Policy Center. Despite Spending Billions on Climate-Change Initiatives, 84 Percent of California's Energy Still Comes from Fossil Fuels. Accessed online at <https://californiapolicycenter.org/reality-check-half-of-californias-energy-comes-from-crude-oil/>. on December 31, 2024.
- RWQCB (Santa Ana Regional Water Quality Control Board). 1995. Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), with amendments effective 2016. Available at https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/.
- RWQCB (Santa Ana Regional Water Quality Control Board). 2013, as amended. National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region (Order No. R9-2013-0001, which was amended in 2015 by Orders No. R9-2015-0001 and R9-2015-0100 [NPDES No. CAS0109266]). Available at: https://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/sd_stormwater.html. Downloaded on March 15, 2021.



- RWQCB (Santa Ana Regional Water Quality Control Board). 2013, December 20. Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (WQMPs). Accessed online at: <http://prg.ocpublicworks.com/DocmgmtInternet/Download.aspx?id=1098>, on January 14, 2025.
- Sawyer, J.O., T. Keeler-Wolf, J.M. Evens, 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society Press. Sacramento, CA.
- SCAG, 2024. Final Connect SoCal 2024. Accessed online at <https://scag.ca.gov/sites/main/files/file-attachments/23-2987-connect-socal-2024-final-complete-040424.pdf?1714175547> on December 31, 2024.
- SCAQMD, 1993. CEQA Air Quality Handbook. Diamond Bar, CA. November.
- SCAQMD, 2022. 2022 Air Quality Management Plan. Accessed online at <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>, on December 31, 2024.
- SCAQMD, 2023. South Coast AQMD Air Quality Significance Thresholds. Accessed online at <https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25> on December 21, 2024.
- SCAQMD, 2024. Climate Change. Accessed online at <https://www.aqmd.gov/nav/about/initiatives/climate-change>, on January 9, 2025.
- SCAQMD, 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. South Coast Air Quality Management District. October 2008. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf).
- SCAQMD, 2010. Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15. September 28, 2010. South Coast Air Quality Management Board. September 28, 2010. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf).
- SCAQMD, 2011. Final AQMD Air Quality-Related Energy Policy. September 9, 2011. Internet URL: <http://www.aqmd.gov/nav/about/policies/aqmd-air-quality-related-energy-policy>. Accessed March 2020.
- SCAQMD, 2018. South Coast Air Quality Management District. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October 2008. Internet URL: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgattachmente.pdf?sfvrsn=2). Accessed December 2018.
- SCAQMD, 2019. SCAQMD Air Quality Significance Thresholds. South Coast Air Quality Management District. Revision: April, 2019. <http://www.aqmd.gov/docs/default->



[source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2](https://www.ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2).

Accessed May 2020.

SCAQMD, 2020b. Rule 1403 Compliance Advisory. Accessed online at <http://www.aqmd.gov/home/rules-compliance/compliance/asbestos-demolition-removal>, accessed on June 1, 2020.

Soil Survey Staff, 2025. Web Soil Survey: Custom Soil Resource Report for Orange County and Part of Riverside County, California. Natural Resources Conservation Service, United States Department of Agriculture. Available at <http://websoilsurvey.sc.egov.usda.gov/>. Downloaded on January 30, 2025.

SSSA (Soil Science Society of America). 2025. Glossary of Soil Science Terms. Accessed online at: <https://www.soils.org/publications/soils-glossary/browse/s>, on January 14, 2025.

SWRCB (State Water Resources Control Board). 2025. GeoTracker. Accessed online at: <http://geotracker.waterboards.ca.gov/>, on January 2, 2025.

SWRCB (California State Water Resources Control Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019, revised April 6, 2021. Available at https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html.

USDA (United States Department of Agriculture, Natural Resources Conservation Service [NRCS]), 2006. Land Resource Regions and Major Land Resource Areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296.

USEPA (U.S. Environmental Protection Agency), 2022. WATERS GeoViewer. Available at <https://www.epa.gov/waterdata/waters-geoviewer>. Accessed on March 9, 2022.

USEPA, 2011. Air Quality Guide for Nitrogen Dioxide. Office of Air and Radiation. EPA-456/F-11-003. URL: <https://www3.epa.gov/airnow/no2.pdf>.

USEPA, 2017a. What EPA Is Doing about Climate Change. EPA's Web Archive. United States Environmental Protection Agency. <https://archive.epa.gov/epa/climatechange/what-epa-doing-about-climate-change.html>. January 19, 2017.

