



Freedom Lane Residential Project

Draft Initial Study/Mitigated Negative Declaration

City of Aliso Viejo, Orange County, California

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City of Aliso Viejo

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August 28, 2026

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ACRONYMS AND ABBREVIATIONS

µg/m ³	micrograms per cubic meter
°F	degrees Fahrenheit
AB	Assembly Bill
ADT	Average Daily Traffic
AERMOD	American Meteorological Society/EPA Regulatory Model
AFY	acre-feet per year
AMSL	above mean sea level
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AVCA	Aliso Viejo Community Association
AVTIG	Aliso Viejo Transportation Impact Guidelines
Bay Area Air District	Bay Area Air Quality Management District
BERD	California Built Environment Resource Directory
bgs	below ground surface
BMP	Best Management Practice
BP	Business Park
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standard Code
Cal/OSHA	Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CBC	California Building Code
CCR	California Code of Regulations
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CDMG	California Division of Mines and Geology
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act

cfs	cubic feet per second
CMP	corrugated metal pipe
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPS Inventory	CNPS Inventory of Rare Plants
CO ₂ e	carbon dioxide equivalent
COA	Condition of Approval
CO	carbon monoxide
CPTED	Crime Prevention Through Environmental Design
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CUSD	Capistrano Unified School District
CVC	California Vehicle Code
DA	Development Agreement
DAMP	Drainage Area Management Plan
DMA	drainage management area
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substance Control
du/acre	dwelling units per acre
EIR	Environmental Impact Report
EMFAC	Emission Factors mobile source emissions model
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
ESA	Environmentally Sensitive Area
EV	electric vehicle
EVSE	electric vehicle supply equipment
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas

GIS	Geographic Information System
GPA	General Plan Amendment
GPCD	gallons per capita per day
GPD	gallons per day
HARP2	Hotspots Analysis and Reporting Program
HCP	Habitat Conservation Plan
HDPE	high density polyethylene
HI	hazard index
HRA	Health Risk Assessment
HREC	Historical Recognized Environmental Condition
HVAC	heating, ventilation, and air conditioning
iDigBio	Integrated Digitized Biocollections
in/sec	inches per second
IPaC	Information for Planning and Consultation
ITE	Institute of Transportation Engineers
kWh	kilowatt hours
lbs	pounds
L _{dn}	day/night sound level
L _{eq}	equivalent continuous sound level
LID	Low Impact Development
L _{max}	maximum noise/sound level
LOS	Level of Service
LRA	Local Responsibility Area
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MDR	Medium Density Residential
MEIR	Maximally Exposed Individual Resident
MEP	Maximum Extent Practicable
Metropolitan	Metropolitan Water District of Southern California
MLD	Most Likely Descendant
MM	Mitigation Measure
MNWD	Moulton Niguel Water District
mph	miles per hour
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MT	metric tons

MWDOC	Municipal Water District of Orange County
MWS	modular wetland systems
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NFHL	National Flood Hazard Layer
NHM	Natural History Museum of Los Angeles County
NO ₂	nitrogen dioxide
NO _x	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OCFA	Orange County Fire Authority
OCSO	Orange County Sheriff's Department
OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
O/D	Origin/Destination
OEHHA	California Office of Environmental Health Hazard Assessment
PM _{2.5}	particulate matter 2.5 micrometers or less in diameter
PM ₁₀	particulate matter 10 micrometers or less in diameter
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
PV	photovoltaic
PWQMP	Preliminary Water Quality Management Plan
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RHNA	Regional Housing Needs Assessment
RM	Residential Medium
RVH	Residential Very High Density
RWQCB	Regional Water Quality Control Board
SA GEO	SA Geotechnical, Inc.
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District

SCCIC	South Central Coastal Information Center
SCE	South California Edison
SEMS	Standardized Emergency Management System
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO ₂	sulfur dioxide
SO _x	sulfur oxides
SoCAB	South Coast Air Basin
SOCWA	South Orange County Wastewater Authority
SR	State Route
SRA	State Responsibility Area
SRRE	Source Reduction and Recycling Element
SVP	Society of Vertebrate Paleontology
SWIS	Solid Waste Information System
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
The Nat	San Diego Natural History Museum
TPA	Transit Priority Areas
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
VHDR	Very High Density Residential
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WEAP	Worker Environmental Awareness Program
WQMP	Water Quality Management Plan

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1 - INTRODUCTION AND PROJECT DESCRIPTION

1.1 - Purpose

The purpose of this Draft Initial Study/Mitigated Negative Declaration (Draft IS/MND) is to identify any potential environmental impacts that would result from implementation of the Freedom Lane Residential Project (proposed project) in the City of Aliso Viejo, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City has discretionary authority over the proposed project and is the Lead Agency in the preparation of this Draft IS/MND and any additional environmental documentation required for the proposed project.

The remainder of this section provides a brief description of the project location and the primary project characteristics. Section 2 includes an environmental checklist that provides an overview of the potential impacts that may result from project implementation, elaborates on the information contained in the environmental checklist, and provides justification for each checklist response. Feasible mitigation measures are analyzed to reduce all impacts to below a level of significance. Section 3 contains the List of Preparers.

1.2 - Project Location

The project site is located at 400–700 Freedom Lane, in the City of Aliso Viejo (City), in Orange County (County), California. The approximately 7.06-acre project site consists of four parcels associated with Assessor's Parcel Numbers (APNs) 632-141-012, 632-141-013, 632-141-014, and 632-141-015. As shown in Exhibit 1, the project site is in the southern portion of the City. Regional access to the project site is provided from Interstate 5 (I-5) via the El Toro Road exit and from State Route (SR) 73 via the Glenwood Drive exit.

1.3 - Environmental Setting

1.3.1 - Land Uses and Zoning

The project site consists of vacant land with ruderal and native grasses, as well as trees and shrubs lining the perimeter (Exhibit 2). The overall site topography of the proposed development area is relatively flat, with grade changes on the order of 5 feet. Mass grading of the site and surrounding area occurred in the mid-1980s and the site has remained undeveloped since that time.¹ An approximately 12-foot-high stockpile is located in the northern portion of the site, and an approximately 5- to 6- foot-deep temporary desilting basin is present in the eastern portion of the development area. Outside of the proposed development area, the site descends steeply to the south, from an elevation of approximately 465 feet above mean sea level (AMSL) to 390 feet AMSL.

¹ SA Geotechnical, Inc. (SA GEO). 2024. Geotechnical Exploration and Preliminary Design Recommendations, Proposed Residential Development, 400-700 Freedom Lane, Lots 2 through 5 of Tract No. 18080, City of Aliso Viejo, California. June 3.

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Source: Census 2000 Data, The California Spatial Information Library (CaSIL).



Exhibit 1 Regional Location Map

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Source: ESRI World Imagery, X Engineering & Consulting, Inc., January 2025, Updated 11/03/2025.



Exhibit 2 Local Vicinity Map

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The Aliso Viejo General Plan (General Plan) currently designates the project site Business Park with a Mixed Use/Residential Overlay of Very High Density Residential (VHDR) (Exhibit 3).² The project applicant requests a General Plan Amendment (GPA) to change the General Plan land use designation to Medium Density Residential. The Medium Density Residential land use designation is intended to provide residential development with a density between 8 and 18 dwelling units per gross acre (du/acre), with an average density of 12 du/acre.³ The proposed project's density would be 16 du/acre, consistent with the Medium Density Residential maximum density.

The project site is currently zoned Mixed Use/Residential Overlay of Business Park-1/Residential Very High Density (MU/R/BP-1/RVH) (Exhibit 4). The project applicant requests a rezone to change the zoning designation to Residential Medium Density (RM). The RM zoning district is intended to provide for the development and preservation of medium density neighborhoods containing detached and attached single-family homes on smaller lots, duplexes, townhomes, apartments, and condominiums. The development standards specify that a minimum of 25 percent of the site must be common open area.⁴ The required minimum lot size is 5,000 square feet in the MDR zoning district.

1.3.2 - Surrounding Land Uses

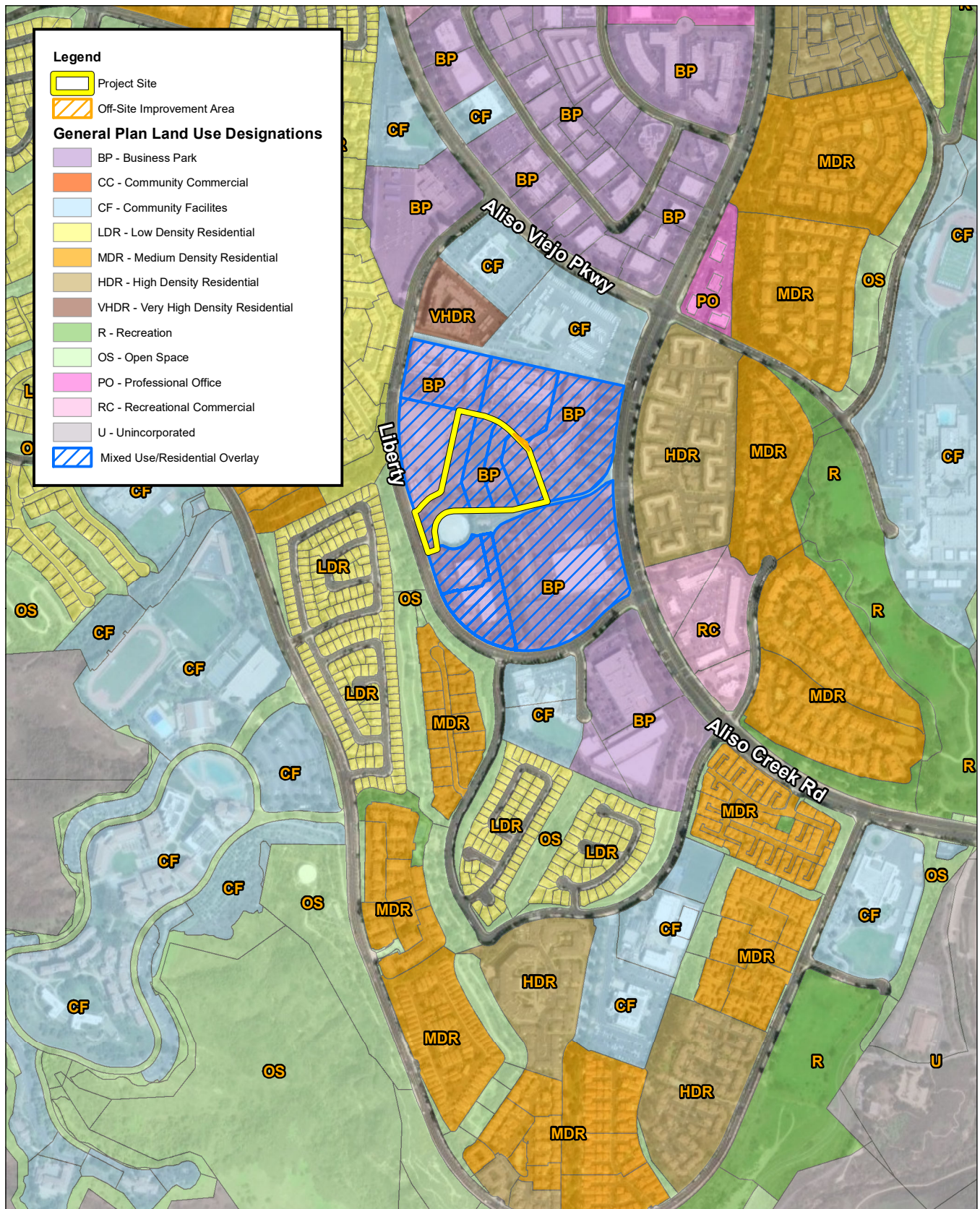
- North** Senior apartment communities, behavioral health facility, designated as Business Park and zoned as Business Park 1/Residential Very High Density.
- South** Mouton Niguel Water District (MNWD) (water tank and office), office and industrial buildings, designated as Business Park and zoned as Business Park 1.
- East** Senior apartment communities, behavioral health facility, designated as Business Park and zoned as Business Park 1/Residential Very High Density, slope descending from the property to Aliso Creek Road, Aliso Creek Road, and multi-family homes designated as High Density Residential and zoned as Residential High Density.
- West** Medical office building designated as Business Park and Low Density Residential and zoned as Business Park 1/Residential Very High Density, Liberty Road, and single-family homes designated as Low Density Residential and zoned as Residential Low Density.

² City of Aliso Viejo. 2004. City of Aliso Viejo General Plan, Land Use Element, Land Use Policy Map, Figure LU-1. Website: <http://avcity.org/DocumentCenter/View/397/Land-Use-Policy-Map-PDF>. Accessed December 6, 2025.

³ City of Aliso Viejo. 2004. City of Aliso Viejo General Plan, Land Use Element. Website: <https://avcity.org/DocumentCenter/View/391/Land-Use-Element-PDF>. Accessed December 6, 2025.

⁴ Ibid.

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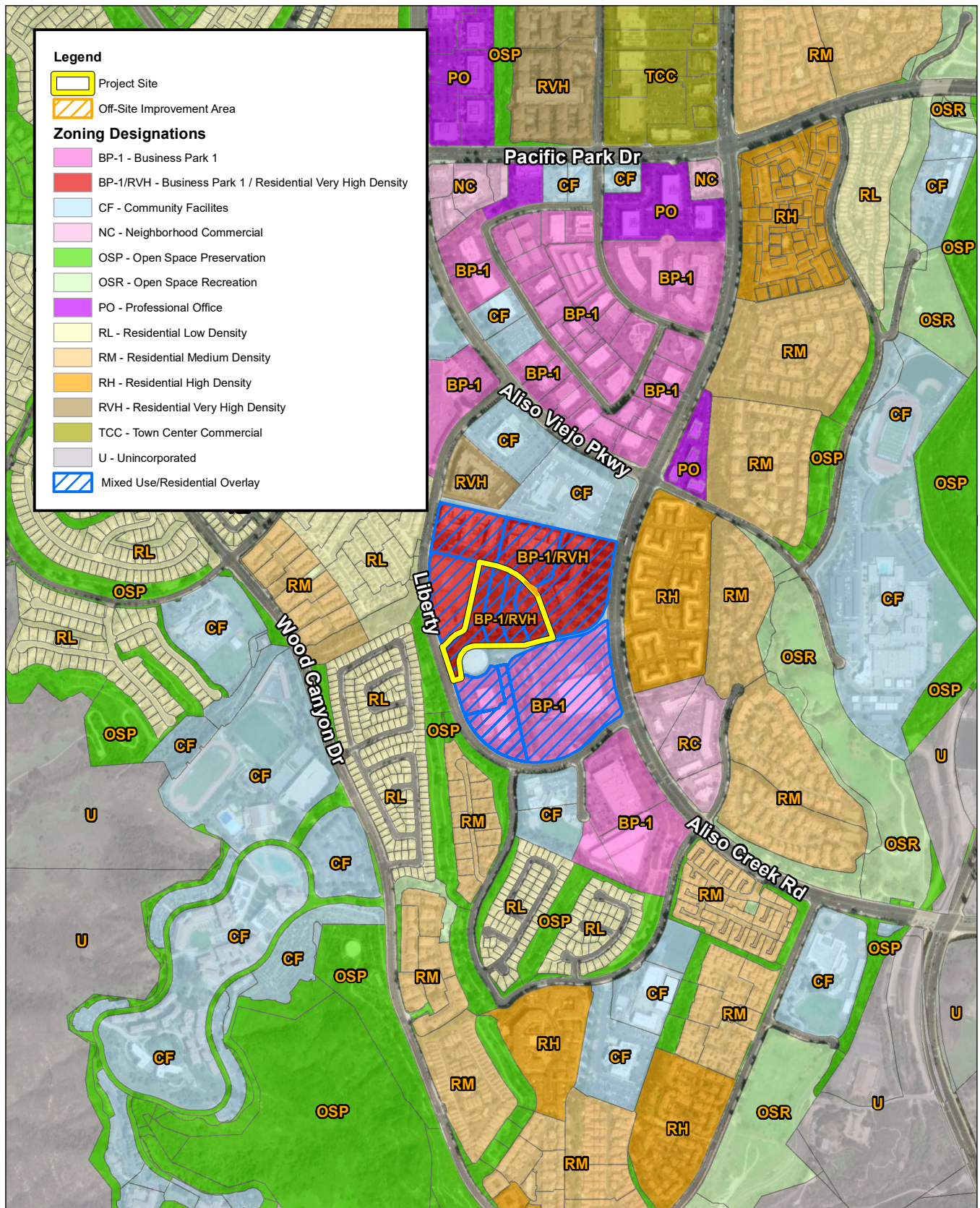


Source: ESRI World Imagery. X Engineering & Consulting, Inc., January 2025, Updated 10/24/2025. City of Aliso Viejo.



Exhibit 3 General Plan Land Use Map

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Source: ESRI World Imagery. X Engineering & Consulting, Inc., January 2025, Updated 10/24/2025. City of Aliso Viejo.



Exhibit 4 Zoning Map

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1.4 - Project Description

Meritage Homes, Inc. (applicant) proposes constructing a total of 71 residential units within a series of 40 3-story single and duplex buildings at a maximum height of 38 feet. The residential units are provided in 31 duplex buildings totaling 62 attached units, in addition to nine detached single-family homes. Four affordable units at the very low-income level would be provided. Unit sizes for the buildings would vary from approximately 1,776 square feet to 1,969 square feet with three- and four-bedroom units, and private open space would range from approximately 114 to 158 square feet per unit (Exhibit 5). Each building would contain one or two residential units. The proposed project would have building site coverage of 63 percent, with a total building footprint of approximately 119,102 square feet. Because of a large slope at the south perimeter of the project site and access requirements, the proposed residential development would be clustered on approximately 4.41 acres (192,100 square feet) of the 7.06-acre site. The proposed project buildings would feature an Italian architectural style characterized by ornate trim bands, finials, brick veneer, and roof accents (Exhibit 6a—Exhibit 6c).

Two distinct color schemes would be used to create visual variety within the community, and these color schemes are designed to complement the adjacent residential community to the west.

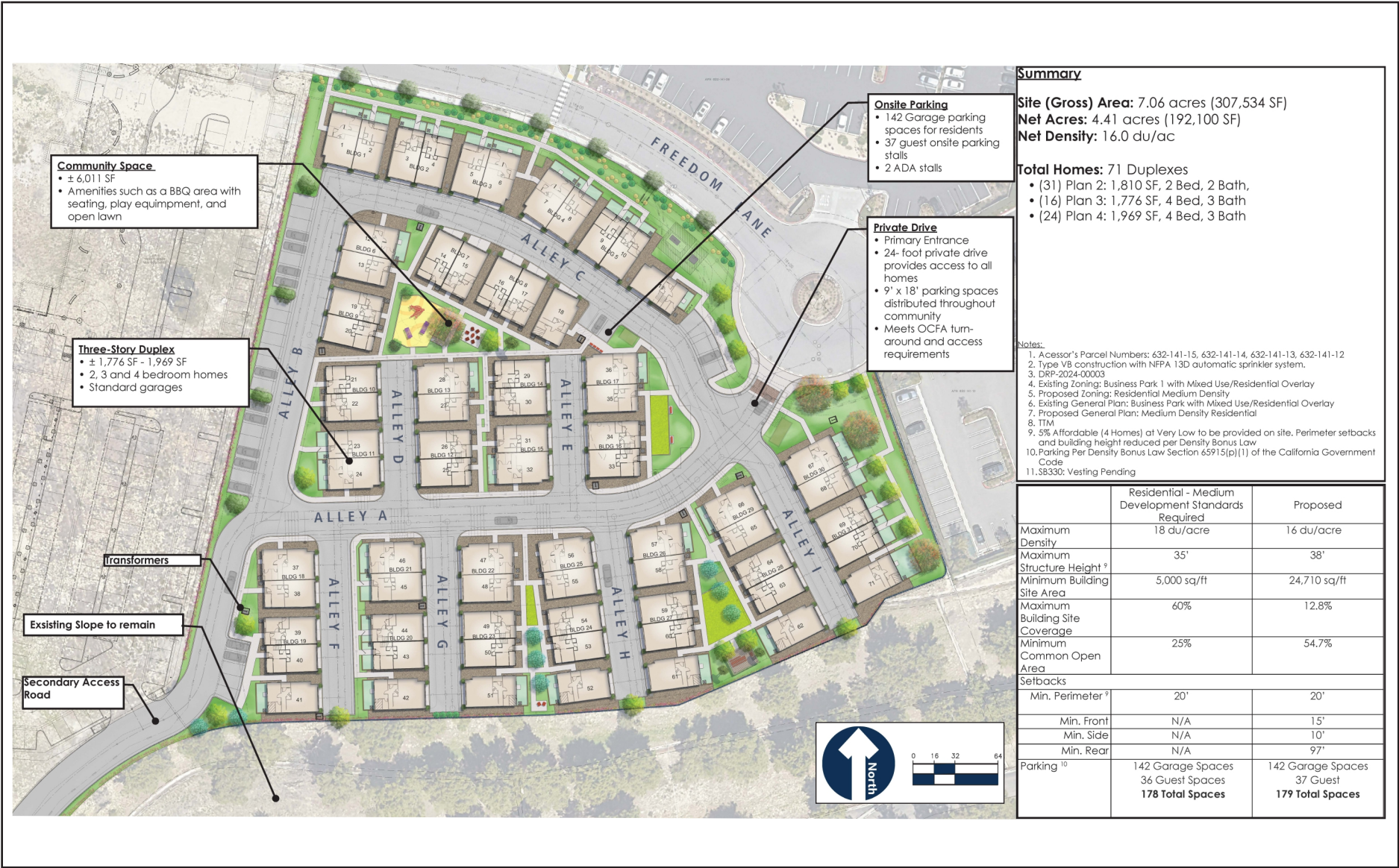
The proposed project would include private roadways and parking, pedestrian walkways, landscaping, and recreational amenity areas. The proposed project's density would be 16 du/acre, consistent with the maximum density of the proposed MDR land use designation (18 du/acre).

1.4.1 - Parking and Circulation

Vehicles would access the project site via a proposed driveway at the northeast portion of the project site along Freedom Lane and another driveway on Liberty. The roadway that connects to Liberty in the southwestern portion of the project site was constructed as a part of the adjacent Kaiser Permanente project and would provide shared access for the proposed project. An internal private roadway system would provide two-way access to each unit's parking garage, as well as to guest parking spaces that would be distributed throughout the site. Pedestrians would circulate within the site via proposed internal pedestrian walkways and sidewalks.

The proposed project would provide a total of 179 parking spaces, consisting of 142 spaces within garages (2 per unit) and 37 guest spaces (See Table 1). All garages would provide room for storage, including water heaters and trash bins. Individual trash service would be provided with collection occurring on a weekly basis. Residents would have enough garage space to store trash, recycling, and organics within their private garage.

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Source: MLC Holdings, Inc., Meritage Homes Corporation, 06/19/2026.

Exhibit 5
Site Plan

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UNIT 4X.1R

UNIT 2.1

FRONT ELEVATION

MATERIALS LEGEND

(WHERE OCCURS)

FRONT DOOR:	FIBERGLASS
GARAGE DOOR:	METAL SECTIONAL
ROOF:	CONCRETE "S" TILE
FASCIA:	2x6 WOOD
BARGE:	2x6 WOOD
WALL:	STUCCO
WINDOWS:	VINYL W/ GRIDS
SHUTTERS:	SIMULATED WOOD
TRIM:	STUCCO OVER RIGID FOAM
WAINSCOT:	BRICK VENEER



UNIT 2.1

UNIT 4X.1R

REAR ELEVATION

Source: Kevin L. Crook Architect, Inc., 02/18/2026.



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UNIT 3.1

UNIT 2.1

FRONT ELEVATION

MATERIALS LEGEND
(WHERE OCCURS)

FRONT DOOR:	FIBERGLASS
GARAGE DOOR:	METAL SECTIONAL
ROOF:	CONCRETE "S" TILE
FASCIA:	2x6 WOOD
BARGE:	2x6 WOOD
WALL:	STUCCO
WINDOWS:	VINYL W/ GRIDS
SHUTTERS:	SIMULATED WOOD
TRIM:	STUCCO OVER RIGID FOAM
WAINSCOT:	BRICK VENEER



UNIT 2.1

UNIT 3.1

REAR ELEVATION

Source: Kevin L. Crook Architect, Inc., 02/18/2026.