USEPA, 2017b. News Release: EPA Kicks Off Website Updates. United States Environmental Protection Agency. <https://www.epa.gov/newsreleases/epa-kicks-website-updates>. April 28, 2017.

USEPA, 2019. Nitrogen Dioxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report: Green Book. U.S. Environmental Protection Agency Current [https://www3.epa.gov/airquality/greenbook/nmcs.html]. Data as of September 30, 2019. Accessed October 2019.

USEPA, 2020b. PM-10 (1987) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report: Green Book. U.S. Environmental Protection Agency Current <https://www3.epa.gov/airquality/greenbook/pmcs.html#CA>. Data as of May 31, 2020. Accessed June 2020.



❖ SECTION 5.0 – REFERENCES ❖

- USEPA, 2020c. PM-2.5 (2012) Designated Area State/Area/County Report: Green Book. U.S. Environmental Protection Agency. Current Data as of May 31, 2020. [https://www3.epa.gov/airquality/greenbook/kbcs.html#CA]. Accessed June 2020.
- USEPA, 2020d. Carbon Monoxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report: Green Book. U.S. Environmental Protection Agency Current [https://www3.epa.gov/airquality/greenbook/cmcs.html#CA]. Data as of May 31, 2020. Accessed June 2020.
- USEPA, 2020e. Nitrogen Dioxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report.: Green Book. U.S. Environmental Protection Agency Current [https://www3.epa.gov/airquality/greenbook/nmcs.html]. Data as of May 31, 2020. Accessed June 2020.
- USEPA, 2020. Integrated Science Assessment for Ozone and Related Photochemical Oxidants. Center for Public Health and Environmental Assessment, Office of Research and Development, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA/600/R-20/012. April. URL: <https://cfpub.epa.gov/ncea/isa/recordisplay.cfm?deid=348522>
- USEPA, 2024. Nonattainment Areas for Criteria Pollutants (Green Book). Accessed online at <https://www.epa.gov/green-book> on November 25, 2024.
- USFS (U.S. Department of Agriculture Forest Service). 2025. The American Bumble Bee (*Bombus pensylvanicus*) (website). <https://www.fs.usda.gov/wildflowers/pollinators/pollinator-of-the-month/american-bumble-bee.shtml>. Accessed on February 11, 2025.
- USFWS (U.S. Fish and Wildlife Service). 2025a. Carlsbad Fish and Wildlife Office. Information for Planning and Consultation (IPaC) Official Species List. Project Code: 2025-0047976. Carlsbad, California. Accessed on January 27, 2025.
- USFWS. 2025b. National Wetlands Inventory (NWI) website, National Wetlands Mapper. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Available at <https://www.fws.gov/wetlands/>. Accessed on February 11, 2025.
- U.S. Fish and Wildlife Service. 2017. Critical Habitat Fact Sheet. Accessed online at, <https://www.fws.gov/sites/default/files/documents/critical-habitat-fact-sheet.pdf>, on March 17, 2025.
- USGS, 2020. National Hydrography Dataset (ver. USGS National Hydrography Dataset Best Resolution (NHD) for Hydrologic Unit (HU) 12. Available at <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/access-national-hydrography-products>. Downloaded on July 14, 2020.
- White House, 2017. Executive Order 13783, "Promoting Energy Independence and Economic Growth." 82 FR 16093. March 31, 2017.
- WRCC, 2021. Western U.S. Climate Historical Summaries, Western Regional Climate Center. Accessed online at <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7888>, on December 31, 2024.



❖ SECTION 5.0 – REFERENCES ❖

Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990., California's Wildlife. Vol. I-III. California Department of Fish and Game, Sacramento, California.



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❖ SECTION 7.0 - MITIGATION MONITORING AND REPORTING PROGRAM ❖

7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared in conformance with § 21081.6 of the Public Resources Code and § 15097 of the CEQA Guidelines, which requires all state and local agencies to establish monitoring or reporting programs whenever approval of a project relies upon a MND or an EIR. The MMRP ensures implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified through the use of monitoring and reporting. Monitoring is generally an ongoing or periodic process of project oversight; reporting generally consists of a written compliance review that is presented to the decision-making body or authorized staff person.

It is the intent of the MMRP to: (1) provide a framework for document implementation of the required mitigation; (2) identify monitoring/reporting responsibility; (3) provide a record of the monitoring/reporting; and (4) ensure compliance with those MM that are within the responsibility of the City and/or Applicant to implement.

The following table lists impacts, mitigation measures adopted by the City of Fountain Valley in connection with approval of the proposed project, level of significance after mitigation, responsible and monitoring parties, and the project phase in which the measures are to be implemented.

Only those environmental topics for which mitigation is required are listed in this Mitigation Monitoring and Reporting Program.



❖ SECTION 7.0 – MITIGATION MONITORING AND REPORTING PROGRAM ❖

**Table 7.0-1
MITIGATION MONITORING AND REPORTING PROGRAM**

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
4.4 Biological Resources				
Threshold 4.4 a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	BIO-1: Pre-Construction Breeding Bird Survey If vegetation removal is scheduled within the nesting season, a qualified biologist will conduct a pre-construction nesting bird survey to maintain compliance with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (§§ 3503 and 3503.5), which prohibit take of nesting birds and nests of migratory and non-game bird species. Nesting season is generally considered to be: • January 1-July 30 for raptors. • February 1-September 15 for non-raptors. A qualified biologist will conduct pre-construction surveys no more than five days prior to when project activities (e.g., mobilization, excavation, grading, vegetation removal) are underway. Should a lapse in project activity be greater than five days, a qualified biologist will conduct additional surveys to maintain compliance. To maximize the detection of nesting birds,	Project Applicant and Qualified Biologist	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley 3. Before Project vegetation removal activities



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	surveys must be conducted in work areas (e.g., staging, stockpiling, storage, equipment yards, access roads) during favorable weather conditions. A wide variety of shelters and resources are used by avian species; these include barren ground, grasses, forbs, shrubs, trees, rocky outcrops, and man-made structures (dependent on species and conditions). The qualified biologists will interpret physical signs for nesting structures (e.g., manipulation of materials like mud or grass) and direct signs of life (e.g., courtship behaviors, gathering, swooping, alarm calls, pellets). If nests are encountered, a qualified biologist will consider individual species tolerance, proximity to construction activity, noise impacts, line-of-sight barriers, and distance (horizontal and vertical) to determine if planned construction activities would impact nesting success. The rate and duration of construction activities will also be considered should the modification of scheduled activities be required to maintain healthy nesting outcomes. If the qualified biologist determines construction activities will potentially adversely affect a nest, the biologist must			



❖ SECTION 7.0 – MITIGATION MONITORING AND REPORTING PROGRAM ❖

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	immediately inform the construction manager to halt construction activities (i.e., establish a no-work zone) within a minimum exclusion buffer of 50 feet for songbird nests and 200-500 feet for raptor nests. If a federal or state protected bird species is observed occupying a nest during surveys, USFWS and CDFW will be consulted to determine the appropriate no-work zone to establish for the nest. The no-work zone lawfully avoids the “take” of nesting birds and the mortality of eggs and younglings. Construction activities within the no-work buffer may proceed after a qualified biologist determines the young have successfully fledged the nest and are no longer dependent upon the nest or parents.			
4.5 Cultural Resources				
Threshold 4.5 b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.	MM CUL 1 In the event of an unexpected discovery of a cultural resource, as defined by CEQA Guidelines § 15064.5, during any project related earth disturbing activities, all earth disturbing activities within 60 feet of the find shall be halted and the City of Fountain Valley shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior’s	Qualified Archaeologist and Project Contractor	Field Verification	1. City of Fountain Valley Planning Department 2. City of Fountain Valley Planning Department 3. During project excavation activities



❖ SECTION 7.0 – MITIGATION MONITORING AND REPORTING PROGRAM ❖

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts on any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A L) form and filed with the SCCIC. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place. A Monitoring and Treatment Plan shall be prepared by a qualified archaeologist. The qualified archaeologist shall recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area and afforded the necessary time and funds to recover, analyze, and curate the find(s). Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.			



❖ SECTION 7.0 – MITIGATION MONITORING AND REPORTING PROGRAM ❖

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	MM CUL-2 Prior to the commencement of grading or excavation, workers conducting construction activities and their foremen will receive Worker Environmental Awareness Program (WEAP) training from a qualified archaeologist regarding the potential for sensitive archaeological and paleontological resources to be unearthed during grading activities. The workers will be directed to report any unusual specimens of bone, stone, ceramics or other archaeological artifacts or features observed during grading and/or other construction activities to their foremen and to cease grading activities in the immediate vicinity of the discovery until a qualified archaeologist or Native American cultural monitor is notified of the discovery by the Superintendent of the project site and can assess their significance. The WEAP shall be implemented to educate all construction personnel of the area's environmental conditions and the environmental protection measures that must be adhered to by all workers throughout the duration of project construction. Training materials shall be language-appropriate for all construction personnel. Upon completion of the WEAP, workers	Project Construction Contractor	Field Verification	1. City of Fountain Valley Planning Department 2. City of Fountain Valley Planning Department 3. Prior to project grading activities