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© 2021 Kevin L. Crook Architect, Inc. Refer to landscape drawings for wall, tree, and shrub locations

FRONT

MATERIALS LEGEND
(WHERE OCCURS)

FRONT DOOR:	FIBERGLASS
GARAGE DOOR:	METAL SECTIONAL
ROOF:	CONCRETE "S" TILE
FASCIA:	2x6 WOOD
BARGE:	2x6 WOOD
WALL:	STUCCO
WINDOWS:	VINYL W/ GRIDS
SHUTTERS:	SIMULATED WOOD
TRIM:	STUCCO OVER RIGID FOAM
WAINSCOT:	BRICK VENEER



REAR

Source: Kevin L. Crook Architect, Inc., 02/18/2026.



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Table 1: Required and Proposed Parking Spaces

	Required	Proposed
Garage Spaces	142	142
On-site Guest Spaces	36	37
TOTAL	178	179

Source: City of Aliso Viejo. 2024. Code of Ordinances. Website: <https://www.codepublishing.com/CA/AlisoViejo/#!/AlisoViejo15/AlisoViejo1538.html#15.38.030>. Accessed October 24, 2025.

1.4.2 - Open Space and Landscaping

The City of Aliso Viejo Municipal Code (Municipal Code) requires open space equal to 25 percent of the site area. The proposed project's total site area (including the slopes on the southern portion that would not be developed) is 282,824 square feet. The proposed open space, including the slope area, landscaped common area, and usable open space, would total approximately 154,817 square feet. Therefore, the proposed project would exceed the 25 percent open space requirement, providing approximately 54.7 percent of the site area as open space. Usable open space includes shaded seating, barbecues, picnic tables, a tot lot, community open lawn space, and play equipment areas. Other open space includes landscaped walkways (Exhibit 7). In addition to the private parkland provided on-site, the proposed project would be subject to the City's parkland dedication fee for residential subdivisions per the City's Municipal Code. The proposed project would be subject to 0.936-acre of parkland dedication. The parkland dedication fee is assessed according to Municipal Code Section 14.16.

1.4.3 - Infrastructure and Utilities

Water service is currently provided by MNWD. The proposed project would connect to existing domestic water lines in the street at Freedom Lane and Liberty and would construct one 12-inch line into the site through the drive aisles. South Orange County Wastewater Authority (SOCWA) is the sewer service provider for the project site, and an 8-inch system would be installed. Sewer service would connect to an existing 12-inch sewer system located at Freedom Lane, and an 8-inch system would service the project site. The proposed project includes an on-site underground modular wetland system (MWS) designed to treat stormwater runoff, which would then discharge to a proposed 18-inch storm drain line. The proposed storm drain line would connect to the existing 18-inch storm drain located beneath Freedom Lane near the roundabout, which constitutes the off-site improvement shown in Exhibit 2.

The proposed project would be all electric in design and would not include natural gas plumbing.

1.4.4 - Estimated Construction Timeline

The applicant anticipates that construction of the proposed project would begin approximately in Quarter 3 of 2027, with the community opening for sales in Quarter 2 of 2028 and construction completed at the end of Quarter 3 of 2029. Site grading would require 45,000 cubic yards of cut and 40,300 cubic yards of fill, resulting in 4,700 cubic yards of export from the project site.

1.5 - Waiver to Development Standards

State Density Bonus Law (California Government Code Section 65915-65918) allows qualifying projects to take advantage of various tools to maximize density and offset the cost of providing affordable housing on-site. Qualifying projects include those that include at least 5 percent of housing units that are restricted to very low-income residents. The applicant proposes to include four affordable units (5 percent of the 71 total units) priced for households at very low-income levels, as defined in California Health and Safety Code Section 50105(b). The affordable component of the proposed project would comply with Chapter 3.18 and Chapter 15.58 of the City's Code. Although the applicant proposes 5 percent very low-income units, the proposed project would not pursue the allowable 20 percent Density Bonus Law increase. Qualifying projects are permitted a specified number of incentives or concessions based on the level of affordability. The applicant is not seeking any incentives/concessions at this time. However, qualifying Density Bonus Law projects are also permitted waivers to development standards, and the proposed project is requesting the following:

- The Medium Density Residential standards require a 35-foot maximum building height and the proposed project includes buildings that are 38 feet.
- The Medium Density Residential standards require a maximum building site coverage of 60 percent and the proposed project includes 63 percent residential site coverage.
- The City's development standards require an Exception Permit for fences and walls that are taller than 6 feet but no greater than 10 feet and a Site Development Permit for wall heights that exceed 10 feet. The proposed project includes a 7-foot retaining wall with a 3.5-foot guard rail atop for a maximum height of 10.5 feet.

1.6 - Required Discretionary Approvals

As mentioned previously, the City of Aliso Viejo has discretionary authority over the proposed project and is the CEQA Lead Agency for the preparation of this Draft IS/MND. In order to implement the proposed project, the applicant would need to secure the following permits/approvals:

- **General Plan Amendment** to change the land use designation from Business Park (BP) with a Mixed Use/Residential (MU/R) Overlay of Very High Density Residential (VHDR) to Medium Density Residential (MDR) (density of up to 18 du/acre);

- **Zone Change** to change the zoning from Mixed Use/Residential Overlay of Business Park-1/Residential Very High Density (MU/R/BP-1/RVH) to Residential Medium Density (RM)(density of up to 18 du/acre);
- **Site Development Permit** to allow for the construction of proposed development including 71 residential units contained in three-story duplexes and singletons, guest parking area, and resident amenities;
- **Development Agreement (DA)** pursuant to Municipal Code Section 15.82.010.

1.7 - Intended Uses of this Document

This Draft IS/MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project.

The Draft IS/MND will be circulated for a minimum of 20 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

Rose Rivera, Senior Planner
City of Aliso Viejo Planning Services
12 Journey, Suite 100
Aliso Viejo, CA 92656
Phone: 949.497.2528
Email: rrivera@avcity.org

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Source: C2 Collaborative, 06/19/2026.

Exhibit 7
Landscape Plan

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2 - ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

Environmental Factors Potentially Affected					
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.					
☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality			
☒ Biological Resources	☒ Cultural Resources	☐ Energy			
☒ Geology and Soils	☐ Greenhouse Gas Emissions	☐ Hazards and Hazardous Materials			
☐ Hydrology and Water Quality	☐ Land Use and Planning	☐ Mineral Resources			
☐ Noise	☐ Population and Housing	☐ Public Services			
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources			
☐ Utilities and Services Systems	☐ Wildfire	☒ Mandatory Findings of Significance			
Environmental Determination					

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 measure 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.

Date: 8/25/26

Signed:



Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.1 Aesthetics				
<i>Except as provided in Public Resources Code Section 21099, would the project:</i>				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Environmental Evaluation

Setting

The General Plan Conservation/Open Space Element identifies hillsides, ridgelines, canyons, and view corridors as the primary aesthetic resources in the City. The General Plan identifies canyon views and scenic highways as examples of scenic qualities benefiting the community. Architectural and landscaping design guidelines complement the natural setting, enhancing the City's unique visual character.⁵ Public and private portions of the City bordering the Aliso and Woods Canyons are situated with highly valued viewsheds or scenic overlooks of the canyons. In addition, several City roadways have been designated by the County of Orange Master Plan of Scenic Highways as having scenic qualities worth preserving. These roadways are classified as Viewscape Corridors or

⁵ City of Aliso Viejo. 2004. Aliso Viejo General Plan, Conservation/Open Space Element. Website: <https://avcity.org/DocumentCenter/View/394/Conservation--Open-Space-Element-PDF>. Accessed February 3, 2026.

Landscape Corridors.⁶ Additional scenic amenities such as golf courses also provide visual relief from the built environment and are important visual amenities and landmarks.

The project site is relatively flat and undeveloped. Surrounding uses include a senior living community to the north; MNWD facilities, office and industrial buildings, and a slope to the south; multi-family homes and a slope to the east; and single-family homes and a medical office building to the west. As such, the project site's existing visual character is a combination of urban and suburban uses. Views from the project site are primarily of surrounding infrastructure and landscaping, as well as surrounding roadways and parking lots. Distant views of hillsides to the east and west are visible from the project site.

Existing sources of light and glare include streetlights and lighting on the interiors and exteriors of existing and surrounding buildings, as well as vehicle headlights and traffic signals. Existing trees along the western boundary of the project site provide shielding from some sources of light and glare from Liberty.

Would the project:

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

No impact. The City does not designate any specific scenic vistas; however, it identifies hillsides, ridgelines, canyons, and view corridors as the primary scenic resources in the City and states that the Aliso and Woods Canyons have viewsheds or scenic overlooks of the canyons.⁷ The project site is located in the eastern portion of the City, 0.47 mile east of the City's hillside and canyon area. However, because of mature trees along Liberty and intervening development, the hill and canyon area is almost entirely obscured and therefore not clearly visible from the project site.

General Plan Policy COS-4.1 aims to protect scenic landform features such as hillsides, ridgelines, canyons, and view corridors through designation of key areas as open space and use of other land use planning tools. Because of trees and intervening development, the project site does not provide scenic views of the City's hillside and canyon area or other scenic areas in the City. Therefore, the proposed project would not impede or obscure any views and would not affect public views of any scenic vistas. Furthermore, no hillsides or ridgelines are visible from the project site. Therefore, no impact would occur.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway?

No impact. The nearest designated State Scenic Highway is SR-91. The portion of SR-91 that is designated as a State Scenic Highway is located approximately 20.42 miles north of the project site. A portion of SR-1, approximately 3.25 miles southwest of the project site, is identified as being eligible

⁶ City of Aliso Viejo. 2004. Aliso Viejo General Plan, Conservation/Open Space Element. Website: <https://avcity.org/DocumentCenter/View/394/Conservation--Open-Space-Element-PDF>. Accessed February 3, 2026.

⁷ Ibid.

for listing.⁸ Because of the project site's distance from this section of SR-1 and from SR-91, as well as intervening development, the project site is not visible from SR-1 or SR-91.

General Plan Figure COS-1—Conservation/Open Space Policy Map shows the locations of viewscape corridors and landscape corridors. As shown on the map, the nearest landscape corridor is Aliso Creek Road, located near the southern and western borders of the project site. There is a slope with trees and landscaping separating the project site from Aliso Creek Road. A portion of Aliso Creek Road also has a wall separating the project site from the roadway. The topography, vegetation, and development is not a part of the project site and would not be altered as part of the proposed project. Because of the intervening topography, vegetation, and development, Aliso Creek Road is not visible from the project site.

There are no scenic resources such as trees, rock outcroppings, or historic buildings, or other scenic amenities such as golf courses on-site or near the project site. No unique visual resources or historic structures are located on or near the project site. Therefore, no impact would occur to scenic or historic resources within a State Scenic Highway.

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

No impact. The project site is located in an urbanized area surrounded by urban and suburban development, including a senior living community, MNWD facilities, office and industrial buildings, multi-family homes, single-family homes, and a medical office building. According to CEQA Guidelines Section 15387, an urbanized area is a central city or group of contiguous cities with a population of 50,000 or more, together with adjacent densely populated areas having a population density of at least 1,000 per square mile. Thus, the project site is considered to be an urbanized area, and this discussion focuses on zoning and other regulations governing scenic quality.

The proposed project would comply with all Municipal Code requirements related to scenic quality as part of the development review process to ensure the project design is consistent with adopted design guidelines. Chapter 15.62 (Design Standards) is the City's primary tool for addressing scenic quality at the project level. This chapter establishes qualitative design criteria intended to enhance the man-made environment and ensure that new development provides "pleasing and interesting views" and is harmonious with surrounding natural and built features. In particular, Chapter 15.62 (Design Standards) requires discretionary design review of site planning, building form, landscaping, screening, and lighting to ensure development provides pleasing views and is visually compatible with surrounding natural and built environments. Additionally, the proposed project would not conflict with any General Plan policies related to scenic quality, including General Plan Policy COS-4.1, which

⁸ California Department of Transportation (Caltrans). 2024. State System Highway Map. Website: <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>. Accessed February 3, 2026.

protects scenic landform features through designation of key areas as open space and use of other land use planning tools, and Policy COS-4.2, which encourages high-quality architectural and landscaping design that enhance or complement the community's visual character. The proposed project would not conflict with applicable zoning and other regulations pertaining to scenic quality, and no impacts would occur.

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

Less than significant impact. The project site is located in an urbanized area with existing light sources, which include streetlights and lighting on the interiors and exteriors of existing and surrounding buildings, as well as vehicle headlights and traffic signals. The project site is currently undeveloped and therefore does not generate light and glare.

Construction activities would be subject to regulations set forth by the City's Building and Safety Department, which restricts construction activities to between the hours of 7:00 a.m. and 8:00 p.m. on Monday through Friday and 8:00 a.m. to 8:00 p.m. on Saturdays, excluding federal holidays.⁹ No nighttime construction would occur. Therefore, the proposed project would not require construction lighting, except security and safety lighting.

The proposed project would introduce new sources of light and glare on the project site, such as indoor and outdoor lighting, reflective surfaces, and headlights from vehicles on the project site. New sources of light would originate from two primary sources: lighting from the building interiors that would pass through windows and lighting from exterior sources. Specifically, the proposed project's light fixtures would include 11 streetlights throughout the project site, 10 pedestrian lights throughout the project site, 25 bollard lights along sidewalks, six trellis lights in common areas, and four monument lights to be installed on monument signs, as well as garage lights and porch lights for the residential units. The proposed lighting would be typical of residential developments and would be consistent with the surrounding urban and suburban uses. Because the proposed project's lighting would be similar to existing residential development in the area, it would not substantially affect day or nighttime views in the area.

The City's Building and Safety Department would review any proposed lighting to ensure conformance with the California Building Code (CBC), Title 24, as well as the California Green Building Standard Code (CALGreen) (California Code of Regulations [CCR] Title 24, Part 11), such that only the minimum amount of lighting is used and no light spillage occurs. Although the proposed project would introduce new buildings to the project site that would introduce new light sources, the surrounding area is urban and already illuminated, and the proposed lighting conditions would be similar to similar residential properties surrounding the project site. The proposed project would also comply with applicable provisions of the Aliso Viejo Municipal Code, including outdoor lighting and development standards set forth in Title 15 (Buildings and Construction) and Title 9 (Planning and Zoning), which include requirements to minimize light spillover, glare, and off-site illumination. In

⁹ City of Aliso Viejo. 2024. Building & Safety. Website: <https://avcity.org/154/Building-Safety>. Accessed February 3, 2026.

addition, the proposed project would comply with the CBC and CALGreen (Title 24, Part 11), which establish requirements for energy efficiency, light pollution reduction, and safety. These include high-performance building standards under Title 24, outdoor lighting controls and shielding to minimize glare and light spillover, and construction practices that promote resource efficiency and occupant safety.

Sunlight or artificial light reflecting from finished surfaces such as window glass or other reflective materials can cause reflected light (glare). Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. The proposed project does not propose use of materials known to cause glare, such as mirrored/reflective glass. Furthermore, the proposed lighting would be similar to the existing residential uses in the surrounding area and would not substantially increase sources of light in the area. Additionally, the proposed landscaping on the project site, combined with existing landscaping in the area, would help shield adjacent residential areas from sources of light and glare. Therefore, impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.2 Agriculture and Forestry Resources <i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.</i> <i>Would the project:</i>				
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 nonagricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Environmental Evaluation

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

Setting

The project site is currently vacant and does not contain farmland, agricultural uses, timberland, or forestry land. The General Plan currently designates the project site as Business Park 1 with a Mixed Use/Residential Overlay (Exhibit 3). The project site is not zoned or designated for agriculture, nor is it zoned Timberland Production as defined by California Public Resources Code Section 51104(g).

The proposed project requests a GPA to change the General Plan land use designation to Medium Density Residential, which is a nonagricultural land use designation intended to provide residential development with a density of up to 18 du/acre.

The proposed project site is currently zoned Business Park-1 Mixed Use/Residential Overlay of Business Park-1/Residential Very High Density (MU/R/BP-1/RVH) (Exhibit 4). The project applicant requests a rezone to change the zoning designation Residential Medium Density (RM), which is a nonagricultural zone intended to provide for the development and preservation of medium density neighborhoods containing detached and attached single-family homes on smaller lots, duplexes, townhomes, apartments, and condominiums.

The project site is mapped as Urban and Built-up Land by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP). Urban and Built-up Land is a nonagricultural land use designation.¹⁰

Would the project:

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

No impact. The project site does not contain any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The project site is mapped as "Urban and Built-up Land" by the California

¹⁰ California Department of Conservation. 2019. Important Farmland Categories. Website: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed January 6, 2025.

Department of Conservation FMMP, which is a nonagricultural land use designation.¹¹ The nearest designated farmland is Prime Farmland located near Ortega Highway, more than 7.5 miles southeast of the project site. Additionally, the General Plan does not designate the site as agricultural or forest land, and the project site is not in active agricultural use. This condition precludes the possibility of the conversion of Important Farmland to nonagricultural use. No impacts would occur.

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

No impact. The project site is currently vacant and does not support agricultural uses and is not under a Williamson Act Contract. Thus, the proposed project would not conflict with existing zoning for agricultural use or a Williamson Act Contract. No impacts would occur.

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

No impact. The project site does not have a forest or timberland zoning designation. This condition precludes the possibility of conflicts with forest zoning. No impacts would occur.

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

No impact. The proposed project site is mapped as “Urban and Built-up Land” by the California Department of Conservation FMMP. The project site is currently vacant and does not contain forestland, timberland, or timberland zoned Timberland Production as defined by California Public Resources Code Section 51104(g). This condition precludes the possibility of the conversion of forest land to non-forest use. No impacts would occur.

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

No impact. The project site and surrounding area are mapped as “Urban and Built-up Land” by the California Department of Conservation FMMP. The project site is not located on or near land used for farmland or agriculture. This condition precludes the possibility of the conversion of farmland to nonagricultural use or forest land to non-forest use. No impacts would occur.

Mitigation Measures

None.

¹¹ California Department of Conservation. 2019. Important Farmland Categories. Website: <https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx>. Accessed January 6, 2025.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.3 Air Quality <i>Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:</i>				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	☐	☐	☒	☐

Environmental Evaluation

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Setting

The proposed project site is located in the City of Aliso Viejo, in Orange County, which is within the South Coast Air Basin (SoCAB). The SoCAB includes all of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the north and east, while the Pacific Ocean lies to the west of the SoCAB. The southern limit of the SoCAB is the San Diego County line. The SoCAB is under the jurisdiction of South Coast Air Quality Management District (SCAQMD).¹²

¹² South Coast Air Quality Management District (SCAQMD). 2022. Air Quality Management Plan. Website: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. Accessed February 3, 2026.

The air pollutants for which national and State standards have been promulgated and that are most relevant to air quality planning and regulation in the SoCAB include ozone, nitrogen oxide (NO_x), carbon monoxide (CO), particulate matter, including dust, 10 micrometers or less in diameter (PM₁₀), and particulate matter, including dust, 2.5 micrometers or less in diameter (PM_{2.5}). In addition, toxic air contaminants (TACs) are of concern in the SoCAB. Each of these pollutants is briefly described below. Other pollutants that are regulated but not considered an issue in the project area are sulfur dioxide (SO₂), vinyl chloride, sulfates, hydrogen sulfide, and lead; the proposed project would not emit substantial quantities of those pollutants, so they are not discussed further in this section.

Construction and operation of the proposed project would be subject to applicable SCAQMD rules and requirements. The SCAQMD CEQA Air Quality Handbook was developed to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality.

Would the project:

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

Less than significant impact. A potentially significant impact would occur if the proposed project would conflict with or obstruct implementation of the applicable air quality plan. The SCAQMD is responsible for preparing air quality attainment plans to be transmitted to the ARB and the United States Environmental Protection Agency (EPA) for incorporation into the State Implementation Plan. SCAQMD has designated this area as extreme nonattainment for ozone and serious nonattainment for PM_{2.5}.¹³ To evaluate whether a project conflicts with or obstructs implementation of the applicable air quality plan (2022 Air Quality Management Plan [AQMP] for SoCAB), the SCAQMD CEQA Air Quality Handbook states that there are two key indicators. These indicators are identified by the criteria discussed below.

Indicator: Whether the proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

If a project's emissions do not exceed the SCAQMD regional thresholds for volatile organic compounds (VOC), NO_x, CO, sulfur oxides (SO_x), PM₁₀, or PM_{2.5}, it follows that the project's emissions would not exceed the allowable limit for each project in order for the region to attain and maintain ambient air quality standards, which is the primary goal of air quality plans. As shown in Impact 2.3(b), the proposed project would not exceed the SCAQMD's regional thresholds of significance during either construction or operation. Therefore, the proposed project would be consistent with the AQMP under this criterion.

¹³ South Coast Air Quality Management District (SCAQMD). 2022. Air Quality Management Plan. Website: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan>. Accessed April 10, 2025.

Indicator: According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a proposed project is inconsistent with the growth assumptions incorporated into the air quality plan and, thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

The development of emission burdens used in AQMPs to demonstrate compliance with ambient air quality standards is based, in part, on land use patterns contained within local general plans. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and the general plan was adopted prior to the applicable AQMP, then the growth of Vehicle Miles Traveled (VMT) and/or population generated by said project would be consistent with growth in VMT and population assumed within the AQMP. The General Plan and Zoning Ordinance defines the permitted land uses and the corresponding development standards within the City.

The project applicant requests a GPA to change the General Plan land use designation from BP with a Mixed Use/Residential (MU/R) Overlay to Medium Density Residential and a rezone to change the zoning designation to RM. Therefore, the 2022 AQMP would have analyzed a VMT and density different from the proposed project. Although the proposed project's land use may not be fully consistent with the General Plan and associated AQMP assumptions, it would not result in a substantial increase in growth beyond that anticipated in regional projections. As described in Section 2.14, Population and Housing, the City's population remains below Southern California Association of Governments (SCAG) projections, and the proposed project would incrementally contribute to planned growth without exceeding those forecasts. Because AQMP projections are based on SCAG growth assumptions, the proposed project's population and associated VMT would not interfere with the region's ability to comply with federal and California air quality standards.

Summary

In summary, the proposed project would not result in a regional exceedance of criteria air pollutants and would not result in population and VMT growth that would substantially exceed AQMP projects. As such, the proposed project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. Furthermore, the proposed project would not interfere with the region's ability to comply with federal and California air quality standards. Therefore, this impact would be less than significant.

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?

Less than significant impact. This impact is related to the cumulative effect of a project's criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the SoCAB, and this regional impact is a cumulative

impact. Therefore, new development projects (such as the proposed project) within the SoCAB would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited but cumulatively considerable when evaluated in combination with past, present, and future development projects.

Potential regional impacts could result in exceedances of State or federal standards for NO_x, PM₁₀, PM_{2.5}, or CO. NO_x emissions are of concern because of potential health impacts from exposure to NO_x emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM₁₀ and PM_{2.5} are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and resulting health effects.

VOC emissions are also important because of their participation in the formation of ground level ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors, such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to CEQA Guidelines Section 15064(h)(4), the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that a project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions. The proposed project's regional construction and operational emissions are evaluated separately below. Construction and operational emissions from the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1.¹⁴ The complete CalEEMod output files are included as part of Appendix A.

Construction Emissions

Construction emissions are described as "short-term" or temporary in duration; however, they have the potential to represent a significant impact with respect to air quality. Construction of the proposed

¹⁴ The air quality analysis was conservatively based on a 72-unit residential development, although the current project includes 71 units. Modeling the slightly larger development scenario results in marginally higher estimated emissions than would occur under the proposed project, thereby ensuring the analysis does not underestimate potential impacts. As such, the results provide a conservative assessment of the project's air quality impacts.

project would result in the temporary generation of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} emissions from construction activities such as site preparation, grading, building construction (home construction), architectural coating, and paving. Fugitive dust emissions are primarily associated with earth disturbance and grading activities and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on-site and off-site. Construction-related NO_x emissions are primarily generated by exhaust emissions from heavy-duty construction equipment, material and haul trucks, and construction worker vehicles. VOC emissions are mainly generated by exhaust emissions from construction vehicles, off-gas emissions associated with architectural coatings, and asphalt paving. For the purpose of emission modeling, construction of the proposed project was modeled to begin in July (Quarter 3) 2027 and conclude in August (Quarter 3) 2029 and was modeled based on an applicant-provided preliminary schedule; see Appendix A. Note that construction emissions would likely decrease if the construction schedule were deferred to later years because of improvements in technology and more stringent regulatory requirements. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required by the CEQA Guidelines. The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, and the duration of equipment use. Table 2 presents the proposed project's maximum daily construction emissions during the entire construction duration using the worst-case summer or winter daily construction-related criteria pollutant emissions for each phase of construction. The PM₁₀ and PM_{2.5} emissions reflect the combined exhaust and fugitive dust emissions after implementation of best available dust control measures outlined in SCAQMD Rule 403. Complete CalEEMod output files are included as part of Appendix A.

Table 2: Unmitigated Construction—Maximum Daily Regional Emissions by Year

Construction Year	Regional Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Maximum Daily from Project Construction (2027)	1.57	14.08	14.81	0.02	4.60	2.55
Maximum Daily from Project Construction (2028)	0.64	4.78	8.38	0.01	0.68	0.27
Maximum Daily from Project Construction (2029)	59.42	5.98	9.58	0.01	0.67	0.26
Maximum Daily Construction Emissions						
Maximum Daily Emissions	59.42	14.08	14.81	0.02	4.60	2.55
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter						

Construction Year	Regional Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
PM _{2.5} = particulate matter less than 2.5 microns in diameter SCAQMD = South Coast Air Quality Management District SO _x = sulfur oxides VOC = volatile organic compound The PM ₁₀ and PM _{2.5} emissions reflect the combined exhaust and fugitive dust emissions in accordance with SCAQMD Rule 403. Source of Emissions: Appendix A.						

As shown above in Table 2, the proposed project's construction emissions would not exceed the applicable significance threshold for any of the pollutants. Therefore, the proposed project would have a less than significant impact related to regional air quality during project construction.

Operational Emissions

Long-term operational emissions would be generated, resulting from daily operations at the proposed residences. Operational emissions for residential land use development projects are typically distinguished as mobile-, area-, and energy-source emissions. Mobile source emissions are those associated with automobiles that would travel to and from the project site. Assumptions used to estimate mobile source emissions that would be generated by the proposed project were consistent with those presented in the project-specific Trip Generation Memorandum and Institute of Transportation Engineers (ITE) Codes 215 Single-Family Attached Residential and 223 Affordable Housing. Area-source emissions are those associated with landscape maintenance activities and periodic architectural coatings. The proposed project would be all electric and would not have any natural gas infrastructure. Therefore, there are no direct emissions related to building energy use for space or water heating. Table 3 presents the proposed project's estimated maximum daily operational emissions.

Table 3: Maximum Daily Operational Regional Pollutants

Operational Activity	Regional Pollutant Emissions (pounds per day) ¹					
	VOC	NO _x	CO	SO _x	PM ₁₀ (Total)	PM _{2.5} (Total)
Mobile (Automobiles)	1.64	1.14	12.66	0.03	3.40	0.87
Area	4.30	0.04	4.10	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Overall Maximum Daily¹	5.93	1.18	16.75	0.03	3.40	0.88
SCAQMD Significance Threshold	55	55	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No

Operational Activity	Regional Pollutant Emissions (pounds per day) ¹					
	VOC	NO _x	CO	SO _x	PM ₁₀ (Total)	PM _{2.5} (Total)
Notes: CO = carbon monoxide NO_x = nitrogen oxides PM₁₀ = particulate matter less than 10 microns in diameter PM_{2.5} = particulate matter less than 2.5 microns in diameter SCAQMD = South Coast Air Quality Management District SO_x = sulfur oxides VOC = volatile organic compounds ¹ Emissions shown represent the maximum daily emissions for summer and winter seasons for each operational emission source and pollutant. Therefore, total daily operational emissions represent the maximum daily emissions that could occur. Source of Table: Appendix A.						

As shown in Table 3, the proposed project's regional daily operational emissions would not exceed any of the SCAQMD thresholds of significance. Therefore, the proposed project would have a less than significant impact related to regional air quality during project operation.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. This impact evaluates the potential for the proposed project's construction and operational emissions to expose sensitive receptors to substantial pollutant concentrations. Sensitive receptors are defined as those individuals who are sensitive to air pollution, including children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide [NO₂] and CO), commercial and/or industrial facilities would be considered sensitive receptors. To result in a less than significant impact, the following criteria must be true:

Criterion 1: Localized significance threshold (LST) assessment: emissions and air quality impacts during project construction or operation must be below the applicable LSTs to screen out of needing to provide a more detailed air quality analysis. If the proposed project exceeds any applicable LST when the mass rate lookup tables are used as a screening analysis, then project-specific air quality modeling may be performed to determine significance.

Criterion 2: A CO hotspot assessment must demonstrate that the proposed project would not result in the development of a CO hotspot that would result in an exceedance of the CO ambient air quality standards.

Criterion 3: TAC analysis must demonstrate that TAC emissions from construction and operations of the proposed project would not result in significant health risk impacts to nearby sensitive receptors.

Criterion 1: Localized Significance Threshold Analysis—Criteria Pollutants

The localized construction and operational analyses use thresholds (i.e., LSTs) that represent maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard. If the proposed project's construction or operational emissions are under those thresholds, it follows that the proposed project would not cause or contribute to an exceedance of the standard and would not expose sensitive receptors to substantial pollutant concentrations.

Friant Ranch Case and Project Health Impacts

In the 5th District Court of Appeal case *Sierra Club v. County of Fresno (Friant Ranch, L.P.)* (also referred to as *Friant Ranch*), the Court found the project Environmental Impact Report (EIR) deficient because it did not identify specific health-related effects resulting from the estimated amount of pollutants generated by the project. The ruling stated that the EIR should give a “sense of the nature and magnitude of the ‘health and safety problems’ caused by a project’s air pollution. The EIR should translate the emission numbers into adverse impacts or to understand why such translation is not possible at this time (and what limited translation is, in fact, possible).”

The California Supreme Court held that when an EIR concluded that a project would have significant impacts to air quality, an EIR should “make a reasonable effort to substantively connect a project’s air quality impacts to likely health consequences.” In order to determine compliance with this case, the Court developed a multi-part test that includes the following:

The air quality discussion shall describe the specific health risks created from each criteria pollutant, including diesel particulate matter (DPM).

This air quality analysis details the specific health risks created from each criteria pollutant above under Section 2.3, Air Quality, Environmental Setting, Air Pollutants. As such, this analysis meets the Part 1 of the *Friant Ranch* case test.

The analysis shall identify the magnitude of the health risks created from the project. On page 24 of the Ruling, it is stated that “[t]he Court of Appeal identified several ways in which the EIR could have framed the analysis so as to adequately inform the public and decision-makers of possible adverse health effects.”

The *Friant Ranch* case found that an EIR's air quality analysis must meaningfully connect the identified air quality impacts to the human health consequences of those impacts or meaningfully explain why that analysis cannot be provided. As noted in the brief of *Amicus Curiae* by the SCAQMD *Friant Ranch* (Brief),¹⁵ SCAQMD has air quality modeling and health impact evaluation capability among the most sophisticated of any of the air districts in the State, and thus it is uniquely situated to

¹⁵ South Coast Air Quality Management District (SCAQMD). 2015. Application of the South Coast Air Quality Management District for Leave to File Brief of *Amicus Curiae* in Support of Neither Party and *[Proposed]* Brief of *Amicus Curiae*. Website: <https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf>. Accessed December 2, 2025.

express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from relatively small projects due to photochemistry and regional model limitations. The Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful. Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS), it is not feasible, and thus would be speculative to attempt, to link health risks to the magnitude of emissions exceeding the significance thresholds.

On the other hand, for extremely large regional projects (unlike the proposed project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources as part of their rulemaking activity, specifically, 6,620 pounds per day of NO_x and 89,180 pounds per day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. As shown above in Table 2, project-related construction activities would generate a maximum of 59.42 pounds per day of VOC and 14.08 pounds per day of NO_x; and, as shown above in Table 3, operation of the proposed project is estimated to generate 5.93 pounds per day of VOC and 1.18 pounds per day NO_x. The proposed project would not generate emissions anywhere near levels that would reach 6,620 pounds per day of NO_x or 89,190 pounds per day of VOC emissions. Therefore, the proposed project's emissions are not sufficiently high enough to use a regional modeling program to correlate health effects on a basin-wide level.

Notwithstanding, this analysis does evaluate the proposed project's localized impact to air quality for emissions of NO_x, CO, PM₁₀, and PM_{2.5} by comparing the proposed project's on-site emissions to the SCAQMD's applicable LST thresholds. As evaluated in this analysis provided below, the proposed project would not result in emissions that exceed the SCAQMD's LSTs during either the construction or operational period. Therefore, the proposed project would not be expected to exceed the most stringent applicable federal or State ambient air quality standards for emissions of NO_x, CO, PM₁₀, or PM_{2.5}.

Localized Construction Analysis

The LST Methodology only applies to on-site emissions and states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only on-site emissions were compared with the applicable LSTs.

Utilizing the earthmoving activity acreages and phase durations from CalEEMod (Section 5.6.1), the number of acres disturbed per day were 0.75 for site preparation and 0.25 for grading. As specified in SCAQMD's guidance, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, the appropriate thresholds were selected based on the maximum number of acres disturbed in a day. The proposed project emissions have been compared to the 1 acre per day LST.

Table 4 presents the proposed project's maximum daily on-site emissions compared with the applicable LSTs. The closest sensitive receptor is approximately 130 feet (40 meters) from the project boundary. The LSTs for the project site were obtained from the LST Methodology for a 1-acre project site located in Source Receptor Area 20—Central Coastal Orange County, with sensitive receptors at a distance of 25 meters to present a conservative analysis. As noted in Table 4, emission estimates account for implementation of SCAQMD Rule 403, and the construction vehicle trip lengths were adjusted to 0.5 mile to represent localized emissions.

Table 4: Construction Localized Significance Screening Analysis

Activity	On-site Emissions (pounds per day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Maximum Daily from Project Construction (2027)	14.02	14.28	3.15	1.85
Maximum Daily from Project Construction (2028)	4.57	6.94	0.17	0.14
Maximum Daily from Project Construction (2029)	5.82	9.01	0.21	0.18
Maximum Daily On-site Construction Emissions	14.02	14.28	3.15	1.85
Construction Localized Significance Threshold (Source Receptor Area 20, 1 acre disturbed, 25 meters)	92	647	4	3
Exceed Screening Threshold?	No	No	No	No
Notes: CO = carbon monoxide NO_x = nitrogen oxides PM₁₀ = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less PM_{2.5} = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers SCAQMD = South Coast Air Quality Management District The PM₁₀ and PM_{2.5} emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403. Source of emissions: Appendix A. Source of thresholds: South Coast Air Quality Management District (SCAQMD) Mass Rate Localized Significance Threshold (LST) Lookup Table for Source Receptor Area 20. The proposed project would disturb 1 acre with the nearest sensitive receptor located 25 meters from the project site.				

As shown in Table 4, the proposed project's maximum daily on-site emissions would not exceed the applicable SCAQMD LSTs for NO_x, CO, PM₁₀, or PM_{2.5}; therefore, localized construction impacts related to these air pollutants would be less than significant.

Localized Operational Analysis

Similar to the construction LST analysis above, the applicable operational LSTs were obtained for a project located in Source Receptor Area 20 with the nearest sensitive receptor being at a distance of 25 meters. SCAQMD provides LST thresholds for projects equal to 1 acre, 2 acres, or 5 acres in size.

The proposed project would involve construction on 4.41 acres of the 7.06-acre site; therefore, the lower, more conservative threshold for a 2-acre site is used.

As described above, the LST Methodology recommends that only on-site emissions are evaluated using LSTs. Because most of the proposed project's mobile source emissions would occur on the local and regional roadway network away from the project site, a trip length of 0.5 mile was used in the modeling input assumptions to account for on-site emissions and from mobile sources. The 0.5-mile on-site trip length is a conservative estimate that takes into account the maximum project site distance a vehicle could travel, not the most likely or fastest route, to ensure all potential impacts are considered. On-site area-, energy-, and mobile source emissions were included in this analysis. Table 5 presents the proposed project's maximum daily on-site emissions compared with the appropriate LSTs.

Table 5: Operational Localized Screening Significance Analysis

Emissions Source	Pounds per Day			
	NO _x	CO	PM ₁₀	PM _{2.5}
Area	0.04	4.10	0.00	0.00
Energy	0.00	0.00	0.00	0.00
Mobile (Automobiles)	0.42	3.85	0.22	0.06
Maximum Daily On-site Operational Emissions	0.46	7.95	0.22	0.06
Localized Significance Thresholds (Source Receptor Area 20, 2-acre site, 25 meters)	131	962	2	2
Exceeds Screening Threshold?	No	No	No	No
Notes: CO = carbon monoxide NO _x = nitrogen oxides PM ₁₀ = particulate matter less than 10 microns in diameter PM _{2.5} = particulate matter less than 2.5 microns in diameter The highest daily emissions of NO _x , CO, PM ₁₀ , and PM _{2.5} were in the summer season. Source of Emissions: Appendix A. Source of thresholds: SCAQMD Mass Rate Lookup Tables for a 2-acre site in Source Receptor Area 20 for sensitive receptors located within 25 meters of the project site.				

As shown in Table 5, the proposed project's maximum daily on-site operational emissions would not exceed any applicable SCAQMD LSTs. Therefore, the proposed project's operational activities would not cause or contribute substantially to an existing or future ambient air quality standard violation. Accordingly, the proposed project's operational criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

Criterion 2: Carbon Monoxide Hotspot Analysis

A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent to help remedy this impact. The CO hotspot analysis contained in the SCAQMD 1992 CO Plan is used to determine potential CO hotspot impacts from the proposed project, because by using the 1992 CO Plan as a worst-case scenario, the proposed project can measure CO impacts against intersections that experienced significantly more vehicle traffic than those adjacent to the proposed project. The 1992 CO Plan is used as a worst-case scenario because it included a CO hot spot analysis for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day. Subsequently, the CO Plan determined that no CO hotspot would occur even with 100,000 vehicles per day at this one intersection.

According to the transportation analysis prepared by Urban Crossroads, the proposed project would generate 33 AM peak-hour trips and 37 PM peak-hour trips. Therefore, the proposed project would not result in traffic volumes exceeding 100,000 vehicles per day at any of the intersections evaluated near the project site. As a result, none of the intersections near the proposed project site would have peak-hour traffic volumes exceeding those at the intersections analyzed in the 1992 CO Plan. Additionally, the adjacent roadways are not located in an area where vertical or horizontal atmospheric mixing is substantially limited, such as a tunnel or overpass. Furthermore, there are no factors unique to the local meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. Therefore, the operational CO impact would be less than significant.

Criterion 3: Project-specific Toxic Air Pollutants

An assessment was made of the potential health impacts on surrounding sensitive receptors resulting from TAC emissions during construction. As discussed in more detail under the Toxic Air Contaminant Operation Analysis section below, an operational assessment was not warranted because it was determined that operation of the proposed project would not result in significant health impacts to nearby sensitive receptors due to the residential nature of the project. The SCAQMD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM₁₀. The California Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer

risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project. To assess impacts to off-site sensitive receptors, the American Meteorological Society/EPA Regulatory Model (AERMOD) air dispersion model was used to estimate the concentrations from PM₁₀ and PM_{2.5} exhaust at nearby sensitive receptors within 1,000 feet of the project site. The Hotspots Analysis and Reporting Program Version 2 (HARP2) software was used to identify the cancer risks associated with DPM generated during construction activities.

Toxic Air Contaminant Construction Analysis

Major sources of DPM during construction include off-road construction equipment and heavy-duty delivery truck activities. The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Detailed parameters, a description of methodology, and complete calculations are contained in Appendix A.

The estimated health and hazard impacts at the Maximally Exposed Individual Resident (MEIR) from the proposed project's construction emissions, prior to incorporation of mitigation, are provided in Table 6.

Table 6: Estimated Health Risks and Hazards During Project Construction

Source	Cancer Risk (risk per million)	Chronic Non-cancer HI
Maximally Exposed Individual Resident ¹	7.2	0.0045
Significance Threshold	10	1
Exceeds Individual Source Threshold?	No	No
Notes: HI = hazard index ¹ The location of the construction MEIR was determined to be a senior living community approximately 40 meters northeast of the project boundary, at 432503.5 m E, 3713832 m N. Source: Appendix A.		

As shown in Table 6, the proposed project's construction emissions would not exceed any risk significance threshold. Therefore, the proposed project would have a less than significant impact related to residential health risks and hazards during project construction.

Toxic Air Contaminant Operation Analysis

The proposed project is a residential project and would not have stationary sources or on-site sources of TACs during operation. Traffic generated by the residential project would consist of mostly light-duty gasoline-powered vehicles, which are not a significant source of TAC and air pollutant emissions. Thus, the proposed project would not generate a significant amount of DPM or other TAC emissions during operation and would not result in significant health impacts to nearby sensitive receptors during operation.

Cumulative Toxic Air Contaminant Analysis

As previously discussed, projects that exceed project-specific significance thresholds are considered cumulatively considerable by the SCAQMD. Conversely, projects that do not exceed project-specific thresholds are generally not considered cumulatively significant. As discussed in Criteria 1 through 3 above, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Since the proposed project would not exceed project-specific thresholds, it would not be considered to result in cumulatively significant impacts.

The Proposed Project as a Receptor

The proposed project would locate new sensitive receptors (residents) that could be subject to existing sources of TACs at the project site. However, as demonstrated above, the proposed project would comply with all existing regulations and would not exacerbate environmental hazards or conditions that already exist. Accordingly, no further analysis is required. The California Supreme Court concluded in *California Building Industry Association v. BAAQMD* [Bay Area Air Quality Management District] that CEQA generally does not require an analysis of the impact of existing environmental conditions on a project's future users or residents.

In summary, the proposed project would not expose sensitive receptors to substantial pollutant concentrations either during construction or operation. Impacts would be less than significant.

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

Less than significant impact. Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District (Valley Air District) does have a screening distance for odor sources. These screening distances by type of odor generator are listed below in Table 7.

Table 7: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles

Odor Generator	Screening Distance
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). March 19. Website: https://valleyair.org/transportation/GAMAQI.pdf . Accessed February 10, 2026.	

Construction-Related Odors

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, the intermittent nature of construction activities, and the highly diffusive properties of DPM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites for a residential subdivision. As such, the proposed project would not cause odors that adversely affect a substantial number of people during the construction period; potential impacts during construction would be less than significant.

Operational-related Odors

The proposed project includes the construction and development of a new residential infill community consisting of 71 residential units and associated amenities, landscaping, and paving. Operations of the proposed project could lead to odors from associated vehicle exhaust and outdoor cooking. However, such odors generated by project operation would be small in quantity and duration and would not pose an objectionable odor impact to nearby receptors. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, composting facilities, feedlots, coffee roasters, asphalt batch plants, and rendering plants. The proposed residential project would not produce any offensive odor-emitting end uses such as coffee roasting, composting, feed lots, refining, sewage treatment, or solid waste management and would not be considered an odor generator as identified in Table 7, and potential impacts during operation would be less than significant.

Summary

The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people from construction or operations. Therefore, approval of the

proposed project would not result in any significant effects relating to other emissions (such as odors), and impacts would be less than significant.

Applicable Existing Regulations

The proposed project would be required to demonstrate compliance with the following regulations prior to obtaining grading permits.

SCAQMD 403 SCAQMD Rule 403 requires the implementation of best available dust control measures during activities capable of generating fugitive dust. The proposed project must follow the standard SCAQMD rules and requirements with regard to fugitive dust control, which include, but are not limited to the following:

1. All active construction areas shall be watered two times daily.
2. Speed on unpaved roads shall be reduced to less than 15 miles per hour (mph).
3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
4. Any on-site stockpiles of debris, dirt, or other dusty material shall be covered or watered twice daily.
5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
6. Access points shall be washed or swept daily.
7. Construction sites shall be sandbagged for erosion control.
8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
11. Replace the ground cover of disturbed areas as quickly possible.

SCAQMD 1113 All interior and exterior architectural coatings used on-site during project construction must meet or exceed the VOC content limits established by SCAQMD Rule 1113. The project sponsor shall include in any construction contracts and/or subcontracts a requirement that all interior and exterior architectural coatings used in project construction meet the VOC content limits established by SCAQMD Rule 1113.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.4 Biological Resources				
<i>Would the project:</i>				
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 United States Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?	☐	☐	☐	☒

Environmental Evaluation

The analysis in this section is based, in part, on a biological resources evaluation, which consisted of a field survey and desktop analysis conducted by FirstCarbon Solutions (FCS). Desktop survey results are included in Appendix B.

Setting

Methods

The biological resources evaluation included a review of existing environmental documentation for the project site and vicinity, including literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity; and federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). FCS also reviewed topographic maps, aerial photographs, and published soil surveys and queried special-status species databases, including the USFWS Information for Planning and Consultation (IPaC) database,¹⁶ the California Natural Diversity Database (CNDDB),¹⁷ and the CNPS Inventory of Rare Plants (CNPS Inventory) of Rare and Endangered Vascular Plants of California.¹⁸

The biological resources evaluation included a field survey of the project site on January 22, 2025, to ascertain general site conditions and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species.

Results

An FCS Biologist conducted a general biological survey of the project site on January 22, 2025, between approximately 10:30 a.m. to 1:00 p.m. Weather conditions during the field survey were sunny, with an average temperature around 74°F (degrees Fahrenheit) and wind speeds between 0 and 4 mph.

Environmental Setting

The approximately 7.06-acre project site is bordered by a senior living community immediately to the north; multi-family residential uses and Aliso Creek Road to the east; MNWD facilities, industrial and commercial office space, and Aliso Creek Road to the south; and a vacant lot, Liberty, and single-family housing to the west. The project site is mostly comprised of bare and disturbed vegetation. The vegetation on most of the project site is sparse, and many plants are damaged or dried. Trash and construction debris appears to be scattered throughout the site. The southern portion of the project

¹⁶ United States Fish and Wildlife Service (USFWS). 2025. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed January 20, 2026.

¹⁷ California Department of Fish and Wildlife (CDFW). 2025. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data>. Accessed January 20, 2026.

¹⁸ California Native Plant Society (CNPS). 2025. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed January 20, 2026.

site has a non-native ornamental pine grove consisting mostly of Italian stone pine (*Pinus pinea*) trees. An approximately 12-foot-high stockpile is located in the northern portion of the site. An approximately 5- to 6-foot-deep temporary desilting basin is located in the eastern portion of the project site and is vegetated with weedy, ruderal plant species indicative of a recently or frequently disturbed area. The northernmost portion of the project site is a developed sidewalk along Freedom Lane. There are no jurisdictional drainages present on-site. The non-jurisdictional v-ditch is present along the southern boundary of the project site along the ornamental pine grove.

Would the project:

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

Less than significant impact. The project site is mostly disturbed and contains ornamental trees located along the southern site boundary. According to the CNDDDB and CNPS Inventory of Rare and Endangered Vascular Plants of California, 45 special-status plant species have been recorded within 10 miles of the project site or within the *San Juan Capistrano, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles that comprise the search area (Appendix B). The potential for occurrence of a species was based on presence of suitable habitats, soil types, and recency, proximity, and number of occurrences recorded in the CNPS Inventory and CNDDDB. Based on the disturbed nature of the project site, trash and construction debris, and developed drainage within the ornamental pine grove, the likelihood for the potential for persistence and occurrence of populations of many special-status plant species is lowered. The project site is surrounded by urban development. Because of the disturbed nature of the project site and lack of suitable habitat, all special-status plants that occur in the region were assessed as having no potential for occurrence (Appendix B, Table 1). Thus, special-status plants are not expected to occur on the project site, and there are no anticipated impacts to special-status plant species due to project implementation.

Sixty-four special-status wildlife species were identified within 10 miles of the project site as recorded in the CNDDDB or as identified in the USFWS IPaC database. Because of the urbanized/developed nature of the project site and vicinity, all special-status wildlife species identified in the database reviews were determined to have no or low potential for occurrence on the project site. Thus, special-status wildlife species are not expected to occur on the project site, and there would be less than significant impacts to special-status wildlife species due to project implementation.