❖ SECTION 7.0 – MITIGATION MONITORING AND REPORTING PROGRAM ❖

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	shall sign a form stating that they attended the program, understand all protection measures, and shall abide by all the rules of the WEAP. A record of all trained personnel shall be kept with the construction foreman at the project field construction office and shall be made available to any resource agency personnel. If new construction personnel are added to the project later, the construction foreman shall ensure that new personnel receive training before they start working. The archaeologist shall provide hard copies of the WEAP presentation to the construction foreman.			
Threshold 4.5 c) Would the project disturb any human remains, including those interred outside of formal cemeteries?	MM CUL 3 If human remains are encountered during excavations associated with this project, all work will stop within a 30 foot radius of the discovery and the Orange County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will			1. City of Fountain Valley Planning Department 2. City of Fountain Valley Planning Department 3. During project excavation activities



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).			
4.7 Geology and Soils				
Threshold 4.7 f): Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	MM GEO-1 Prior to the issuance of the grading permit, the applicant shall provide a letter to the City of Fountain Valley, or designee, from a qualified paleontologist stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility	Project Applicant, Qualified Paleontologist, and Construction Contractor	Monitoring, Assessment, Recovery, and Curation	1. City of Fountain Valley Planning Department 2. City of Fountain Valley Planning Department 3. Prior to project grading activities



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the			



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.			
4.18 Tribal Cultural Resources				
Threshold 4.18 b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?	MM TCR-1: Gabrielino-Kizh Nation only) Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. B. A copy of the executed monitoring agreement shall be submitted to the lead	City of Fountain Valley, Construction Contractor & Kizh Nation	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley 3. Before and during project ground-disturbing activities



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	agency prior to the earlier commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity. C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe. D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the			



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.			
	MM TCR 2: (Gabrielino-Kizh Nation only) Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial) A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.	City of Fountain Valley, Construction Contractor & Kizh Nation	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley 3. During construction
	MM TCR 3: (Gabrielino-Kizh Nation only)	City of Fountain Valley,	Field Verification	1. City of Fountain Valley



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects A. Native American human remains are defined in PRC 5097.98 (d)(1) as a inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code § 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	Construction Contractor, Kizh Nation & Orange County Coroner		2. City of Fountain Valley 3. During construction



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	MM TCR 4: (Juaneño Band of Mission Indians, Acjachemen Nation- Belardes only) Retention of a Native American Monitor Prior to Commencement of Ground-Disturbing Activities a) The Project applicant shall retain a Native American Monitor from or approved by the Juaneño Band of Mission Indians, Acjachemen Nation- Belardes. The monitor shall be retained prior to the commencement of any ground-disturbing activity for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. b) A copy of the executed monitoring agreement shall be submitted to the (City) prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence ground disturbing activity.	City of Fountain Valley, Construction Contractor & Juaneño Band of Mission Indians, Acjachemen Nation- Belardes	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley 3. Before and during project ground-disturbing activities



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	c) The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered tribal cultural resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Project applicant upon written request to the Tribe. d) On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Tribe or Tribal monitoring agency from a designated point of contact for the Project applicant that all ground-disturbing activities and phases that may involve the Project are complete; or (2) a determination and written notification by the Tribe or Tribal monitoring agency to the Director of Community Development, or designee that no future, planned construction activity and/or development/construction phase at			



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	the Project site possesses the potential to impact TCRs.			
	MM TCR 5: (Juaneño Band of Mission Indians, Acjachemen Nation- Belardes only) Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial) a) Upon discovery of any tribal cultural resources (TCRs), all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Native American Monitor. The Tribe or Tribal monitoring agency will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.	City of Fountain Valley, Construction Contractor & Juaneño Band of Mission Indians, Acjachemen Nation- Belardes	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley 3. During construction
	MM TCR 6: (Juaneño Band of Mission Indians, Acjachemen Nation- Belardes only)	City of Fountain Valley, Juaneño Band of Mission Indians, Acjachemen Nation- Belardes	Field Verification	1. City of Fountain Valley 2. City of Fountain Valley



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TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects. a) Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. b) If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. c) Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). d) Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. e) Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	& Orange County Coroner		3. During construction



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