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

No impact. No riparian or other sensitive natural communities were recorded on or adjacent to the project site; therefore, the proposed project would have no impact on any riparian habitat or other sensitive natural community.

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

No impact. There were no waters or wetland features detected on the project site that would be considered potentially jurisdictional by the United States Army Corps of Engineers (USACE), nor any features that would be considered potentially jurisdictional by State regulatory agencies, including the San Diego Regional Water Quality Control Board (San Diego RWQCB) and CDFW. Additionally, the project site does not contain vernal pools or features indicative of the historic presence of vernal pools. Therefore, the proposed project would have no impact on any State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

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

Less than significant impact with mitigation incorporated. The project site is undeveloped but is disturbed and is surrounded by urbanized areas and roads on all sides that limit wildlife movement through the project site. The project site itself does not serve as a wildlife movement corridor.

All trees within the limit of disturbance would be removed by the proposed project, but nearly all trees removed by the proposed project would be replaced with trees that could function in a similar capacity for nesting. Trees outside the limit of disturbance would remain. Trees within the project site may provide nesting habitat for various migratory and native birds acclimated to anthropogenic environments, which are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. If ground-disturbing or vegetation-removing construction activities are initiated during the nesting season, they could disturb nesting and breeding birds on the ground surface, in trees and shrubs, and on structures on and adjacent to the project site, which would be considered a significant impact. Potential construction-related project impacts on special-status and migratory birds include destruction of eggs or occupied nests, mortality of young, and parental abandonment of nests with eggs or pre-fledged young birds. With the implementation of Mitigation Measure (MM) BIO-1a and MM BIO-1b, which require a pre-construction survey and avoidance of direct and indirect impacts on active nests, potential project-related impacts to protected bird nests would be reduced to a less than significant level.

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

No impact. The General Plan for the City of Aliso Viejo contains the following Ecological and Biological Resources goals and policies for the Conservation/Open Space Element:

Goal COS-3 Identify, protect and improve significant ecological and biological resources within and surrounding Aliso Viejo.

Policy COS-3.2 Protect sensitive habitat areas and vegetation, particularly along Aliso Creek, within Aliso Woods, and within the Aliso and Wood Canyons Wilderness Park, by maintaining these resources as long-term open space.

The proposed project would not conflict with these goals and policies. Therefore, there are no local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, with which the proposed project would conflict. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No impact. The project site is located within the boundaries of the County of Orange Natural Communities Conservation Plan (County of Orange NCCP) Habitat Conservation Plan (HCP), an HCP and NCCP authorized by the CDFW through the NCCP Act (California Fish and Game Code [FGC] § 2800) and Sections 2081 and 2084 of the California Endangered Species Act (CESA) and by the USFWS through Sections 7 and 10 of the Endangered Species Act.

The project site does not contain Covered Habitats or suitable habitat for Identified Species covered under the County of Orange NCCP HCP. Therefore, the proposed project would not conflict with HCP, NCCP, or other approved local, regional, or State HCP. No impact would occur.

Mitigation Measures

MM BIO-1a Nesting Bird Pre-construction Surveys

If ground-disturbing or vegetation-removing construction activities or tree removal is proposed during the breeding/nesting season for migratory birds (February 1 through September 15), a qualified Biologist shall conduct pre-construction surveys for special-status birds and other migratory birds within the construction area, including a 300-foot survey buffer (where accessible), no more than 3 days prior to the start of ground-disturbing activities in the construction area.

MM BIO-1b Avoidance of Active Avian Nests

If an active nest (i.e., a nest occupied by eggs or fledglings) is located during pre-construction surveys or at any point during the construction phase of the proposed project, a qualified Biologist shall establish and demarcate a 50-foot (for Passerine birds) or 300-foot (for raptors) avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and or yellow caution tape. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).

Construction personnel shall be instructed not to enter the ESAs, and the Biologist(s) shall ensure that ESA boundaries are maintained. The ESA buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified Biologist deems disturbance potential to be minimal. Additional restrictions may include, if needed, alteration of the construction schedule.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.5 Cultural Resources				
<i>Would the project:</i>				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Environmental Evaluation

Setting

This section describes the existing cultural resource setting and potential effects from the proposed project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based, in part, on information provided by the California Native American Heritage Commission (NAHC), South Central Coastal Information Center (SCCIC), National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks list, California Points of Historical Interest list, California Built Environment Resource Directory (BERD), and the California Historical Resources Inventory. Non-confidential records search results and other correspondence are included in Appendix C.

South Central Coastal Information Center

A records search and literature review for the project site and its 0.5-mile radius was conducted on June 13, 2024, at the SCCIC, located at California State University Fullerton in Fullerton, California. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, historic aerial photographs, and historic maps to evaluate whether any previously documented prehistoric or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project site.

The results from the SCCIC indicated that there are five pre-contact cultural resources recorded within the 0.5-mile search radius. One of these resources (P-30-000416) was recorded within the project boundaries. In addition, there are 13 area-specific survey reports on file with the SCCIC for the 0.5-mile search radius, with seven reports located within the proposed project boundaries,

indicating that the project site has been previously surveyed for archaeological and historical resources. A review of these survey reports indicates that, aside from the previously recorded resource (P-30-000416), no additional cultural resources were identified within the project boundaries during prior surveys. A records search map identifying the proposed project boundaries, the 0.5-mile search radius, and the relevant non-confidential records search results are included in Appendix C.

Pedestrian Survey and Field Survey

On January 23, 2025, FCS Staff Archaeologists Natalie Adame and Maximillian Ochoa conducted a pedestrian survey for unrecorded cultural resources at the project site. The survey covered the subject property where possible, beginning in the northwestern corner of the project site and heading south–north utilizing 15-meter north–south transects where possible. The topographical conditions of the survey were for the most part relatively flat and clear with approximately 95 percent soil visibility; however, the project site was heavily disturbed by modern materials. In the northern central portion of the project site there was a spoils pile consisting of excess soil and rocks surrounded by modern refuse and debris. The project site is heavily covered by non-native soil, such as fill and gravel from construction, in which the native soil of the site consisted of yellowish-brown sand. The soil appeared more disturbed near the center of the project site as there seemed to be a concentration of modern debris.

Survey conditions were documented using digital photographs and field notes. During the survey, the team examined all areas of the exposed ground surface for pre-contact artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, and features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations) or historic debris (e.g., glass, metal, ceramics). All areas of the project site, where possible, were closely examined for culturally modified soils or other indicators of potential historic or pre-contact resources. No historic or pre-contact cultural resources or raw materials were observed. The entire project site has been disturbed, and as a result, the survey did not identify any evidence of the pre-contact archaeological resource (P-30-000416) identified by the records search. Pedestrian survey photologs can be found in Appendix C.

Buried Site Potential

The potential for not yet identified cultural resources in the project vicinity was reviewed against geologic and topographic Geographic Information System (GIS) data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria originally identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9. The geoarchaeological overview mapped the “archaeological sensitivity,” or potential to support the presence of buried prehistoric archaeological deposits based on geology and environmental parameters, including distance to water and landform slope. The methodology used in the study is applicable to other parts of California and generally concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when

compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

The project site is situated on sloping terrain, and according to the geologic map of Morton et al.,¹⁹ the proposed project site is situated on course-grained Tertiary age formations (Tss). Applying the criteria set forth in Meyer et al.,²⁰ the positive results from the NAHC as described below, and the pre-contact cultural resource recorded within the proposed project boundaries, in addition to the fact that the site has been previously surveyed seven times, indicates a low to moderate potential for unanticipated buried cultural resources to be impacted by project construction.

Native American Heritage Commission

On June 10, 2024, FCS contacted the NAHC to determine whether any sacred sites are listed on its Sacred Lands File (SLF) for the project site. A response from the NAHC was received on July 1, 2024, indicating that the SLF search produced a positive result for the presence of Native American cultural resources within the project site. The NAHC included a list of 23 Tribal representatives available to provide additional information pertaining to Tribal Cultural Resources (TCRs). To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by the proposed project are addressed, a letter containing proposed project information and requesting any additional information about TCRs was sent to each of the 23 Tribal representatives on January 17, 2025. A response was received on January 22, 2025, from the Santa Rosa Band of Cahuilla Indians that the Tribe is deferring any comments to the Soboba Band of Luiseño Indians. On January 29, 2025, the Juaneño Band of Mission Indians submitted a response stating that the project site falls within their traditional territory and is considered a culturally sensitive area. No additional responses have been received to date. NAHC correspondence can be found in Appendix C.

Cultural Resources

Would the project:

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

No impact. The records search conducted at the SCCIC determined that there are no historic built environment resources within the project site or within the 0.5-mile radius of the project site. Additionally, the results of the pedestrian survey were negative for historic and pre-contact cultural resources.

Furthermore, a review of 31 historic aerial photographs depicting the project site from 1938 to 2020 indicates that the project site has remained undeveloped. The project site does not contain any

¹⁹ Morton, D.M., and Miller, F.K. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California. U.S. Geological Survey Open-File Report 2006-1217, Version 1.0.

²⁰ Meyer, J., D. Craig Young, and Jeffrey S. Rosenthal. 2010. Volume I: A Geoarchaeological Overview and Assessment of Caltrans District 6 and 9, Cultural Resources Inventory of Caltrans District 6/9 Rural Conventional Highways. Submitted to Central California Department of Transportation, District 6.

buildings, structures, or objects that could potentially qualify as historical resources under CEQA. Therefore, there would be no impacts to historical resources.

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

Less than significant impact with mitigation incorporated. Records search results from the SCCIC indicate that one pre-contact archaeological resource (P-30-000416) has been recorded within the project site. In addition, there are four pre-contact archaeological resources within a 0.5-mile radius of the project site boundaries. However, the pedestrian field survey produced negative results for indicators of undiscovered pre-contact and/or historic archaeological resources. Furthermore, it also did not identify any evidence of the pre-contact archaeological resource (P-30-000416) identified by the records search.

Although the potential for encountering archaeological resources is low to moderate, it is possible that earth-disturbing activities associated with project construction could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would have a potentially significant impact.

MM CUL-1 and MM CUL-2 set forth the procedures for cultural protection measures, including pre-construction worker environmental awareness training, archaeological monitoring during ground-disturbing activities by a qualified Archaeologist, and protocols to be implemented if cultural resources are encountered during construction. Worker environmental awareness training would increase awareness of cultural resources and the importance of avoidance, while archaeological monitoring would allow for the identification of resources at the time of ground disturbance. In the event that cultural resources are discovered, implementation of the specified discovery and treatment protocols would ensure that construction activities are halted in the vicinity of the find and that appropriate evaluation and treatment measures are implemented in accordance with regulatory requirements. Through early identification, avoidance where feasible, and appropriate treatment of resources if encountered, implementation of MM CUL-1 and MM CUL-2 would ensure that potential impacts on archaeological resources are reduced to a less than significant level.

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

Less than significant impact with mitigation incorporated. No human remains or cemeteries are known to exist within or near the project site. Therefore, the potential for the disturbance of any human remains is considered low. While it is highly unlikely that human remains exist within or near the project site, there is always a possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-3 further specifies the

procedures to follow in the event that human remains are uncovered during construction activities, including requirements to halt work, notification of the County Coroner and NAHC as appropriate, and consultation with the Most Likely Descendant (MLD) if Native American Remains are identified. Along with compliance with required guidelines and statutes, implementation of MM CUL-3 would reduce potential impacts to human remains to a less than significant level.

Mitigation Measures

- MM CUL-1** Prior to the initiation of construction activities, all construction personnel conducting ground disturbance at the site shall be provided Worker Environmental Awareness Program (WEAP) cultural resources “tailgate” training. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may be found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for archaeology. The Archaeologist shall be present to monitor ground disturbance during the grading phases to check for the inadvertent discovery of archaeological resources or human remains, which may be followed by periodic archaeological spot-check monitoring as determined by the Archaeologist.
- MM CUL-2** In the event that buried cultural resources are discovered during construction, operations shall stop within a 100-foot radius of the find, and an Archaeologist who meets the Secretary of Interior’s Professional Qualification Standards for archaeology shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area shall be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA criteria. If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the Monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the

Lead Agency where they would be afforded long-term preservation to allow future scientific study.

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5; Health and Safety Code Section 7050.5; Public Resources Code Section 5097.94 and Section 5097.98 must be followed. During the course of project development, if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site where human remains are discovered and/or any nearby area reasonably suspected to overlie adjacent human remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project area in a location not subject to further subsurface disturbance:
 - The NAHC is unable to identify a MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission;
 - The descendant identified fails to make a recommendation; or
 - The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project site, a Lead Agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant shall develop a plan for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.6 Energy <i>Would the project:</i>				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Environmental Evaluation

Setting

Energy use, especially through fossil fuel consumption and combustion, relates directly to environmental quality since it can adversely affect air quality and generate greenhouse gas (GHG) emissions that contribute to climate change. Electrical power is generated through a variety of sources, including fossil fuel combustion, hydropower, wind, solar, biofuels, and others. Natural gas is widely used to heat buildings, prepare food in restaurants and residences, and fuel vehicles, among other uses. Fuel use for transportation is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes such as auto, carpool, and public transit; and miles traveled by these modes and is generally based on petroleum-based fuels such as diesel and gasoline. Electric vehicles (EVs) may not have any direct emissions but do have indirect emissions via the source of electricity generated to power the vehicle. Construction and routine operation and maintenance of transportation infrastructure also consume energy. Southern California Edison (SCE) provides electricity and Southern California Gas Company (SoCalGas) provides natural gas services within the City of Aliso Viejo. SCE provides electricity and natural gas as customers request their services.

Would the project:

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

Less than significant impact. A discussion of the proposed project's anticipated energy usage is presented below. Energy use consumed by the proposed project was estimated and includes

electricity and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix A.

Short-term Construction Impacts

For the purpose of this analysis, construction of the proposed project was modeled to begin in July 2027 and conclude in August 2029 and was modeled based on an applicant-provided preliminary schedule (see Appendix A). If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., site clearing, and grading), and the actual construction of the buildings. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, front end loaders, forklifts, and cranes. On-site, off-road construction equipment is estimated to consume a total of approximately 29,120 gallons of fuel over the entire construction duration (Appendix A).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to and from the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emissions Factors (EMFAC) model mobile source emission model. In total, the proposed project is estimated to generate approximately 372,576 VMT and a combined 17,624 gallons of gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Municipal Code Section 8.12.070 restricts noise sources associated with construction, repair, remodeling, or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, 8:00 p.m. and 8:00 a.m. on Saturday, or at any time on Sunday or a federal holiday. As on-site construction activities would be restricted during these hours, it is anticipated that the use of construction lighting would be minimal.

The overall construction processes are already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully because of the added expenses associated with renting the equipment, maintaining it, and fueling it. Thus, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Long-term Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Operation of the proposed project would consume an estimated 524,172 kilowatt hours (kWh) of electricity per year. The proposed residential buildings would be built all electric and the proposed project would install solar photovoltaic (PV) systems that would generate renewable energy, consistent with applicable Building Energy Efficiency Standards. Therefore, the proposed project would not impair but rather would include the use of renewable energy. In addition, the proposed project's buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced Building Energy Efficiency Standards, and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary. Additionally, the CBC requires new residential development to include energy efficiency features related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. CALGreen requires all new garages for the proposed homes to install electrical panels of adequate size to support the installation of EV charging systems. The proposed project would install solar PV systems in compliance with Title 24, Part 6, California's Energy Code. As such, compliance with the CBC Title 24 standards and CALGreen would ensure that the proposed project would not interfere with the ability to include renewable energy sources. As it relates to energy use from vehicular travel, the proposed project was estimated to generate approximately 468 daily vehicle trips for the proposed project under a conservative 72-unit scenario. Project-related vehicle trips would consume an estimated 49,992 gallons of gasoline, diesel, and compressed natural gas and 38,817 kWh of electricity annually. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

The operational energy analysis was prepared using a conservative 72-unit project scenario that was evaluated during technical studies completed earlier in the project planning process. The current proposed project includes 71 residential units. Because the energy analysis assumes one additional dwelling unit beyond the currently proposed development, the estimated vehicle trips, VMT, transportation fuel consumption, and associated electricity demand are conservatively overstated. As a result, actual operational energy consumption associated with the proposed 71-unit project would be slightly lower than the values presented herein, and the conclusions of this analysis remain valid and conservative.

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

Less than significant impact. The proposed project would be evaluated with existing State energy standards and with energy conservation policies included in the General Plan. The proposed project would be served with electricity provided by SCE. In 2023, the latest year with available data, SCE obtained 37.6 percent of its electricity from renewable energy sources. SCE also offers a Green Rate 50 percent option that sources 68.7 percent of its power mix from eligible renewable energy sources and a Green Rate 100 percent option that sources 100 percent of its power mix from eligible

renewable energy sources.²¹ SCE would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. Additionally, the proposed project is planned to be an all-electric design and would therefore utilize more renewable energy sources during project operation beyond CALGreen requirements.

The proposed residential project would be designed in accordance with Title 24, California's Energy Efficiency Standards for residential buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. CALGreen requires all new garages for the proposed homes to install electrical panels of adequate size to support the installation of EV charging systems. Therefore, it is anticipated the proposed project would be designed and built to minimize transportation energy through the promotion of the use of electric-powered vehicles, and it is anticipated that existing and planned capacity and supplies of transportation fuels would be sufficient to support the proposed project's demand. The proposed project would install solar PV systems in compliance with Title 24, Part 6, California's Energy Code.

The General Plan Conservation/Open Space Element contains the following policies related to energy conservation.

Energy Supply and Conservation

- Policy COS-6.1** Encourage green building designs for new construction and renovation projects within the City.
- Policy COS-6.2** Coordinate with regional and local energy suppliers to ensure adequate supplies of energy to meet community needs, implement energy conservation and public education programs, and identify alternative energy sources where appropriate.
- Policy COS-6.3** Encourage building orientations and landscaping that enhance natural lighting and sun exposure.
- Policy COS-6.4** Encourage expansion of neighborhood-level products and services and public transit opportunities throughout the City to reduce automobile use.

While several of these policies are requirements at City level or voluntary, compliance with Title 24 standards and other applicable regulations would ensure that the proposed project would not conflict with any of the energy conservation policies related to the proposed project's building, mechanical systems, and indoor and outdoor lighting.

²¹ California Energy Commission (CEC). Annual Power Content Labels for 2023. Website: <https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure-program/power-content-label/annual-power-4>. Accessed December 2, 2025.

The proposed project would comply with existing State energy standards and with energy conservation policies contained in the General Plan. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Potential impacts would be less than significant.

Mitigation Measures

None.

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

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Evaluation

Setting

Geology and Soils

The analysis in this section is based, in part, on the Geotechnical Report prepared by SA Geotechnical, Inc. (SA GEO) on June 3, 2024, included in Appendix D of this document. The Geotechnical Report concluded that the proposed grading and development is considered geotechnically feasible provided the recommendations in the report, included in MM GEO-1, are implemented during design, grading, and construction.

Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones; fish, amphibians, reptiles, birds, mammals, etc.), invertebrates (animals without backbones; starfish, clams, coral, cephalopods, etc.), microscopic plants and animals (microfossils), and trace fossils/ichnofossils (footprints, burrows, etc.). Fossils are valuable, nonrenewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils are preserved in sedimentary rocks and, despite the abundance of these rocks and the vast numbers of organisms that have lived through time, preservation of plant or animal remains as fossils is a rare occurrence.

The Society of Vertebrate Paleontology (SVP) defines a significant fossil resource as, “identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information.” Paleontological resources are considered older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).²²

The sensitivity of an area with respect to paleontological resources hinges on its geologic setting and whether significant fossils have been discovered in the area or in similar geologic units.

²² Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee. Website: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf. Accessed February 3, 2026.

Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less than significant impact. Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to an earthquake's seismic waves. Ground rupture is most likely to occur along active faults and typically occurs during earthquakes of magnitude 5.0 or higher. Ground rupture only affects the area immediately adjacent to a fault.

The project site is located in Southern California, which is a seismically active area. The type and magnitude of seismic hazards affecting the project site are dependent on the distance to the causative fault and the intensity and magnitude of the seismic event. The seismic hazards may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction and/or ground lurching.

Active faults are not known to exist within the project site. According to the Geotechnical Report, the project site is not within a California State-designated earthquake fault rupture hazard zone, and the potential for primary ground rupture is considered very low. Furthermore, according to the most recent Alquist-Priolo Earthquake Fault Zone and Seismic Hazard Zone Map, a known earthquake fault is not located near the project site or known to traverse the project site.²³ According to the Geotechnical Report, the closest active fault to the site is San Joaquin Hills fault located 2.7 miles west of the project site. Additionally, the General Plan Safety Element states that there are no known fault zones or seismic zones in the City.²⁴ Therefore, impacts related to rupture of a known earthquake fault would be less than significant.

ii) Strong seismic ground shaking?

Less than significant impact. The City, as well as most of Southern California, is located in a region of historic seismic activity. Strong levels of seismic ground shaking can cause damage to buildings. The intensity of ground shaking on the project site would depend upon the earthquake's magnitude, distance to the epicenter, and geology of the area between the project site and epicenter.

²³ California Geologic Survey. 2024. Earthquake Zones of Required Investigation Map. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/?print_preview=true. Accessed February 3, 2026.

²⁴ City of Aliso Viejo. 2004. General Plan Safety Element. Website: <https://www.avcity.org/DocumentCenter/View/395/Safety-Element-PDF>. Accessed February 3, 2026.

According to the Geotechnical Report, the closest active fault to the site is San Joaquin Hills fault located 2.7 miles west. During seismic events, the project site could experience strong ground shaking associated with the fault described above.

Pursuant to Municipal Code Chapter 13.02, Building Regulations, the City has adopted the 2025 CBC and related codes. The proposed project would be required to comply with all applicable regulations in the 2025 CBC as amended by the Municipal Code, which includes design requirements to minimize the effects of seismic ground shaking. The proposed project would be subject to the current CBC, as adopted by the City's Planning and Building Department, with respect to seismic design parameters. Conformance with these standard engineering practices and design criteria would reduce the effects of seismic ground shaking.

The Geotechnical Report noted that the project site has the potential for strong seismic shaking during an earthquake event. Section 3 of the Geotechnical Report makes site-specific recommendations concerning earthwork, grading, seismic design parameters, slope stability and slope setbacks, corrosivity, groundwater, and stormwater infiltration. The Geotechnical Report concluded that the proposed project would be feasible from a geotechnical standpoint, provided that the preliminary recommendations are implemented during design, grading, and construction. Municipal Code Chapter 13.08.170, Soil engineering and engineering geology reports, requires implementation of the recommendations provided in the Geotechnical Due Diligence Review and approved by the building official, including seismic design parameters. Compliance with Municipal Code Chapter 13.08.170 and the 2025 CBC would reduce potential impacts related to strong seismic ground shaking to a less than significant level.

Consistent with the requirements of Municipal Code Chapter 13.08.170, all recommendations approved by the building official would be included in the grading plans. Condition of Approval (COA) GEO-1 requires implementation of the recommendations provided in the Geotechnical Report, including seismic design parameters, in accordance with Municipal Code Chapter 13.08.170. Compliance with COA GEO-1 and Municipal Code Chapter 13.08.170 would reduce potential impacts related to strong seismic ground shaking to a less than significant level.

Following compliance with standard engineering practices, the CBC, the Municipal Code, and the site-specific recommendations referenced in COA GEO-1, potential impacts concerning exposure of people or structures to potential adverse effects involving strong seismic ground shaking would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

No impact. Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. For liquefaction to occur, a project site must be subject to three factors: underlying loose, coarse-grained (sandy) soils, a groundwater depth of approximately 25 feet, and a potential for seismic shaking from nearby large-magnitude earthquakes.

The project site is not located in a Liquefaction Hazard Zone.²⁵ Additionally, the Geotechnical Report indicates that the project site is not located within a potential liquefaction zone as defined by the State's Seismic Hazard Mapping and is not subject to other secondary seismic hazards. Furthermore, the General Plan indicates that the project site is not located within an area with liquefaction potential.²⁶ Therefore, the proposed project would not cause potential substantial adverse effects involving seismic-related ground failure, including liquefaction. There would be no impact.

iv) Landslides?

No impact. Liquefaction is a phenomenon where earthquake-induced ground vibrations increase the pore pressure in saturated, granular soils until it is equal to the confining, overburden pressure. When this occurs, the soil can completely lose its shear strength and enter a liquefied state. For liquefaction to occur, a project site must be subject to three factors: underlying loose, coarse-grained (sandy) soils, a groundwater depth of approximately 25 feet, and a potential for seismic shaking from nearby large-magnitude earthquakes.

The project site is not located in a Liquefaction Hazard Zone.²⁷ Additionally, the Geotechnical Report indicates that the project site is not located within a potential liquefaction zone as defined by the State's Seismic Hazard Mapping and is not subject to other secondary seismic hazards. Furthermore, the General Plan indicates that the project site is not located within an area with liquefaction potential.²⁸ Therefore, the proposed project would not cause potential substantial adverse effects involving seismic-related ground failure, including liquefaction. There would be no impact.

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

Less than significant impact. The Geotechnical Report indicates that the project site is underlain by bedrock of the Monterey and Niguel Formations and partially by artificial fill material. Within the southern portion of the site, the bedrock is overlain by compacted artificial fill associated with prior mass grading. The artificial fill was found to be up to 22 feet thick and generally consists of pale brown, yellowish-brown, dark brown, and olive brown silty fine to medium sand that was damp to very moist and medium dense. The stockpile in the northern portion of the site is composed of undocumented artificial fill presumed to have been placed during grading and construction of the neighboring developments. The undocumented artificial fill (stockpile) encountered was up to 12.5 feet thick and generally consisted of pale brown, yellowish-brown, and pale yellowish gray silty to clean fine to coarse sand and sandy silt that was damp to moist and loose to medium dense. The proposed project would be required to implement the site-specific recommendations referenced in

²⁵ California Geologic Survey. 2024. Earthquake Zones of Required Investigation Map. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/?print_preview=true. Accessed February 3, 2026.

²⁶ City of Aliso Viejo. 2004. General Plan, Safety Element Policy Map. Website: <https://avcity.org/DocumentCenter/View/384/Safety-Policy-Map-PDF>. Accessed February 3, 2026.

²⁷ California Geologic Survey. 2024. Earthquake Zones of Required Investigation Map. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/?print_preview=true. Accessed February 3, 2026.

²⁸ City of Aliso Viejo. 2004. General Plan, Safety Element Policy Map. Website: <https://avcity.org/DocumentCenter/View/384/Safety-Policy-Map-PDF>. Accessed February 3, 2026.

COA GEO-1, which includes remedial grading consisting of removal of weathered/unsuitable fill materials in their entirety, as well as measures to ensure that on-site irrigation is properly maintained and runoff is non-erosive.

During construction, the proposed project would be required to comply with erosion and siltation control measures outlined in Municipal Code Chapter 13.08: Grading and Excavation Code. Municipal Code Chapter 13.08 requires that excavations and fills that may affect drainage and watercourses be performed in accordance with good engineering practice, thereby reducing to a minimum the hazards and damage to public and private property. This would include measures such as using sandbags as temporary erosion control.

Additionally, the proposed project would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009DWQ and all subsequent amendments) (Construction General Permit); see Impact 2.10(a). The Construction General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion control and sediment control Best Management Practices (BMPs) that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Following compliance with the established regulatory framework, including the Municipal Code and Construction General Permit, and with implementation of COA GEO-1, potential impacts concerning soil erosion and loss of topsoil would be less than significant.

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?

Less than significant impact. As discussed in Impact 2.7(a), the project site would not be subject to seismically induced liquefaction or landslides.

Lateral spreading is a type of ground deformation that occurs when surface material extends or spreads on gentle slopes.²⁹ Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes.

Subsidence is a gradual settling or sudden sinking of the earth's surface that occurs when the withdrawal of groundwater, oil, or natural gas vertically displaces a large portion of land. Soils that are particularly subject to subsidence include those with high silt or clay content.

Bedrock of the Monterey and Niguel Formations and artificial fill material underlie the project site. The Geotechnical Report evaluated site conditions and identified the need for removal and recompaction of all undocumented fill materials and near-surface weathered/disturbed or highly faulted bedrock and remedial removal/overexcavation within the building pads. Accordingly, the Geotechnical Report

²⁹ United States Geological Survey (USGS). Lateral Spread. <https://www.usgs.gov/media/images/lateral-spread>. Accessed February 3, 2026.

recommends remedial removals in the upper 1 to 7 feet below existing grades. The removals for building pads are recommended to extend 3 to 5 feet below design grades or existing grades, whichever is lower. Areas underlain by faulted, highly expansive diatomaceous bedrock (Monterey Formation) would need a 7-foot removal/overexcavation. Remedial grading within the proposed drive areas may be limited to removal and recompaction of the upper 1 to 2 feet.

Pursuant to Municipal Code Chapter 13.08.170, Soil engineering and engineering geology reports, the proposed project would incorporate all site-specific recommendations of the Geotechnical Due Diligence Study approved by the building official, as COA GEO-1, which would address any identified potential soil and geologic hazards. Compliance with these recommendations would be required by implementation of COA GEO-1 and would reduce potential impacts to less than significant.

Furthermore, the proposed project would be required to comply with all applicable regulations in the 2025 CBC as amended by the Municipal Code, which includes design requirements to mitigate the effects of potential soil and geologic hazards, including landslide, lateral spreading, subsidence, liquefaction, and seismic settlement. The Aliso Viejo Building and Safety Department would review construction plans to verify compliance with standard engineering practices, the Municipal Code, the CBC, and the site-specific recommendations contained in the Geotechnical Feasibility Report, as referenced in COA GEO-1. Following compliance with standard engineering practices, the established regulatory framework, and COA GEO-1, the proposed project would not have significant impacts related to unstable geologic units. Therefore, with implementation of COA GEO-1, impacts would be less than significant.

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?

Less than significant impact. As discussed in Impact 2.7(a), the project site would not be subject to seismically induced liquefaction or landslides.

Lateral spreading is a type of ground deformation that occurs when surface material extends or spreads on gentle slopes.³⁰ Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes.

Subsidence is a gradual settling or sudden sinking of the earth's surface that occurs when the withdrawal of groundwater, oil, or natural gas vertically displaces a large portion of land. Soils that are particularly subject to subsidence include those with high silt or clay content.

Bedrock of the Monterey and Niguel Formations and artificial fill material underlie the project site. The Geotechnical Report evaluated site conditions and identified the need for removal and recompaction of all undocumented fill materials and near-surface weathered/disturbed or highly faulted bedrock and remedial removal/overexcavation within the building pads. Accordingly, the Geotechnical Report recommends remedial removals in the upper 1 to 7 feet below existing grades. The removals for

³⁰ United States Geological Survey (USGS). Lateral Spread. <https://www.usgs.gov/media/images/lateral-spread>. Accessed February 3, 2026.

building pads are recommended to extend 3 to 5 feet below design grades or existing grades, whichever is lower. Areas underlain by faulted, highly expansive diatomaceous bedrock (Monterey Formation) would need a 7-foot removal/overexcavation. Remedial grading within the proposed drive areas may be limited to removal and recompaction of the upper 1 to 2 feet.

Pursuant to Municipal Code Chapter 13.08.170, Soil engineering and engineering geology reports, the proposed project would incorporate all site-specific recommendations of the Geotechnical Due Diligence Study approved by the building official, as COA GEO-1, which would address any identified potential soil and geologic hazards. Compliance with these recommendations would be required by implementation of COA GEO-1 and would reduce potential impacts to less than significant.

Furthermore, the proposed project would be required to comply with all applicable regulations in the 2025 CBC as amended by the Municipal Code, which includes design requirements to mitigate the effects of potential soil and geologic hazards, including landslide, lateral spreading, subsidence, liquefaction, and seismic settlement. The Aliso Viejo Building and Safety Department would review construction plans to verify compliance with standard engineering practices, the Municipal Code, the CBC, and the site-specific recommendations contained in the Geotechnical Feasibility Report, as referenced in COA GEO-1. Following compliance with standard engineering practices, the established regulatory framework, and COA GEO-1, the proposed project would not have significant impacts related to unstable geologic units. Therefore, with implementation of COA GEO-1, impacts would be less than significant.

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

No impact. Sewers are available for disposal of the proposed project's wastewater. The proposed project would connect to the existing sanitary sewer system for wastewater disposal and would not include the use of septic tanks. Therefore, no impacts would occur, and no mitigation is required.

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

Less than significant impact with mitigation incorporated.

Geologic mapping indicates that the project site is within coarse-grained Tertiary age formations (Tss)³¹ that are associated with the Monterey Formation (Tm) and the Niguel Formation (Tn). Since the Monterey Formation (Tm) and the Niguel Formation (Tn) include sedimentary formations that are older than middle Holocene in age such as marine sandstones and siliceous rocks, the formations have been assigned high paleontological potential and may contain the interbedding of marine microfossils from siliceous ooze and marine invertebrates. According to the San Diego Natural History Museum (The Nat) online fossil locality database and the Natural History Museum of Los Angeles

³¹ Morton, D.M., and F.K. Miller. 2006. Geologic map of the San Bernardino and Santa Ana 30' x 60' quadrangles, California. United States Geological Survey. Open-File Report OF-2006-1217. Map. Scale 1:100,000.

County (NHM) collections (which are available online through the Integrated Digitized Biocollections [iDigBio]), there are no recorded fossil localities within the project site.³² There are recorded 23 vertebrate fossil localities (4521, 5547, 5752, 6283, 6284, 6286, 6550, 6551, 7541, 7542, 7543, 7544, 7546, 7547, 7548, 7549, 7550, 7551, 7552, 7553, 7554, 7555, and 7753) where 153 individual vertebrate specimens were recovered from late Pleistocene-age deposits at these localities, none of which are located on or within 0.5 miles to the project site.³³

A review of the University of California Museum of Paleontology (UCMP) online fossil locality database revealed 449 individual localities from Holocene age deposits within Orange County; the fossils from these localities are all invertebrate fossils.³⁴ Additionally, the UCMP database contains 122 localities from various (mostly unnamed) Pleistocene-age deposits within Orange County, including vertebrate, invertebrate, and microfossils.³⁵

There are several Pleistocene-age localities also reported by George T. Jefferson in A Catalogue of Late Quaternary Vertebrates from California from Orange County; however, none of them are listed as being in proximity to the project site.^{36,37} Online record searches indicated no known fossil localities within the project area. However, many rock units associated with the Monterey Formation (Tm) and the Niguel Formation (Tn) are fossiliferous. As such, a records search request was sent to the NHM and The Nat on February 13, 2025, to determine the potential extent of significant vertebrate fossils in the project area. The NHM conducted their records search on February 16, 2025, and found marine vertebrates and invertebrate localities in Aliso Canyon within the Niguel and Monterey Formations uncovered at the surface. The records search performed by The Nat on February 26, 2025, did not identify any fossil localities around the project site. However, the Niguel Formation was identified to underlie the project site and determined by The Nat to contain high paleontological potential using SVP guidelines based on previous marine invertebrate fauna recoveries. Although the project site consists of artificial fill and site grading is estimated to be shallow, the disturbance of significant paleontological resources during construction cannot be disregarded as the NHM records search identified fossil localities revealed at the surface; site grading exceeding 3 feet below ground surface (bgs) may potentially disturb significant paleontological resources. As such, construction of the

³² Integrated Digitized Biocollections (iDigBio). 2024. Online records search tool. National Science Foundation. Website: <https://www.idigbio.org/portal/search>. Accessed on February 3, 2026.

³³ San Diego Natural History Museum (The Nat). 2024. Paleontology Collection Database Results, Pleistocene-age vertebrate localities in Anaheim, CA.

³⁴ University of California Museum of Paleontology (UCMP). 2023. UC Museum of Paleontology Localities, localities from Holocene age deposits within Orange County. Website: <https://ucmpdb.berkeley.edu/loc.html>. Accessed February 3, 2026.

³⁵ University of California Museum of Paleontology (UCMP). 2024. UC Museum of Paleontology Localities, localities from Pleistocene-age deposits within Orange County. Website: https://ucmpdb.berkeley.edu/cgi/ucmp_query2. Accessed February 3, 2026.

³⁶ Jefferson, George T. 1991. A Catalogue of Late Quaternary Vertebrates from California: Part One, Nonmarine Lower Vertebrate and Avian Taxa. Natural History Museum of Los Angeles County Technical Reports 5:1-51.

³⁷ Jefferson, George T. 1991. A Catalogue of Late Quaternary Vertebrates from California: Part Two, Mammals. Natural History Museum of Los Angeles County Technical Reports 7:1-129.

proposed project may have a potentially significant impact on disturbing and damaging significant paleontological resources.

To address the potential for an unanticipated discovery during construction, implementation of MM GEO-1 would be required. MM GEO-1 would require a worker training by a qualified Paleontologist, prior to the start of construction, to inform construction personnel of the potential to encounter fossils and procedures to follow in the event fossils are encountered during construction. Implementation of MM GEO-1 would reduce the potentially significant impact to less than significant. The impact would be less than significant with mitigation incorporated.

Condition of Approval

COA GEO-1 In accordance with Municipal Code 13.08.170, Soil Engineering and Engineering Geology Reports, a soil engineering and engineering geology report shall be required for grading projects unless otherwise waived by the building official. The reports shall include information appropriate for the site including any information required by the building official. Recommendations included in the reports and approved by the building official shall be incorporated in the grading plans or specifications.

Prior to the issuance of a grading permit, the Owner/Developer shall implement the recommendations provided in Section 3, Conclusion and Preliminary Recommendations, in the Geotechnical Due Diligence Review prepared by SA Geotechnical Inc. (SA GEO), as approved by the building official. These include general earthwork requirements for site preparation, soil removal, fill material, grading, foundation, design, and all relevant construction permits, as well as requirements related to structural design and pavement design. The Geotechnical Feasibility Report, included in Appendix D, is incorporated herein.

Mitigation Measures

MM GEO-1 The project applicant shall enlist a qualified Paleontologist (meeting the standards of the Society of Vertebrate Paleontology [SVP]) to prepare a Worker Environmental Awareness Program (WEAP) presentation for construction personnel. It shall include information on paleontological resources, laws protecting them, types of fossils that could occur at the project site, and protocol for unanticipated discoveries. In the event that fossils are discovered during construction, excavations within 50 feet of the find shall be temporarily halted or diverted. The contractor shall notify the qualified Paleontologist to examine the discovery. The qualified Paleontologist shall document the discovery as needed in accordance with SVP standards, evaluate the potential resource, and assess the significance of the find under the criteria set forth in CEQA Guidelines Section 15064.5. Based on the significance of the find, the qualified Paleontologist shall determine procedures to be followed before construction is allowed to resume at the location of the find. If, in consultation with the qualified Paleontologist, it is determined that avoidance is not feasible, the qualified Paleontologist shall prepare a Paleontological Resources Impact Mitigation Program

(PRIMP) to outline salvage and recovery procedures. If deemed necessary by the qualified Paleontologist, the PRIMP shall include construction monitoring requirements as well. The PRIMP shall be submitted to the City for review and approval and the approved plan shall be implemented.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.8 Greenhouse Gas Emissions				
<i>Would the project:</i>				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Environmental Evaluation

Setting

Setting and Threshold of Significance

The project site is within the SoCAB, which is under the jurisdiction of the SCAQMD. In 2008, the SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SoCAB. The working group developed several different options, which are contained in the SCAQMD Draft Guidance Document-Interim CEQA GHG Significance Threshold (Interim GHG Thresholds). The working group has not provided additional guidance since the release of the interim guidance in 2008. In 2010, the SCAQMD Tier 3 threshold was expanded to include non-industrial projects, as explained in the minutes from the most recent working group meeting.³⁸ The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the Lead Agency in adopting its own threshold.

The City has not adopted a climate action plan, evidence-based numeric thresholds under the 2017 or 2022 Scoping Plan, or any other plan, policy, or regulation that would bear on this assessment of the proposed project's GHG emissions, as conducted pursuant to CEQA. In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 parts per million (ppm) and stabilize global climate.

³⁸ South Coast Air Quality Management District (SCAQMD). 2010. Greenhouse Gas CEQA Threshold Stakeholder Working Group Meeting No. 15. September 28.

To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, the appropriate tier for this project is Tier 3, which states that if GHG emissions are less than 3,000 metric tons (MT) carbon dioxide equivalent (CO₂e) per year, project-level and cumulative GHG emissions would be less than significant. However, this threshold was developed to meet the 2020 GHG emissions goals. To be consistent with State goals detailed in SB 32, Executive Order B-30-15, and Executive Order S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030, a scaled screening GHG threshold can be developed for an assumed opening year of 2029. Though the SCAQMD has not published a quantified threshold beyond 2020, a threshold of 1,920 MT CO₂e per year would be appropriate.³⁹ Therefore, this analysis utilizes 1,920 MT CO₂e per year for a quantitative threshold of significance for GHG emissions and ARB's 2022 Scoping Plan for consistency with an applicable GHG emissions reduction plan.

A project's incremental contribution to a cumulative impact can be found not to be cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements to avoid or substantially lessen the cumulative problem within the geographic area of the project.

This analysis includes estimates of GHG emissions associated with project construction and operational activities using CalEEMod Version 2022.1. The model is considered by SCAQMD to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects in California. These estimates have been determined to comply with CEQA Guidelines Section 15064.4(a) and to provide evidence that the implementation of the plans, policies, and regulations adopted to reduce GHG emissions would result in actual GHG emissions reduction.

Would the project:

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

Less than significant impact. Both construction and operational activities have the potential to generate GHG emissions. The following is a discussion of the proposed project's contribution to GHG emissions during both the construction and operation phases.

Construction Greenhouse Gas Emissions

The proposed project would generate GHG emissions during construction activities, resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a

³⁹ The 1,920 MT CO₂e per year threshold for opening year 2029 is calculated by reducing the 3,000 MT CO₂e per year threshold (developed to meet the 2020 GHG emissions goals) by 40 percent, then interpolating to obtain the scaled GHG emissions threshold for 2029. Based on a starting threshold of 3,000 MT CO₂e per year in 2020 a threshold of 1,800 MT CO₂e per year in 2030, the 3,000 MT CO₂e per year threshold would be reduced by 120 MT CO₂e per year through 2030.

substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod Version 2022.1.⁴⁰ Table 8, below, shows the annual construction GHG emissions.

Table 8: Proposed Project Construction Greenhouse Gas Emissions

Construction Year	Total GHG Emissions (MT CO ₂ e per year)
Project Construction–2027	116
Project Construction–2028	219
Project Construction–2029	113
Total Construction Emissions	449
Emissions Amortized Over 30 Years¹	15
Notes: GHG = greenhouse gas MT CO ₂ e = metric tons carbon dioxide equivalent ¹ Construction GHG emissions are amortized over the 30-year lifetime of the proposed project. Source: Appendix A.	

As shown above, the proposed project would generate approximately 449 MT CO₂e during construction. Over 30 years the construction GHG emissions would be amortized to approximately 15 MT CO₂e per year. Since SCAQMD has not established a construction GHG threshold, total construction emissions were amortized over 30 years and included in the emissions inventory to account for the short-term, one-time GHG emissions from the construction phase of the proposed project.

Operational Greenhouse Gas Emissions

Operational, or long-term, emissions are those emissions that occur over the life of the project. Project operations were modeled for the year 2029 since it is the first year when the homes would be fully built out and occupied after construction ends in fall 2029. Sources for operational GHG emissions are summarized below.

Motor Vehicles: These emissions refer to GHG emissions contained in the exhaust from the cars and other on-road vehicles that would travel to and from the project site. Based on the project-specific trip generation rates presented in the Trip Generation Memorandum, the proposed project was estimated to generate 468 daily vehicle trips under a conservative 72-unit scenario.⁴¹

⁴⁰ The air quality and GHG emissions analysis was conservatively based on a 72-unit residential development, although the current project includes 71 units. Modeling the slightly larger development scenario results in marginally higher estimated emissions than would occur under the proposed project, thereby ensuring the analysis does not underestimate potential impacts. As such, the results provide a conservative assessment of the project's air quality impacts.

⁴¹ Urban Crossroads. November 3. Freedom Residential Trip Generation Assessment. 2025.

As noted above, the operational modeling conservatively evaluated a 72-unit development scenario, whereas the currently proposed project consists of 71 residential units. Accordingly, the estimated operational GHG emissions presented in this section are slightly overstated because they assume development of one additional dwelling unit. Actual project emissions would be incrementally lower than those identified in this analysis. Because the modeled emissions remain substantially below the applicable significance threshold, the use of the conservative 72-unit scenario does not affect the impact determination.

Natural Gas: These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. The proposed project would be built all electric and would, therefore, not result in any GHG emissions from natural gas use.

Indirect Electricity: These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project. Although not included in the modeling and Table 9, below, the proposed project would install PV solar panels, consistent with Title 24, Part 6, California's Energy Code. The inclusion of solar panels would provide on-site renewable energy that would reduce the proposed project's consumption of electricity generated at off-site power plants.

Area Sources: These emissions refer to those produced during activities such as landscape maintenance.

Water Transport: These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.

Waste: These emissions refer to the GHG emissions produced by decomposing waste generated by the proposed project.

Table 9 presents the estimated annual GHG emissions from the proposed project's operational activities. The proposed project would generate approximately 578 MT CO₂e per year after the inclusion of 15 MT CO₂e per year from project construction. In addition, with continued implementation of various Statewide measures, the proposed project's operational energy and mobile source emissions would continue to decline in the future.

Table 9: Operational Greenhouse Gas Emissions—Unmitigated

GHG Emissions Source	GHG Emissions (MT CO ₂ e per year)
Area	1
Energy	83
Mobile (Automobiles)	455
Waste	17
Water	7
Amortized Construction	15

GHG Emissions Source	GHG Emissions (MT CO ₂ e per year)
Total Annual Project Emissions	578
Applicable Threshold¹	1,920
Exceed Applicable Threshold	No
Notes: MT CO ₂ e = metric tons carbon dioxide equivalent ¹ The 1,920 MT CO ₂ e per year threshold for opening year of 2029 is calculated by reducing the 3,000 MT CO ₂ e per year threshold (developed to meet the 2020 GHG emissions goals) by 40 percent, then interpolating to obtain the scaled GHG emissions threshold for 2029. Source: Appendix A.	

As shown in Table 9, the proposed project's GHG emissions would not exceed the applicable threshold of significance. In summary, construction and operational GHG emissions would result in a less than significant impact on the environment.

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

Less than significant impact.

2022 Scoping Plan Consistency

The 2022 Scoping Plan identifies additional GHG reduction actions and strategies necessary to achieve the AB 1279 target of 85 percent below 1990 levels by 2045. These actions and strategies build upon those identified in the first update to the Scoping Plan (2013) and in the second update to the Scoping Plan (2017). Although a number of these measures are currently established as Statewide regulations, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve Statewide GHG emissions targets. Many of the measures are implemented at the State level and therefore not applicable to the proposed project. However, as it relates to local climate actions, Appendix D of the ARB 2022 Scoping Plan highlights three priority areas for local jurisdictions to focus on when reducing GHGs: (1) transportation electrification; (2) VMT reduction; and (3) building decarbonization. The proposed project would be consistent with and would further the goals of all three priority areas.

Regarding transportation electrification, the proposed project would provide EV charging infrastructure in accordance with the State CALGreen Code. Accordingly, each dwelling unit would be EV capable by installing a raceway to accommodate a future branch circuit for future electric vehicle supply equipment electric vehicle supply equipment (EVSE) installation.⁴² Therefore, the proposed

⁴² California Energy Codes and Standards. 2022. CALGreen Light-duty Electric Vehicle Charging Infrastructure Requirements. Website:
https://calgreeninfo.com/download/47/resource_file/fieldList/2022+CALGreen+EV+Light+Duty.pdf. Accessed December 2, 2025.

project would be consistent with transportation electrification by having the infrastructure to accommodate the future residents' EV charging needs.

Regarding VMT reduction, as explained in Impact 2.17(b), the proposed project would result in a less than significant VMT impact. Therefore, the proposed project would be consistent with VMT reduction goals.

Regarding building decarbonization, the proposed project would have an all-electric design and would therefore comply with this goal. Furthermore, the proposed project complies with all relevant Energy Code and CALGreen requirements, which would ensure energy efficiency. Impact 2.6 (a) demonstrates that the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the CEQA Guidelines.

The proposed project would be consistent with the applicable measures outlined in the 2022 Scoping Plan. Therefore, the proposed project would be consistent with the 2022 ARB Scoping Plan and potential impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.9 Hazards and Hazardous Materials				
<i>Would the project:</i>				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Environmental Evaluation

Setting

The analysis in this section is based, in part, on the Phase I Environmental Site Assessment (Phase I ESA) prepared by Hillmann Consulting LLC, on May 24, 2024. The Phase I ESA is included in Appendix E of this document.

No Recognized Environmental Conditions (RECs),⁴³ Historical Recognized Environmental Conditions (HRECs),⁴⁴ or Controlled Recognized Environmental Conditions (CRECs)⁴⁵ were identified on the project site. There were no significant data gaps identified. No *de minimis* conditions⁴⁶ were identified on the project site.

Would the project:

- a) **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 of the proposed project would include the routine transport, use, and disposal of limited quantities of hazardous materials necessary for construction, including fuel and solvents. The use of these hazardous materials would be typical of construction projects, would be short-term, and would be handled in accordance with standard construction practices, as well as with applicable federal, State, and local regulations. Standard construction practices would be observed such that hazardous materials are appropriately contained and remediated as needed, as required by local, State, and federal law. Regulatory requirements would include California Code of Regulations Title 22, Division 4.5, for appropriate management of hazardous materials, as well as the requirements of the EPA, Resource Conservation and Recovery

⁴³ The term Recognized Environmental Condition (REC) is defined by ASTM E1527-21 as “(1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.”

⁴⁴ The term Historical Recognized Environmental Condition (HREC) is defined as a “previous release of hazardous substances or petroleum products affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the subject property to any controls (for example, activity and use limitations or other property use limitations).” The ASTM E1527-21 standard has clarified that a historical recognized environmental condition is not a recognized environmental condition.

⁴⁵ The term Controlled Recognized Environmental Condition (CREC) is a type of recognized environmental condition and defined by ASTM E1527-21 as a “recognized environmental condition affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls (for example, activity and use limitations or other property use limitations).”

⁴⁶ The term *de minimis* condition is defined by the ASTM, “. . . a condition related to a release that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.” A condition determined to be a *de minimis* condition is not REC nor a CREC.

Act (RCRA), California Department of Toxic Substance Control (DTSC), Division of Occupational Safety and Health (Cal/OSHA), and Caltrans.

The proposed project would include residential development, which does not typically use or store large quantities of hazardous materials. During the operational phase of the proposed project, hazardous materials may be handled on the project site. Hazardous materials that would likely be used during operation would likely be limited to fertilizers, herbicides, pesticides, solvents, household cleaning agents, and similar materials used for maintenance and operation of the residential structures, amenities, and landscaping. These types of materials are common and represent a low risk to people and the environment when used as intended. The proposed project would also be required to adhere to State and federal regulatory requirements, as discussed above. Therefore, impacts associated with hazardous materials would be less than significant.

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?

Less than significant impact. The Phase I ESA determined that the project site appears to have been vacant since at least 1938 through the present. Additionally, the Phase I ESA did not identify any RECs, HRECs, or CRECs on the project site.

As previously discussed above under Impact 2.9(a), the proposed project would be required to comply with all applicable local, State, and federal laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit. Proper handling of the use and disposal of hazardous materials associated with residential uses would reduce the potential for exposure.

Operation of the proposed project would not involve the transport, use, or disposal of large quantities of hazardous materials. The use of hazardous materials on the project site postconstruction would consist of those commonly used in a residential setting for routine maintenance and cleaning and would not be of a significant quantity to create a reasonably foreseeable upset or accident. As such, the proposed project would not introduce uses to the site that would 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. The proposed project would be required to comply with additional regulatory requirements including but not limited to the Code of Federal Regulations, Title 49, Transportation, specific to the transport of hazardous materials; California Code of Regulations Titles 8, 22, and Title 26 and their enabling legislation set forth in California Health and Safety Code Division 20, Chapter 6.95, Hazardous Materials Release Response Plans and Inventory; and the requirements of the Orange County Health Care Agency Environmental Health Division (i.e., the Certified Unified Program Agency), which would ensure safety standards related to the use and storage of hazardous materials are implemented. Consistency with local, State, and federal regulations related to the transport, storage, use, and disposal of hazardous materials would minimize the potential for upset and accident conditions to occur within the site. Therefore, impacts would be less than significant, and no mitigation would be required.

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

No impact. There are no schools within 0.25 mile of the project site. The nearest schools are Canyon Vista Elementary School (27800 Oak View Drive), 0.34 mile west of the project site; Aliso Niguel High School (28000 Wolverine Way), 0.51 miles east of the project site; and Wood Canyon Elementary School (23241 Knollwood), 0.62 miles southeast of the project site. As discussed in Impact 2.9(a), construction of the proposed project would include the limited use of hazardous materials, such as fuel and solvents. However, use of these hazardous materials would be in compliance with all applicable local, State, and federal regulations. During operation of the proposed project, limited use of hazardous materials would likely be used for building maintenance. Similarly, these hazardous materials would be stored, handled, and disposed of in accordance with applicable regulations. Thus, the proposed project would not include any uses that could potentially generate hazardous materials in significant quantities that would have an impact to surrounding schools. Therefore, there would be no impact.

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

No impact. Government Code Section 65962.5 refers to the Hazardous Waste and Substance Site List, commonly known as the Cortese List. The Cortese List contains hazardous waste and substance sites with known underground storage tanks (USTs) having a reportable release and solid waste disposal facilities with known migration. The Cortese List also includes hazardous substance sites selected for remedial action, historic Cortese Sites, and sites with known toxic materials identified through the abandoned site assessment program. The proposed project would not be located on a site which is included on a hazardous materials site list compiled pursuant to California Government Code Section 65962.5. The closest site recognized by the Cortese List is approximately 4.4 miles northeast of the project site and is an active Voluntary Cleanup sites located at 23804 Mercury Road in Lake Forest.⁴⁷ None of the activities occurring at these sites would be close enough to the project site to have an impact. Therefore, the proposed project would not create a significant hazard to the public or the environment. No impact would occur and no mitigation is required.

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 project site is not within 2 miles of an airport. The nearest airport is John Wayne Airport located 11 miles northwest of the project site. The project site is not within the Airport Influence Areas of this airport and is not located within an airport land use plan. Therefore, the proposed project

⁴⁷ California Department of Toxic Substances Control (DTSC). 2024. EnviroStor Hazardous Waste and Substances List. Website: <https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Aliso+Viejo>. Accessed January 17, 2026.

would not result in a safety hazard or excessive noise for people working or living at the project site. No impact would occur.

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

Less than significant impact. The City has developed an Emergency Operations Plan (EOP) consistent with the Standardized Emergency Management System (SEMS) outlining the City's response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The EOP is designed to incorporate and coordinate all the facilities and personnel of the City into an efficient organization capable of reacting adequately in the face of any disaster and to conduct such operations as the nature of the disaster deems necessary. It serves as an extension of the California Emergency Plan and the Emergency Resource Management Plan. The EOP is not intended to address normal day-to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Instead, the operational concepts reflected in the EOP focus on potential large-scale disasters that can generate unique situations requiring unusual emergency responses. The EOP provides comprehensive policy and guidance for emergency and response operations and details the responsibilities of residents, organizations, and City departments.

The project site is within Zone 12 of Aliso Viejo's Evacuation Zones.⁴⁸ Designated Evacuation Zones within Zone 12 include Liberty, Aliso Viejo Parkway, and Aliso Creek Road. The project site is adjacent to Liberty, which provides evacuation access north to Aliso Viejo Parkway or south to Aliso Creek Road.⁴⁹ Construction would not require closure or partial closure of Liberty, which provides shared access with the adjacent development. The proposed project would be constructed completely within the project site, and construction equipment would access the project site via Freedom Lane, which is the main access point to the project site. If any road closures to Freedom Lane are required, the project applicant and construction crew would be required to coordinate with the City of Aliso Viejo Public Works Department to ensure that emergency access routes are maintained during construction. Thus, construction of the proposed project would not impede the use of surrounding roadways for emergencies or access for emergency response vehicles.

Operation of the proposed project would not interfere with roadways, and the design of the proposed project would provide adequate emergency access consistent with City requirements. Therefore, the proposed project would not result in significant impacts to emergency access during construction and/or operation. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

⁴⁸ City of Aliso Viejo. 2024. Citywide Evacuation Zones. Website: <https://avcity.org/DocumentCenter/View/3750>. Accessed February 6, 2026.

⁴⁹ City of Aliso Viejo. 2024. Evacuation Zone 12. Website: https://avcity.org/231/Protecting-Your-Home-Preparing-to-Evacuate#tab8a3a84c5-531c-450e-9da4-44cc6f94da32_12. Accessed January 17, 2026.

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

Less than significant impact. CAL FIRE has mapped fire threat potential throughout California and ranks fire threats on a scale of no fire threat, moderate, high, and very high fire severity. According to the CAL FIRE Hazards Severity Zone Map Viewer, the project site is located in a Moderate to High Fire Hazard Severity Zone (FHSZ).⁵⁰ The project site is located in an urbanized area and is not located near densely vegetated areas that contribute to wildfire. According to the General Plan, the project site is not located along an urban-wildfire interface and is not located in the portions of the City abutting the Aliso and Woods Canyon Wilderness Park within the Orange County Fire Authority's (OCFA) Very High Fire Hazard Severity Zone (VHFHSZ), where wildfires are of the greatest risk.⁵¹ Additionally, the project site and its surrounding areas do not have a history of wildfire.⁵²

As shown in the project Fuel Modification Plan, the fire behavior modeling completed for the project site assessed nearby hazardous fuels and potential ignition sources. The nearest natural and native hazardous vegetation is located approximately 0.75-mile to the west adjacent to the residential development on Oak View Drive and the Soka University of America campus and 0.5-mile to the east in the Aliso Creek open space. Wildfires ignited and burning in either area could carry embers to the project site. The modeling also determined that a human-caused vegetation fire could be ignited in the landscaping on the manufactured slope along the west side of Aliso Creek Road and extend into the landscaping on the slope in the southern portion of the project site. However, the fire risk assessment concluded that the potential for off-site wildfire showering embers into the site is considered low, and the risk of ignition from such encroachments or ember showers is considered low given the ignition-resistant construction and landscaping, along with fire protection features that would be provided for the structures.

The worst-case fire conditions would be a fire during an offshore Santa Ana wind event with strong winds from the northeast. However, under such wind conditions, the fire would be a flanking fire relative to the project site that would produce flame lengths of only 1 foot in the irrigated ground cover with minimal heat energy. The northeast winds would drive a fire on the slope away from the project site. As such, fire would not present an ignition risk to the structures due to the required fuel modification provided for the proposed project and flames directed away from structures by the offshore wind. The project site is not adjacent to natural and native hazardous vegetation and fire behavior in the irrigated, landscaped open spaces near the project's buildings would not produce flames or heat energy that could present a risk of ignition to the buildings. Therefore, the proposed

⁵⁰ California Department of Forestry and Fire Protection. 2024. Fire Hazard Severity Zones in State Responsibility Area. Website: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>. Accessed January 17, 2026.

⁵¹ City of Aliso Viejo. 2004. General Plan, Safety Element. Website: <https://avcity.org/DocumentCenter/View/395/Safety-Element-PDF>. Accessed February 6, 2026.

⁵² California Department of Forestry and Fire Protection. 2024. California Wildfire History Map. Website: <https://projects.capradio.org/california-fire-history/#10.64/33.5901/-117.7005>. Accessed January 17, 2026.

project would not expose people or structures to wildland fire hazards. Impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.10 Hydrology and Water Quality				
<i>Would the project:</i>				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
(i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
(iv) impede or redirect flood flows?	☐	☐	☒	☐
d) Risk release of pollutants in a flood hazard, tsunami, or seiche zone due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental Evaluation

Setting

The following analysis is based in part on the Preliminary Water Quality Management Plan (PWQMP) and the Preliminary Hydrology Report prepared by X Engineering & Consulting, Inc., both included in Appendix F.

The project site is located within the Aliso Creek Watershed. Site drainage originates from overland flow that sheet flows east into a siltation basin at the east of the site adjacent to the Freedom Lane cul-de-sac. Existing catch basins along Freedom Lane intercept street flow and convey stormwater to the existing 18-inch high density polyethylene (HDPE) storm drain within the cul-de-sac. Street flow drainage does not commingle with site stormwater flows. Project drainage is directed to the 18-inch HDPE existing storm drain that scales up to a 24-inch HDPE storm drain flowing northeast through the Belmont Village property located northeast of the project site. A 24-inch reinforced concrete pipe (RCP) conveys stormwater to a 30-inch RCP storm drain on Aliso Creek Road that eventually increases up to a 96-inch RCP downstream. The 96-inch RCP terminates at a rip rap energy dissipation structure at Aliso Creek, via which stormwater is conveyed to the Pacific Ocean at South Laguna Beach.

The project site is vacant with sparse, poor ground cover. The proposed project would increase the project site from 0 percent impervious to 75 percent impervious (a total of 3.34 acres of impervious surfaces).⁵³ The existing site contains one siltation basin at the eastern border of the project site. One 18-inch corrugated metal pipe (CMP), approximately 80 feet long, drains stormwater from the basin to a catch basin at the Freedom Lane cul-de-sac.

According to the General Plan's Safety Element, the project site is not within a designated 100-year flood zone. The nearest 100-year flood zone is located west of Alicia Parkway, 0.69 miles east of the project site.⁵⁴ Additionally, according to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the project site is within an area of minimal flood hazard (Zone X).⁵⁵

Would the project:

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

Less than significant impact. Project impacts related to water quality could occur over three different periods:

⁵³ X Engineering & Consulting. 2025. Water Quality Management Plan (WQMP), Freedom Lane. October.

⁵⁴ City of Aliso Viejo. 2004. General Plan, Safety Element, Figure S-1 Safety Policy Map. Website: <https://avcity.org/DocumentCenter/View/384/Safety-Policy-Map-PDF>. Accessed January 17, 2026.

⁵⁵ Federal Emergency Management Agency (FEMA). 2024. National Flood Hazard Layer (NFHL) Viewer. Website: <https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd>. Accessed January 17, 2026.

- During the earthwork and construction phase, where the potential for erosion, siltation, and sedimentation would be the greatest;
- Following construction, before the establishment of ground cover, when the erosion potential may remain relatively high; and
- After project completion, when impacts related to sedimentation would decrease markedly but those associated with urban runoff would increase.

Polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Urban runoff pollution includes a wide array of environmental, stormwater characteristics depending on site conditions (e.g., land use, impervious cover, and pollution prevention practices), rain events (duration, amount of rainfall, intensity, and time between events), soil type and particle sizes, the amount of vehicular traffic, and atmospheric deposition. Major pollutants typically found in runoff from urban areas include sediments, nutrients, oxygen-demanding substances, heavy metals, petroleum hydrocarbons, pathogens, and bacteria. Most urban stormwater discharges are non-point sources.

The City is within the jurisdictional area of the of the San Diego RWQCB. The San Diego RWQCB requirements are further clarified by the Orange County Drainage Area Management Plan (DAMP), which requires the preparation and implementation of Water Quality Management Plans (WQMPs) for development projects. The DAMP reduces the pollution content of stormwater to the Maximum Extent Practicable (MEP). The purpose of the Orange County DAMP is to satisfy NPDES permit conditions for creating and implementing a Storm Water Management Plan (SWMP) to reduce pollutant discharges to the MEP. The DAMP contains guidelines on structural and nonstructural BMPs for meeting the NPDES goals. Consistent with the DAMP, the project applicant would be required to submit a SWPPP prior to project grading and construction for City review along with a Preliminary Project WQMP and a Hydrology Report.

As described in the proposed project's Hydrology Report, site drainage originates from overland flow that sheet flows east into a siltation basin at the east of the site adjacent to the Freedom Lane cul-de-sac. Peak flow originates as overland flow from a highpoint in subarea A-1, which is located on the southwestern portion of the project site. Runoff originating as overland flow along the site boundary and from the proposed buildings would be conveyed into area drains placed throughout the development.

Because the proposed project would disturb more than 1 acre of land, it would be subject to the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities Construction General Permit (Construction General Permit). Construction activity subject to the Construction General Permit includes any construction or demolition activity, including but not limited to clearing, grading, grubbing, or excavation, or any other activity that results in a land disturbance of equal to or greater than 1 acre. The Construction General Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Erosion control BMPs prevent erosion, whereas sediment controls trap sediment once it has been mobilized. The types of required BMPs

are relative to the amount of soil disturbed, the types of pollutants used or stored at the project site, and proximity to water bodies.

Additionally, project construction activities would be required to comply with applicable City requirements to control erosion and reduce or eliminate stormwater runoff containing sediment, including Municipal Code Chapter 13.08 Article XIII, Erosion Control, which requires preparation of an Erosion Control Plan, submitted to the building official, and the implementation of erosion and sediment control measures. Project construction activities would also be required to comply with water quality measures included in the City's Water Quality Ordinance (Municipal Code Chapter 7.35, Stormwater Management). The Water Quality Ordinance is designed to effectively prohibit non-stormwater discharges into the storm sewers, reduce the discharge of pollutants, and achieve compliance with the Clean Water Act and the Porter-Cologne Water Quality Control Act. Specifically, in accordance with Municipal Code Section 7.35.080, Control of Urban Runoff–New Development and Redevelopment Projects, prior to the City's issuance of a grading or building permit for the proposed project, the project applicant would be required to submit project plans demonstrating compliance with all applicable local ordinances; California Stormwater Quality Association (CASQA) standards; and the City's water quality manual, which includes the City's jurisdictional urban runoff management plan or local implementation plan, the Orange County DAMP, and the City's NPDES permit. In addition to the requirements of Municipal Code Section 7.35.080, project construction activities would be required to comply with Municipal Code Section 7.35.070, Control of Urban Runoff–Construction Projects, which requires the project applicant to submit a pollution control plan, construction BMP plan, and/or an erosion and sediment control plan meeting the requirements of the water quality manual and to submit evidence of coverage under the Construction General Permit prior to issuance of a permit involving ground-disturbing activities. This is included as COA HYD-1, below.

Compliance with the above regulations would ensure that impacts related to water quality during construction of the proposed project would be less than significant.

The proposed project would comply with the NPDES requirement through implementation of the WQMP and with the Orange County DAMP; as such, construction of the proposed project would not violate water quality standards or degrade surface or groundwater quality.

During operations, the project site would be subject to compliance with the Regional Municipal Separate Storm Sewer System (MS4) permit. The Regional MS4 Permit (Order No. R9-2013-0001, as amended) requires co-permittees, including the City, to reduce the discharge of pollutants from new development and significant redevelopment to the MEP. All development projects are required to implement source control and site design practices. Per the MS4 Permit requirements for redevelopment, the proposed project would also incorporate LID elements into the site design as well as implementation of BMPs.

The WQMP prepared for the proposed project is intended to comply with the requirements of the County of Orange NPDES Stormwater Program. The WQMP outlines the operation and maintenance of all BMPs to be used at the project site. Structural source control BMPs would include storm drain stenciling and signage, trash storage areas, efficient irrigation and landscape design to conserve

water, and protection of slopes and channels. Nonstructural source control BMPs would include education for property owners and occupants, activity restrictions, common area landscape management and litter control, BMP maintenance, common area litter control, catch basin inspections, and street sweeping. Low Impact Development (LID) BMPs would include biofiltration via an MWS for pollutant control. The MWS would accommodate the tight space constraints of the project site and would receive subsurface pipe flows for treatment. These are paired with a downstream subsurface detention vault for peak flow attenuation.

As described in the Hydrology Report, under the proposed conditions, the project site would divide the previous two drainage management areas (DMAs) into five DMAs from four watersheds (A, B, C, and D). Watershed A is DMA 1 and 0.53 acres; Watershed B is split into DMA 2 at 1.0 acre and DMA 5 at 0.21 acres; Watershed C is DMA 3 and 1.81 acres; and finally, Watershed D is DMA 4 and 0.89 acres. All project drainage would be routed through each watershed to the four proposed MWS for water quality treatment prior to entering a proposed subsurface detention basin in the north portion of the project site. The detention system is designed for hydromodification management as well as peak flow mitigation. Peak flows from the site would ultimately discharge through a proposed 18-inch pipe connection into an existing 18-inch RCP storm drain downstream. The proposed condition peak flow drainage, described further below, would mimic the existing condition to the maximum extent possible.

The proposed project would be subject to federal, State, and local regulations related to water quality, including the City's Water Quality Ordinance. Implementation of the measures outlined above, including water quality operational BMPs, would reduce pollutants of concern associated with the stormwater runoff from the project site in compliance with the Regional MS4 Permit and ensure the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. The impact would be less than significant.

b) 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 located within the boundaries of the MNWD. MNWD's potable water supply is entirely imported water purchased from the Municipal Water District of Orange County.⁵⁶ As such, project implementation would not substantially decrease groundwater supplies associated with water demand such that the proposed project would impede sustainable groundwater management of the basin.

The proposed project would reduce the pervious surfaces as compared to the existing conditions. Under the existing conditions, the project site is vacant with no impervious area. The proposed project

⁵⁶ Moulton Niguel Water District (MNWD). 2025. 2020 Urban Water Management Plan, 2021. Website: <https://www.mnwd.com/wp-content/uploads/2021/12/2020-Urban-Water-Management-Plan.pdf>. Accessed January 17, 2026.

would increase the project site to 75 percent impervious.⁵⁷ However, according to the Preliminary Hydrology Report, on-site stormwater infiltration is not feasible from a geotechnical viewpoint because the southern portion of the project site is underlain by variably thick artificial fill overlying very dense bedrock, and the remainder of the project site is underlain by shallow bedrock. As such, infiltration is not feasible and would be considered a geotechnical hazard.⁵⁸ Since the project site is not considered suitable for infiltration, the proposed project does not propose infiltration BMPs. The project site does not currently allow for infiltration and groundwater recharge; thus, the proposed project would not interfere substantially with groundwater recharge such that the proposed project could impede sustainable groundwater management of the basin. Impacts would be less than significant.

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

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

Less than significant impact. As discussed above, the proposed project would increase impervious surfaces at the project site by 75 percent, which is considered substantial. The proposed project would be subject to the NPDES permit requirements and would implement BMPs and LID elements to mitigate runoff and erosion. Furthermore, the proposed project would mimic the existing drainage pattern to the maximum extent possible, with stormwater continuing to flow west to east toward the catch basin at the cul-de-sac off Freedom Lane. With these measures in place, the substantial increase in impervious surfaces would not alter site conditions. The proposed project has also been designed to adequately convey the 25-year and 100-year storm flow rate to ensure flood protection on the project site and surrounding areas, further ensuring impacts remain controlled.⁵⁹

According to the Geotechnical Due Diligence Review, slopes are considered susceptible to erosion. Implementation of the recommendations provided in the Geotechnical Due Diligence Review in accordance with the Municipal Code, as discussed in Section 2.7, Geology and Soils, would ensure that on-site runoff is controlled and directed off-site in a non-erosive manner and that site drainage and slopes are maintained over the life of the proposed project. Additionally, the proposed project would not alter the course of a river or stream as the site is located in an urban and developed area. As such, the proposed project would not alter the existing drainage pattern at the project site in a manner which would result in on- or off-site erosion or siltation. Additionally, the proposed project would implement the provisions provided in the WQMP prepared for the proposed project, which includes ongoing operation and management of BMPs at the project site. Further, the proposed project would be required to adhere to Article XIII of Chapter 13.08 of the City's Municipal Code, which contains provisions related to erosion control such as grading specifications and erosion

⁵⁷ X Engineering & Consulting. 2025. Water Quality Management Plan (WQMP), Freedom Lane. October.

⁵⁸ X Engineering & Consulting. 2025. Preliminary Hydrology Report. Freedom Lane. October.

⁵⁹ Ibid.

control device requirements. Adherence to the WQMP would also ensure compliance with the County NPDES Stormwater Program. The impact would be less than significant.

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

Less than significant impact. Drainage at the proposed project site originates from runoff that sheet flows east into a siltation basin at the east of the site. Existing catch basins along Freedom Lane intercept street flow and convey stormwater to the existing 18-inch HDPE storm drain. Under existing conditions, stormwater on-site has a peak flow of 9.9 cubic feet per second (cfs) during 25-year storms and 13 cfs during 100-year storms.

The proposed project would implement BMPs, and incorporate the recommendations of the Geotechnical Due Diligence Review per COA GEO-1, in accordance with Municipal Code 13.08.170. The proposed condition peak flow drainage would mimic the existing condition to the maximum extent possible. Runoff originating as overland flow along the site boundary and from the proposed buildings would be conveyed into area drains placed throughout the development. All project drainage would be routed to four proposed MWS for water quality treatment prior to entering a proposed subsurface detention basin in the north portion of the project site. Under the project condition, drainage would be directed to the 18-inch HDPE existing storm drain that scales up to a 24-inch HDPE storm drain flowing northeast through the Belmont Village property located northeast of the project site. A 24-inch RCP conveys stormwater to a 30-inch RCP storm drain on Aliso Creek Road that eventually increases up to a 96-inch RCP downstream. The 96-inch RCP terminates at a rip rap energy dissipation structure⁶⁰ at Aliso Creek, via which stormwater is conveyed to the Pacific Ocean at South Laguna Beach.

The proposed subsurface detention system has been sized to accommodate hydromodification management and peak flow attenuation. The underground detention system is 10.5-foot in height with a storage system of 24,801 cubic feet. During less frequent and more intense storm events (i.e., the 25-year and 100-year storms), stormwater would flow over an internal bypass weir in the MWS units, through the detention vault, through the 3.25-inch orifice at the system invert and over the downstream weir plate. Stormwater then flows underground to the existing 18-inch HDPE storm drain at the cul-de-sac of Freedom Lane. Stormwater on-site would have a peak flow of 12.7 cfs during 100-year storms. Therefore, the proposed stormwater system would maintain 25- and 100-year storm flow rates to be below the existing condition flow rates.

The proposed project would not alter the course of a river or stream. The proposed project would be consistent with the approved drainage plan provided in the Hydrology Report and would not result in increased surface runoff in a manner which would result in flooding. As such, impacts would be less than significant.

⁶⁰ A rip rap energy dissipation structure is a specialized, rock-lined basin or apron placed at the outlet of culverts, storm drains, or channels to reduce water velocity, prevent downstream scour, and control erosion.

- (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**

Less than significant impact. The proposed project would increase runoff compared to existing conditions, however, as discussed above, it would not substantially alter the existing drainage pattern at the project site, or by altering the course of a river or stream. The proposed project would connect to existing water and sanitary sewer lines and would include the installation of stormwater management systems on-site. Stormwater from the proposed project would be routed to four proposed MWS for water quality treatment prior to entering a proposed subsurface detention basin in the northern portion of the project site to meet water quality objectives as required by the MS4 Permit. The proposed project would be designed consistent with the approved drainage plan provided in the Hydrology Report and would not exceed the capacity of the existing stormwater drainage system. Additionally, the proposed project would implement the provisions provided in the WQMP and the Geotechnical Due Diligence Review prepared for the proposed project—which includes ongoing operation and management of BMPs at the project site and measures to ensure that on-site runoff is controlled and directed off-site in a non-erosive manner. Furthermore, adherence to the WQMP would ensure compliance with County NPDES Stormwater Program, which would include biofiltration, and MWS and detention systems to control and reduce the discharge of pollutants in stormwater. Compliance with the WQMP would address potential additional sources of polluted runoff from the project site. The impact would be less than significant.

- (iv) **impede or redirect flood flows?**

Less than significant impact. The proposed project would increase runoff compared to existing conditions, however, as discussed above, it would not substantially alter the existing drainage pattern at the project site, or by altering the course of a river or stream. The proposed project would connect to existing water and sanitary sewer lines and would include the installation of stormwater management systems on-site. Stormwater from the proposed project would be routed to four proposed MWS for water quality treatment prior to entering a proposed subsurface detention basin in the northern portion of the project site to meet water quality objectives as required by the MS4 Permit. The proposed project would be designed consistent with the approved drainage plan provided in the Hydrology Report and would not exceed the capacity of the existing stormwater drainage system. Additionally, the proposed project would implement the provisions provided in the WQMP and the Geotechnical Due Diligence Review prepared for the proposed project—which includes ongoing operation and management of BMPs at the project site and measures to ensure that on-site runoff is controlled and directed off-site in a non-erosive manner. Furthermore, adherence to the WQMP would ensure compliance with County NPDES Stormwater Program, which would include biofiltration, and MWS and detention systems to control and reduce the discharge of pollutants in stormwater. Compliance with the WQMP would address potential additional sources of polluted runoff from the project site. The impact would be less than significant.

d) Risk release of pollutants in a flood hazard, tsunami, or seiche zone due to project inundation?

Less than significant impact. The project site is approximately 3.47 miles from the Pacific Ocean and is not near any other large body of water; therefore, the project site is not at risk of inundation from a tsunami or seiche. As discussed above, the project site is within an area of minimal flood risk and would not include the storage of hazardous materials that could be released into the environment due to inundation from a flood other than small quantities of typical household cleaners. As such, the impact would be less than significant.

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

Less than significant impact. The project site is within the Aliso Creek Watershed and the Water Quality Control Plan for the San Diego Basin (Basin Plan). The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards as well as water quality goals and policies that govern the Santa Ana River Basin.⁶¹ The proposed project would be required to comply with the goals and policies outlined in the Basin Plan, including efficient collection, treatment, and disposal of wastewater, and implementation of BMPs to protect surface water and groundwater quality. Project compliance would also include adherence to applicable discharge requirements to ensure that water quality objectives are met and maintained over the long-term. As previously discussed, the proposed project would be required to comply with the WQMP to ensure that the proposed project meets water quality standards and would not degrade surface or groundwater quality. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan. Impacts would be less than significant.

Condition of Approval

COA HYD-1 In accordance with Municipal Code Section 7.35.070, Control of Urban Runoff–Construction Projects, prior to the issuance of a grading permit, the project applicant shall submit a pollution control plan, construction Best Management Practice (BMP) plan, and/or an erosion and sediment control plan meeting the requirements of the water quality manual and to submit evidence of coverage under the Construction General Permit prior to issuance of a permit involving ground-disturbing activities.

Mitigation Measures

None.

⁶¹ California State Water Resources Control Board (State Water Board). 2024. San Diego Regional Water Quality Control Board (San Diego RWQCB). San Diego Basin Plan. Website: https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/. Accessed January 17, 2026.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.11 Land Use and Planning				
<i>Would the project:</i>				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Environmental Evaluation

Setting

The General Plan currently designates the project site Business Park with a Mixed Use/Residential (MU/R) Overlay of Very High Density Residential (VHDR). The proposed project would require a GPA to change the General Plan land use designation to Medium Density Residential. The Medium Density Residential land use designation is intended to provide residential development with a density between 8 and 18 dwelling units per gross acre, with an average density of 12 units per gross acre. The project site is currently zoned Mixed Use/Residential Overlay of Business Park-1/Residential Very High Density (MU/R/BP-1/RVH) (Exhibit 4). The applicant requests a rezone to change the zoning to RM. The RM zoning district is intended to provide for the development and preservation of medium density neighborhoods containing detached and attached single-family homes on smaller lots, duplexes, townhomes, apartments, and condominiums.

Would the project:

a) Physically divide an established community?

No impact. The project site is in a highly developed and urbanized area and is surrounded by urban and suburban development. The surrounding area contains commercial, industrial, and residential land uses. The project site is not configured in such a way that would create a physical barrier within an established community. A typical example of such a barrier would be a project that involved a continuous right-of-way, such as a roadway, which would divide a community and impede access between parts of the community. The proposed project does not include these types of features. Implementation of the proposed project would not disrupt the surrounding land uses or divide the physical arrangement of the residential communities to the north, east, and west of the project site. Therefore, the proposed project would not physically divide an established community. No impact would occur, and no mitigation is required.

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

Less than significant impact. The proposed project would include a GPA to amend the General Plan land use designation to Medium Density Residential and a rezone to change the zoning to RM. The land uses to the north, south, east, and west of the project site have General Plan land use designations of Business Park, Open Space, Community Facilities, Very High Density Residential, High Density Residential, and Low Density Residential. The proposed GPA would be compatible with the existing surrounding land uses, and with the approval of these changes, the proposed project would not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect.

In addition, the proposed project would request development standard waivers pursuant to the State Density Bonus Law (Government Code section 65915). Because the proposed project would include affordable housing units meeting the minimum percentage required under the statute, the proposed project would be eligible to request concessions and waivers from development standards that would otherwise physically preclude the construction of the density bonus and associated incentives. The requested waivers include modifications to building height, building site coverage, and retaining wall height standards.

The proposed GPA, zone amendment, and associated waivers are intended to allow flexibility in site planning and project layout consistent with the City's General Plan policies and the surrounding urban context. These discretionary actions are related to land use compatibility and development form and do not modify or relax adopted environmental performance standards.

Importantly, the proposed GPA, zone amendment, and development standard waivers would not conflict with adopted regulations for the purpose of avoiding or mitigating an environmental effect. Environmental protection requirements related to air quality, greenhouse gas emissions, noise, traffic, biological resources, water quality, public services, and utilities would continue to apply to the project irrespective of the requested entitlements. Compliance with applicable State and local regulations, including building codes, infrastructure design standards, and permit conditions imposed through project approvals, would remain mandatory.

Further, the requested waivers do not preclude compliance with mitigation measures or performance standards identified in this environmental review. Any required mitigation measures would be implemented independently of the zoning action or development standard flexibility and would be enforceable through Conditions of Approval and the mitigation monitoring and reporting program. As such, the proposed GPA, zoning amendment, and waivers do not reduce environmental protections, nor do they substitute for, or attempt to supplant, adopted regulations intended to avoid or lessen environmental impacts.

Accordingly, the proposed GPA, zone amendment, and development standard waivers would serve primarily to allow a feasible and context-sensitive project design and would not result in conflicts with

adopted regulations or policies governing environmental protection, resource conservation, or public health and safety.

Table 10 shows an analysis of the proposed project's consistency with relevant policies of the General Plan adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 10, the proposed project is consistent with all applicable General Plan policies.

Table 10: Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
Land Use Element	
Policy LU-2.1: Preserve the current pattern of development that encourages more intense and higher density development at the core of the community (near Grand Park and Aliso Viejo Town Center) and less intense uses radiating from the central core.	Consistent. The proposed project includes redevelopment of an underutilized site that is less than 1 mile from the City's central core. The proposed project would include 71 residential units, resulting in a density of 16 dwelling units per acre. Therefore, the proposed project would provide an appropriate density, consistent with this policy of providing less intense uses radiating from the central core.
Policy LU-2.4: Encourage land uses that complement (in type, size, scale and design) the community's topography, scenic vistas, and natural resources.	Consistent. The proposed project includes a townhome development on a site that is surrounded by developed and urbanized uses. Development of the site would be generally consistent with existing surrounding uses. Further, as discussed in Section 2.1, Aesthetics, the proposed project would not have an adverse effect or damage a scenic vista or natural resources. Further, the proposed project would preserve the topography of the site, including the landscaped slope portion of the site. As such, the proposed project is consistent with this policy.
Policy LU-4.2: Encourage environmentally sensitive development patterns, promote public education, and enforce infrastructure criteria that protect residents and property from hazards related to slope stability and flooding.	Consistent. The proposed project consists of infill development in an urbanized area and would not degrade environmentally sensitive areas of the City. The proposed project is not located within or near a flood zone. The proposed project would comply with all recommendations in the project-specific geotechnical review as approved by the building official, per COA GEO-1 to ensure slope stability. On-site drainage and water quality improvements would provide protection from localized flooding. As such, the proposed project is consistent with this policy.
Policy LU-4.4: Reduce the discharge of pollutants and runoff flow from urban development to the maximum extent practicable.	Consistent. As discussed in Section 2.10, Hydrology and Water Quality, the proposed project includes an on-site stormwater system that would reduce on-site

Aliso Viejo General Plan Policies and Actions	Project Consistency
	runoff. Specifically, runoff from the project site would be routed to a modular wetland system (MWS) prior to entering a subsurface detention basin in the southern portion of the site. The proposed water quality Best Management Practices (BMPs) would adhere to Water Quality Management Plan (WQMP) requirements, including providing operational BMPs that would reduce pollutants of concern associated with the stormwater runoff from the project site in compliance with the Regional Municipal Separate Storm Sewer System (MS4) Permit and ensure the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. As such, the proposed project is consistent with this policy.
Policy LU-5.3: Ensure that new development is consistent with City and service provider plans to complete needed improvements and funding capacity for such improvements.	Consistent. As discussed in Section 2.15, Public Services and Section 2.19, Utilities and Service Systems, existing public and utility services are generally anticipated to be adequate to serve the proposed project. Any improvements would be constructed in compliance with City and service provider standards, and the applicant would pay all applicable fees as required. As such, the proposed project is consistent with this policy.
Policy LU-8.2: Require recycling, composting, source reduction and education efforts throughout the community, including residential, businesses, industries, and institutions, within the construction industry, and in all City-sponsored activities.	Consistent. As discussed in Section 2.19, Utilities and Service Systems, the proposed project would be required to comply with applicable federal, State, and local regulations regarding recycling, composting, source reduction, and education efforts. As such, the proposed project is consistent with this policy.
Policy LU-11.1: Ensure that new development contributes its fair share to the timely construction of new school facilities, to the extent permitted by law, and compatible with other City land use objectives.	Consistent. As discussed in Section 2.15, Public Services, the project applicant would be required to pay all statutory fees in place at the time in compliance with Senate Bill (SB) 50 and demonstrate proof of payment to the City prior to approval of a building permit. Payment of developer fees under SB 50 would ensure school related impacts are less than significant. As such, the proposed project is consistent with this policy.
Policy LU-12.2: As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multiuse trails that improve the public and private recreation system.	Consistent. As discussed in Section 2.15, Public Services, the project applicant would be required to pay all public benefits fees, which would satisfy the City's parkland requirement. The proposed project would also provide usable open space and on-site

Aliso Viejo General Plan Policies and Actions	Project Consistency
	amenities to residents that would partially offset impacts to parks facilities. As such, the proposed project is consistent with this policy.
Circulation Element	
Policy C-3.1: Promote increased use of public transportation to reduce roadway congestion, air pollution, and non-point source water pollution. Support efforts to increase bus service range and frequency within the City as appropriate.	Would not conflict. The proposed project is located 1.2 mile from the nearest transit stop. There are no existing or planned transit facilities adjacent to the project site. However, as discussed in Section 2.17, Transportation, project implementation would not conflict with a program plan, ordinance, or policy addressing transit facilities. Therefore, the proposed project would not conflict with this policy.
Policy C-4.1: Improve City sidewalks and rights-of-way to make them efficient and appealing for walking and bicycling safely. Coordinate with Aliso Viejo Community Association (AVCA), adjacent jurisdictions, the County of Orange and regional agencies to improve pedestrian and bicycle trails, facilities, signage, and amenities, especially within Aliso Viejo Town Center.	Consistent. The proposed internal pedestrian walkways and sidewalks would connect to the existing sidewalks along Freedom Lane via the proposed driveway on the cul-de-sac of Freedom Lane and would connect to the existing sidewalks on Liberty. Further, landscaping along the project site would contribute to the appeal of the pedestrian walkways. No dedicated bike lane is proposed as part of the project; however, this is consistent with the conditions of the surrounding area. As such, the proposed project is consistent with this policy.
Conservation/Open Space Element	
Policy COS-1.2: Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.	Consistent. The proposed project would be required to comply with the City's landscaping requirements, including Chapter 7.30, Water Efficient Landscape Regulations, which would increase water efficiency. As such, the proposed project is consistent with this policy.
Policy COS-1.4: Promote water conservation measures, reduce urban runoff, and prevent groundwater pollution within development projects, property maintenance, City operations and all activities requiring City approval.	Consistent. As discussed in Section 2.10, Hydrology and Water Quality, the proposed project would implement structural, source control, and Low Impact Development (LID) BMPs to address water quality conditions associated with the proposed project. The proposed project would adhere to WQMP requirements, which would reduce pollutants of concern associated with the stormwater runoff from the project site in compliance with the Regional MS4 Permit and ensure the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. As such, the proposed project is consistent with this policy.

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy COS-4.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.	Consistent. The proposed project includes a townhome development on a site that is surrounded by developed and urbanized uses. Development of the site would be generally consistent with existing surrounding uses. Further, the proposed project would comply with Municipal Code Chapter 15.62 (Design Standards) which requires discretionary design review of site planning, building form, landscaping, screening, and lighting to ensure development provides pleasing views and is visually compatible with surrounding natural and built environments. As such, the proposed project is consistent with this policy.
Policy COS-5.1: Integrate air quality planning with City land use, economic development, and transportation planning efforts.	Consistent. As discussed in Section 2.3, Air Quality, the proposed project would not generate pollutant emissions in excess of applicable significance thresholds. As such, the proposed project is consistent with this policy.
Policy COS-5.2: Support programs that reduce air quality emissions related to vehicular travel.	Consistent. The proposed project includes pedestrian facilities connecting to existing streets. In addition, the proposed project would provide electric vehicle (EV) charging infrastructure consistent with the latest applicable California Green Building Standard Code (CALGreen), which would allow future residents to charge electric vehicles, in turn reducing air quality emissions from fossil fueled vehicles. As such, the proposed project is consistent with this policy.
Policy COS-5.3: Support alternative transportation modes and technologies and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.	Consistent. Similar to most developments in Orange County, the proposed project is not located within walking distance of a transit stop. The proposed project is approximately 1.2 miles from the nearest transit stop. However, the proposed internal pedestrian walkways and sidewalks would connect to the existing sidewalks along Freedom Lane via the proposed driveway on the cul-de-sac of Freedom Lane and would connect to the existing sidewalks on Liberty, encouraging pedestrian connection to the neighborhood. As such, the proposed project is consistent with this policy.
Policy COS-6.1: Encourage green building designs for new construction and renovation projects within the City.	Consistent. The proposed project would be required to comply with applicable Title 24 standards and CALGreen. In addition, the proposed project would be all electric and would provide solar PV systems. As such, the proposed project is consistent with this policy.

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy COS-6.4: Encourage expansion of neighborhood-level products and services and public transit opportunities throughout the City to reduce automobile use.	Consistent. Similar to many developments in Orange County, the proposed project is not located within immediate walking distance of a fixed-route transit stop, with the nearest stop located approximately 1.2 miles from the project site. However, the proposed project would introduce residential development on an infill site near the city center, where a concentration of retail, restaurant, and entertainment uses already exists. By placing housing in close proximity to these daily services and amenities, future residents would have increased opportunities to meet routine needs locally, reducing the need for longer vehicle trips and supporting shorter, more localized travel patterns. As such, the proposed project is consistent with this policy.
Policy COS-7.5: Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.	Consistent. Refer to response to Land Use Element Policy 12-2.
Policy COS-8.1: Balance the benefits of development with a project's potential impacts to cultural resources.	Consistent. Records search results from the SCCIC indicate that one pre-contact archaeological resource (P-30-000416) has been recorded within the project site. In addition, there are four pre-contact archaeological resources within a 0.5-mile radius of the project site boundaries. However, the pedestrian field survey produced negative results for indicators of undiscovered pre-contact and/or historic archaeological resources. Furthermore, it also did not identify any evidence of the pre-contact archaeological resource (P-30-000416) identified by the records search. However, there is the potential for unknown or undiscovered resources to be uncovered through ground-disturbing construction activities. The proposed project would be required to implement mitigation measures, which would reduce potential impacts to cultural resources to a level that is less than significant. MM CUL-1 and MM CUL-2 set forth the procedures for cultural protection measures, including pre-construction worker environmental awareness training, archaeological monitoring during ground-disturbing activities by a qualified Archaeologist, and protocols to be implemented if cultural resources are encountered during construction. As such, the proposed project is consistent with this policy.

Aliso Viejo General Plan Policies and Actions	Project Consistency
Safety Element	
Policy S-1.1: Avoid development in areas susceptible to erosion and sediment loss.	Consistent. As discussed in Section 2.7, Geology and Soils, grading and earthwork activities associated with project construction would expose soils to potential short-term erosion by wind and water. However, project construction activities would be required to comply with applicable City requirements to control erosion and reduce or eliminate stormwater runoff containing sediment, including Municipal Code Chapter 13.08, Article XIII, Erosion Control, which requires erosion and sediment control measures. Project construction activities would also be required to comply with applicable water quality measures, including the City's Water Quality Ordinance (Municipal Code Chapter 7.35, Stormwater Management), which includes conditions and requirements established by the City related to the reduction or elimination of stormwater runoff pollutants during construction and operational phases of the proposed project. As such, the proposed project is consistent with this policy.
Policy S-1.2: Investigate specific geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, slope instability or other geological hazards are suspected.	Consistent. As discussed in Section 2.7, Geology and Soils, the geologic conditions associated with development of the project site have been investigated in the Preliminary Geotechnical Due Diligence Study. The project site is not susceptible to potential fault rupture or liquefaction. The proposed project would be required to comply with site-specific geotechnical recommendations associated with potential earthquake ground shaking, slope instability, or other geological hazards. As such, the proposed project is consistent with this policy.
Policy S-2.3: Ensure adequate fire equipment access and fire suppression resources to all developed and open space areas within the City.	Consistent. The proposed project would be required to comply with all City and Orange County Fire Authority (OCFA) requirements for fire prevention and safety measures, including site access and would be subject to approval by the City and OCFA. As such, the proposed project is consistent with this policy.
Policy S-3.1: Require that new development and redevelopment minimize stormwater and urban runoff into drainage facilities by incorporating on-site design features such as detention basins, water features, or other suitable strategies. Where feasible, support the use of common detention facilities serving more than one development.	Consistent. Refer to response to Land Use Element Policy LU-4.4 and Conservation/Open Space Element Policy COS-1.4.

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy S-5.3: Apply design techniques and standards that employ adequate street and property lighting and place an increased emphasis on public areas to reduce potential criminal activity in new development and reuse projects.	Consistent. All lighting installed as part of the proposed project would be subject to compliance with the City's lighting requirements. In addition, the proposed project would be required to comply with the City's Crime Prevention Through Environmental Design (CPTED) requirements in accordance with Municipal Code Section 15.50.020, CPTED Safety Requirements. Prior to issuance of a building permit, OCSD would review the project plans to ensure the proposed project adheres to all applicable security requirements. As such, the proposed project is consistent with this policy.
Noise Element	
Policy N-3.1: Ensure stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities and special events are minimized.	Consistent. As discussed in Section 2.13, Noise, the proposed project would result in less than significant impacts related to noise. As such, the proposed project is consistent with this policy.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.12 Mineral Resources				
<i>Would the project:</i>				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Environmental Evaluation

Setting

According to the Surface Mining and Reclamation Act of 1975 (SMARA), the California Department of Conservation classifies the project site as Mineral Resource Zone (MRZ)-1. MRZ-1 is defined as an area in which no significant mineral deposits are present or where there is little likelihood for their presence, based on adequate information.⁶²

Would the project:

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?**

No impact. The General Plan does not identify any mineral resources in the City.⁶³ The proposed project site is classified as MRZ-1, indicating that it does not contain significant mineral deposits. The project site does not support mineral extraction and does not contain any mineral resource zones or other areas designated as containing known mineral resources. The Aliso Viejo General Plan (General Plan) currently designates the project site Business Park with a Mixed Use/Residential Overlay of Very High Density Residential (VHDR). The project site is currently zoned Mixed Use/Residential Overlay of Business Park-1/Residential Very High Density (MU/R/BP-1/RVH). The proposed project would re-designate the site from BP with a Mixed Use/Residential (MU/R) Overlay

⁶² California Division of Mines and Geology (CDMG). 1994. Generalized Mineral Land Classification of Orange County, California. Website: https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_143-MLC-Report07.pdf. Accessed January 16, 2025.

⁶³ City of Aliso Viejo. 2004. City of Aliso Viejo General Plan, Land Use Element.

to Medium Density Residential and rezone the site to RM. These land use and zoning classifications do not support mineral resource extraction,⁶⁴ which precludes the potential for impacts associated with mineral resources. No impacts would occur.

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

No impact. The General Plan does not designate any lands within the City as mineral resources deposit areas. There are no existing mineral resource recovery operations on the project site or surrounding area.⁶⁵ Therefore, the proposed project would not result in the loss of availability of known mineral resources of value to the region or result in the loss of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact to mineral resources would occur.

Mitigation Measures

None.

⁶⁴ City of Aliso Viejo. 2004. City of Aliso Viejo General Plan, Land Use Element, Land Use Policy Map, Figure LU-1. Website: <http://avcity.org/DocumentCenter/View/397/Land-Use-Policy-Map-PDF>. Accessed January 20, 2026.

⁶⁵ Ibid.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.13 Noise <i>Would the project result in:</i>				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Environmental Evaluation

Setting

Existing Conditions

Ambient Noise

The dominant noise sources in the project vicinity include traffic primarily from Freedom Lane and occasional parking lot and pedestrian noise to the north of the project site. An ambient noise monitoring effort was conducted to document daytime ambient noise levels on the project site. Short-term noise monitoring was conducted by FCS on January 22, 2025, between 11:48 a.m. and 12:52 p.m. The noise measurements were taken during the midday hours, as the midday hours are typically representative of the daytime average noise levels in urban environments. It should be noted that peak noise hours often vary slightly from peak traffic hours as peak noise hours more closely align with high volume traffic that is still free flowing while peak traffic hours often result in slower vehicle speeds due to the volume of traffic on the roadway. The short-term existing noise measurement results are summarized in Table 11. The noise monitoring data sheets are included in Appendix G.

Table 11: Existing Ambient Noise Levels on the Project Site

Site ID #	Location/Primary Noise Source Description	L _{eq}	L _{max}
ST-1	Measurements taken on northeast corner of the project site. Primary noise sources observed were parking lot noise, occasional pedestrian and vehicle traffic.	64.0	68.3
ST-2	Measurements taken on northwest corner of the project site. Primary noise sources observed were construction noise from adjacent property to the west, and vehicle traffic.	57.2	73.3
ST-3	Measurements taken on southwest corner of project site. Primary noise sources observed were construction noise from adjacent property to the west, and vehicle traffic.	49.2	62.9
Notes: L _{eq} = equivalent noise/sound level L _{max} = maximum noise/sound level			

Characteristics of Noise

Noise is defined as unwanted sound. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing. Most of the sounds that we hear in the environment do not consist of a single frequency, but rather a broad band of frequencies, with each frequency differing in sound level. The intensities of each frequency add together to generate a sound. Noise is typically generated by transportation, specific land uses, and ongoing human activity.

The standard unit of measurement of the loudness of sound is the decibel (dB). The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. A change of 3 dB is the lowest change that can be perceptible to the human ear in outdoor environments, while a change of 5 dBA is considered to be the minimum readily perceptible change to the human ear in outdoor environments.

Since the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA) was derived to relate noise to the sensitivity of humans, it gives greater weight to the frequencies of sound to which the human ear is most sensitive. The A-weighted sound level is the basis for a number of various sound level metrics, including the day/night sound level (L_{dn}) and the Community Noise Equivalent Level (CNEL), both of which represent how humans are more sensitive to sound at night. In addition, the equivalent continuous sound level (L_{eq}) is the average sound energy of time-varying noise over a sample period and the L_{max} is the maximum instantaneous noise level occurring over a sample period.

Regulatory Framework

City of Aliso Viejo General Plan

The City of Aliso Viejo addresses noise in the City's General Plan. The objectives of the General Plan's Noise Element are to identify noise sources in Aliso Viejo and define strategies for reducing the

negative impact of noise on the community. The Noise Element identifies baseline and projected noise levels so that this information can guide future land use decisions in a manner that limit noises and its effect on the community. Table N-2 of the General Plan Noise Element shows that for residential uses the “Normally Acceptable” noise level is 60 dBA CNEL or lower.

The following goals and policies from the Noise Element of the General Plan would be applicable to the proposed project.

- Goal N-1** Minimize the impact of point source noise and ambient noise levels throughout the community.
- Policy N-1.1** Ensure that construction and occupancy of new development are compatible with, and do not exceed thresholds defining the acceptable noise environment in surrounding areas.
- Policy N-1.2** Require inclusion of noise-reducing design features in development projects to address the impact of noise on residential development.
- Policy N-2.3** Require inclusion of sound-reducing design measures in development projects impacted by transportation-related noise.
- Policy N-2.4** Encourage use of alternative transportation technologies that minimize noise impacts.
- Goal N-3** Minimize noise impacts from sources other than transportation.
- Policy N-3.1** Ensure stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities and special events are minimized.
- Policy N-3.2** Require that mixed use structures and areas be designed to prevent transfer of noise and vibration from commercial uses to residential uses.

Table 12 (Table N-1 in the City’s General Plan Noise Element) summarizes County of Orange residential noise standards adopted by the City of Aliso Viejo. The standards represent the maximum acceptable noise levels as measured from any residential property in the City. Accordingly, it is unlawful to cause the noise level on any residential property to exceed the exterior noise standards: (1) for a cumulative period of more than 30 minutes in any hour; (2) plus 5 dB(A) for a cumulative period of more than 15 minutes in any hour; (3) plus 10 dB(A) for a cumulative period of more than 5 minutes in any hour; (4) plus 15 dB(A) for a cumulative period of more than 1 minute in any hour; or (5) plus 20 dB(A) for any period of time. In addition, any noise that exceeds the interior noise standards established for residential uses: (1) for a cumulative period of more than 5 minutes in any hour; (2) plus 5 dB(A) for a cumulative period of more than 1 minute in any hour; or (3) plus 10 dB(A) for any period of time, is unlawful.

Table 12: Residential Noise Standards

	Daytime Noise Standards (7:00 a.m. through 10:00 p.m.)	Nighttime Noise Standards (10:00 p.m. through 7:00 a.m.)
Interior Noise Standards	55 dBA	45 dBA
Exterior Noise Standards	55 dBA	50 dBA
Note: dBA = A-weighted decibel Standards are based on measurements taken from any residential property in the City. Source: Aliso Viejo General Plan, Noise Element, Table N-1.		

City of Aliso Viejo Municipal Code

The City of Aliso Viejo has established noise performance standards and permissible hours for construction activities in the Municipal Code. These provisions are summarized below:

Section 8.12.050 Exterior Noise Standards

The following exterior noise standards, as shown in Table 13, unless otherwise specifically indicated, shall apply to all residential property within the City:

Table 13: Residential and Nonresidential Exterior Noise Standard

Land Use	Noise Level	Time Period
Residential Exterior Noise Standards		
Density of less than 10 DU/acre	50 dBA	7:00 a.m.–10:00 p.m.
	45 dBA	10:00 p.m.–7:00 a.m.
Density of more than 10 DU/acre	55 dBA	7:00 a.m.–10:00 p.m.
	50 dBA	10:00 p.m.–7:00 a.m.
Nonresidential Exterior Noise Standards		
Commercial	65 dBA	7:00 a.m.–10:00 p.m.
	60 dBA	10:00 p.m.–7:00 a.m.
Manufacturing/Industrial	70 dBA	24 hours per day
Notes: dBA = A-weighted decibel DU = dwelling unit Source: Aliso Viejo Municipal Code Section 8.12.050, Exterior Noise Standards.		

Section 8.12.060, Interior Noise Standards, establishes interior noise standards for residential property within the City. Per Section 8.12.060, for all residential properties, the interior noise standard

is 55 dBA between the hours of 7:00 a.m. to 10:00 p.m. and 45 dBA between the hours of 10:00 p.m. and 7:00 a.m.

Section 8.12.070, Exemptions, establishes a list of activities that the Municipal Code considers exempt from the provisions of the City's noise ordinance. Exempt activities relevant to the proposed project include:

- Noise sources associated with construction, repair, remodeling, or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, 8:00 p.m. and 8:00 a.m. on Saturday, or at any time on Sunday or a federal holiday.
- Noise sources associated with the maintenance of real property, provided the activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except Sunday or a federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a federal holiday.
- Any activity to the extent regulation thereof has been preempted by State or federal law.
- Noise sources associated with solid waste collection and removal, provided such activities take place between 7:00 a.m. and 6:00 p.m. Monday through Friday where audible in residential areas; or between 7:00 a.m. and 6:00 p.m. on Saturdays where audible in residential areas; or between 5:00 a.m. and 9:00 p.m. any day where such activity is not audible in residential areas; or as otherwise provided in an approved franchise agreement between a waste hauler and the City.

Would the project result in:

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

Short-term Construction Impacts

Less than significant impact. For purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels in excess of the City's established standards applicable to construction noise.

The Municipal Code Section 8.12.070 establishes allowable hours and noise standards for construction activities and equipment. Construction activities, including the operation of any tools or equipment used in construction, are restricted between the hours of 7:00 a.m. through 8:00 p.m. Monday through Friday, 8:00 a.m. through 8:00 p.m. Saturday. Construction activities on Sundays and federal holidays are prohibited all hours.

While the City does not establish noise level thresholds for construction activities, this analysis uses the noise limits established by the Federal Transit Administration (FTA) to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits

in the Transit Noise and Vibration Impact Assessment Manual.⁶⁶ During daytime hours, a significant temporary increase would be an increase in excess of the average daily noise levels of 80 dBA $L_{eq}(8\text{-hour})$ as measured at a receiving residential land use.

Construction Equipment Operational Noise

Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities.

Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers is not being used during construction of the proposed project.

The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings.

Construction of the proposed project would require the use of graders, excavators, dozers, front end loaders, and backhoes. The maximum noise level generated by each bulldozer, excavator, and grader is assumed to be 85 dBA L_{max} at 50 feet from this equipment. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq} .

The closest noise-sensitive receptors to the project site would be the senior living community located directly north of the project site. The closest residence would be located approximately 130 feet from the nearest construction footprint where multiple pieces of heavy construction equipment would potentially operate simultaneously at the project site.⁶⁷ At this distance, worst-case construction noise levels could range up to approximately 77 dBA L_{max} intermittently and could have an hourly average

⁶⁶ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

⁶⁷ Assumes one piece of equipment located at the closest single point, and four additional pieces also operating simultaneously at the closest reasonable distance to this single point.

of up to 72 dBA L_{eq} , at the façade of the nearest sensitive receptor. The calculation spreadsheet with detailed modeling assumptions is provided in Appendix G.

These reasonable worst-case construction noise levels would only occur periodically throughout the day as construction equipment operates along the nearest project boundaries. Additionally, these noise levels would drop off at a rate of 6 dBA per doubling of distance as the equipment moves over the project site. Therefore, the calculated reasonable worst-case 8-hour average noise level for construction assuming construction equipment moves over the project site would be 66 dBA $L_{eq(8-hour)}$ as measured at the nearest residential receptor. Therefore, these calculated reasonable worst-case 8-hour average construction noise levels would not exceed the FTA's average daily threshold of 80 dBA $L_{eq(8-hour)}$ as measured at the nearest residential receptors.

In addition, it should be noted that the reasonable worst-case hourly average construction noise levels of 66 dBA $L_{eq(8-hour)}$ as measured at the closest receptor would exceed the documented ambient noise levels (64 dBA L_{eq} for site ST-1 in Table 10 above) to be) by only 2 dBA which is considered a less than perceptible increase for outdoor environments.

Additionally, the proposed project would be required to comply with the City of Aliso Viejo's permissible hours for construction (7:00 a.m. through 8:00 p.m. Monday through Friday and 8:00 a.m. through 8:00 p.m. Saturday) which would ensure that construction noise would not result in a substantial increase in nighttime noise levels in the project vicinity. Therefore, the analysis demonstrates that the proposed project's construction noise impact from on-site activities would be less than significant.

Operational/Stationary Source Noise Impacts

Less than significant impact. A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. Based on the City's noise standards, a significant impact would occur if noise levels exceed the City's most stringent (nighttime) noise performance thresholds of 50 dBA (exterior) and 45 dBA (interior) as measured at the nearest sensitive receptor property line.

Mechanical Equipment Operations

Implementation of the proposed project would include operation of new mechanical ventilation equipment. Specific equipment manufacturers and models have not been identified; therefore, a reasonable worst-case source level was used to evaluate potential operational noise impacts. Noise level specifications for current market available residential-grade mechanical ventilation equipment systems range from 50 dBA L_{eq} up to approximately 70 dBA L_{eq} at a distance of 3 feet⁶⁸ The proposed project would have residential-grade mechanical ventilation equipment for each proposed residential

⁶⁸ Based on typical residential-grade mechanical ventilation equipment noise levels reported in currently available manufacturer specifications and industry references. The assumed 70 dBA source level represents a reasonable, worst-case noise source level for the purposes of this analysis.

unit. In order to provide a conservative analysis, this analysis assumed use of equipment with operational noise level ratings of 70 dBA.

The proposed mechanical ventilation equipment could be located as close as 85 feet from off-site noise-sensitive receptors property line. At this distance, worst-case resulting noise levels could range up to approximately 41 dBA L_{eq} . The noise calculation sheet is provided in Appendix G. These operational noise levels would not exceed the City's most stringent nighttime noise performance threshold of 50 dBA as measured at the nearest residential property, nor would they exceed the City's most stringent nighttime interior noise threshold of 45 dBA.

Therefore, proposed mechanical ventilation system operational noise levels would not result in a substantial permanent increase in noise levels in excess of established standards. The impact of mechanical ventilation equipment operational noise levels on sensitive off-site receptors would be less than significant.

Operational/Mobile Source Noise Impacts

Less than significant impact. A significant impact would occur if project-generated traffic would result in a substantial increase in ambient noise levels compared with those that would exist without the proposed project. Typically, a doubling of the traffic volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels; which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Therefore, for the purposes of this analysis, a doubling of the existing Average Daily Traffic (ADT) or peak-hour traffic volumes could result in a substantial permanent increase in traffic noise levels.

According to the Traffic Assessment prepared by Urban Crossroads,⁶⁹ the existing trips on Freedom Lane adjacent to the project site average 125 AM peak-hour trips, and 142 PM peak-hour trips. However, the proposed project would generate 33 AM peak-hour trips and 37 PM peak-hour trips. Therefore, even if all project trips used Freedom Lane to access the project site, the proposed project trips would not double existing traffic trips on Freedom Lane. Liberty (also adjacent to the project site) experiences much higher existing traffic volumes than Freedom Lane, and therefore project trips would similarly not double existing volumes on Liberty. Therefore, the proposed project would not double average daily trips on either Freedom Lane or Liberty adjacent to the project site and would not result in a 3 dBA increase in traffic noise levels. Thus, the proposed project would not result in a substantial permanent increase in ambient noise levels from project-generated traffic trips and mobile source operational noise impacts would be less than significant.

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

Less than significant impact. A significant impact would occur if the project would generate groundborne vibration or groundborne noise levels in excess of established standards. The City has not established requirements regarding construction vibration impacts, therefore, for the purposes of

⁶⁹ Urban Crossroads. 2025. Freedom Residential Trip Generation Assessment. November 3.

this analysis, the FTA guidelines for vibration impacts are used to determine potential significant construction and operational-related vibration impacts.⁷⁰

This section analyzes both construction and operational groundborne vibration and noise impacts. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Groundborne noise is generated when vibrating building components radiate sound, or noise, generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered to be perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

Short-term Construction Vibration Impacts

Of the variety of equipment that would be used during construction, small vibratory rollers would produce the greatest groundborne vibration levels. Impact equipment such as pile drivers would not be used during construction of the proposed project.

The closest structure to the project site is a water tower to the south of the project site and is located approximately 100 feet from the nearest construction footprint where a large vibratory roller would potentially operate. Large vibratory rollers produce groundborne vibration levels ranging up to 0.210 inch per second (in/sec) peak particle velocity (PPV) at 25 feet from the operating equipment. At distance of 100 feet groundborne vibration levels from operation of the types of equipment would attenuate to 0.026 in/sec PPV. This is well below the FTA's construction vibration damage criteria of 0.5 in/sec PPV for this type of structure, a steel-framed structure. As a result, construction of the proposed project would not expose the nearby water tower to groundborne vibration levels in excess of their applicable FTA damage criteria, and this impact would be less than significant.

The nearest building structure to the project site is the Belmont Village Senior Living facility to the north of the project site and is located approximately 130 feet from the nearest construction footprint where bulldozers and other heavy construction equipment would potentially operate during site grading and construction. Bulldozers and similar heavy equipment produce groundborne vibration levels ranging up to 0.089 in/sec PPV at 25 feet from the operating equipment. At this distance, groundborne vibration levels would range up to 0.007 in/sec PPV from operation of the types of equipment that would produce the highest vibration levels. This is below the FTA's construction vibration damage criteria of 0.3 in/sec PPV for this type of structure, a building of engineered concrete and masonry construction. As a result, construction of the proposed project would not expose nearby buildings to groundborne vibration levels in excess of their applicable FTA damage criteria, and this impact would be less than significant.

In addition to potential structural damage, construction activities can result in vibration levels that are perceptible to nearby occupants and could result in temporary annoyance. The FTA provides guidance on vibration levels associated with human perception and annoyance. According to the FTA,

⁷⁰ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

vibration levels of approximately 0.04 in/sec PPV represent the threshold at which vibration becomes distinctly perceptible and could be occasionally annoying to building occupants, while levels below this threshold are generally not noticeable.⁷¹

As described above, vibration levels from the operation of heavy construction equipment at the nearest sensitive receptor would range up to 0.007 in/sec PPV, which is well below the FTA vibration annoyance threshold. These activities would be temporary, would occur during normal daytime construction hours, and would not result in sustained or excessive vibration levels. Therefore, construction of the proposed project would not generate groundborne vibration levels that would result in substantial vibration-induced annoyance at nearby sensitive receptors, and impacts related to construction vibration annoyance would be less than significant.

Operational Vibration Impacts

Implementation of the proposed project would not include any new permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity. Therefore, there would be no impact related to operational groundborne vibration.

- 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. A significant impact would occur if the project exposed people residing or working in the project area to excessive noise levels 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 2 miles of a public airport or public use airport.

The airport nearest to the project site is John Wayne International Airport, located approximately 11 miles northwest of the project site. The project site does not lie within the identified noise contours of John Wayne International Airport and is not close enough to any other airports to be affected by aviation noise. Therefore, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would exceed normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

None.

⁷¹ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

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

Environmental Evaluation

Setting

According to the California Department of Finance (CDF), the City had a population of 50,213 residents as of January 1, 2025.⁷²

Would the project:

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

Less than significant impact. As described above, the City had a provisional population estimate of 50,213 as of January 1, 2025.⁷³ According to the CDF, the City had an average of 2.54 persons per household in 2025.⁷⁴ The proposed project would include the construction of 71 residential units, which would increase the City's population by approximately 181 persons based on CDF's average

⁷² California Department of Finance (CDF). 2025. Table 2: E-5 Population and Housing Estimates for Cities, Counties, and State, January 2021-2025, with 2020 Benchmark. Website: <https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/>. Accessed February 6, 2026.

⁷³ Ibid.

⁷⁴ Ibid.

household size for the City.⁷⁵ This increase represents approximately 0.36 percent of the City's existing population.

In 2021, Southern California Association of Governments (SCAG) adopted the 6th Cycle Final Regional Housing Needs Assessment (RHNA) Allocation Plan, which assigns a share of the region's future housing need to each jurisdiction in the SCAG region. The City's share of the region's new housing need for the 2021–2029 planning period, as established by SCAG in the RHNA is 1,195 units. Of these, the City's housing needs include 390 units for very low-income households, 214 for low-income households, 205 for moderate-income households, and 386 for above moderate-income households.⁷⁶ The proposed project would provide 71 residential units including four affordable units. The project site was included in the General Plan's Housing Element under Existing Site Inventory, which identified the ability to accommodate 509 units.⁷⁷ The total number of units falls within what was already anticipated by the City and is therefore not considered substantial unplanned growth. Therefore, the proposed project would help to satisfy the RHNA housing allocation for the City, including its allocation of affordable units, in order to meet regional housing needs.

SCAG projected the City would reach a population of 51,000 persons by 2020.⁷⁸ As of 2025, the City has not yet reached this projected population, and the proposed project would not result in an exceedance of this projection; thus, the population growth resulting from the proposed project is consistent with SCAG's growth projections for the City and is considered planned growth. Therefore, the proposed project would not induce unplanned population growth either directly or indirectly.

Additionally, the proposed project would not indirectly induce substantial unplanned population growth through the extension of roads or other infrastructure, as the project site and surrounding area are currently served by adjacent roadways and utilities infrastructure. Therefore, impacts would be less than significant.

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

No impact. There are no existing residences on-site. This precludes the possibility that the proposed project would displace people or housing. As such, no impact would occur.

Mitigation Measures

None.

⁷⁵ 2.54 persons per household * 71 residential units = 180.34 persons

⁷⁶ City of Aliso Viejo. 2024. City of Aliso Viejo Adopted 2021–2029 Housing Element. Website: <https://avcity.org/DocumentCenter/View/393/Housing-Element-PDF>. Accessed January 17, 2026.

⁷⁷ City of Aliso Viejo. Housing Plan. Website: <https://avcity.org/DocumentCenter/View/1938/2021-2029-Housing-Element---Housing-Plan-Revised-Draft-with-redlines-PDF?bidId=>. Accessed May 7, 2026.

⁷⁸ Southern California Association of Governments (SCAG). 2012. 2016–2040 Final Growth Forecast by Jurisdiction. Website: https://scag.ca.gov/sites/main/files/file-attachments/2016_2040rtpscs_finalgrowthforecastbyjurisdiction.pdf?1605576071. Accessed January 17, 2026.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.15 Public Services <i>Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</i>				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☒	☐

Environmental Evaluation

Setting

The information in this section is based, in part, on correspondence with City of Aliso Viejo public service providers, included as Appendix H of this report. Correspondence consisted of responses to an inquiry sent via email to public service providers on April 4, 2025. Responses were provided to FCS on April 4, 2025.⁷⁹

Fire

The City falls under the jurisdiction of OCFA, which provides services to 23 of Orange County's 34 cities and all unincorporated areas of the county. OCFA's services include emergency responses to 911 calls, fire inspections, plan review, public information and education, and arson investigation.

OCFA Fire Station 57 is located at 57 Journey, which is 1 mile northeast of the project site. It employs five firefighters and two paramedics and operates 24 hours a day, 7 days a week. OCFA Fire Station 57 also serves as a Division Headquarters, housing the local fire chief, administrative staff, and community educator. Division Chief Mike Summers serves as the Fire Chief for the City.⁸⁰

⁷⁹ Responses from service providers in this section are based on an earlier iteration of the project that evaluated a greater number of dwelling units and a larger associated population. Although the project has since been revised, the service provider responses remain applicable because they reflect a conservative assessment of service demands.

⁸⁰ City of Aliso Viejo. 2025. Fire Authority. Website: <https://avcity.org/198/Fire-Authority>. Accessed January 17, 2026.

Police

The City contracts with the Orange County Sheriff's Department (OCSD) for its law enforcement needs. OCSD–Aliso Viejo Station is located at 11 Journey, which is 0.7 mile north of the project site. The staff dedicated to the City includes one Crime Prevention Specialist, one Emergency Management Coordinator, 17.65 Deputies (Patrol, Traffic Motor, School Resource Officer, Special Enforcement Team, and Directed Enforcement Team), two Community Service Officers, 1.5 Investigators, and 2.33 Sergeants. The partial numbers are staff whose duties are split among other cities. There are 15 specialized units that can be contacted to provide service to the City when needed. They include units such as Canine, Gang Enforcement, Homicide Detail, and more.⁸¹

Schools

The project site falls within the Capistrano Unified School District (CUSD). During the 2023–2024 school year, the district enrolled 48,326 students.⁸² CUSD serves the City of San Juan Capistrano, City of Dana Point, City of Laguna Niguel, and City of San Clemente, as well as a portion of the City of Aliso Viejo, City of Mission Viejo, and City of Rancho Santa Margarita, a very small portion of the City of Laguna Beach and City of Laguna Woods, and a portion of unincorporated Orange County.⁸³ The proposed project is within the service area of Oak Grove Elementary School, Aliso Viejo Middle School, and Aliso Niguel High School.⁸⁴ During the 2023–2024 school year, Oak Grove Elementary School enrolled 584 students, Aliso Viejo Middle School enrolled 799 students, and Aliso Niguel High School enrolled 2,608 students.⁸⁵

Level 1 Developer Fees are established by the State and are considered a basic mandatory fee that all residential and commercial projects must pay.⁸⁶

Parks

The City of Aliso Viejo Recreation & Community Services department owns and manages Vista Park and Iglesia Park, which total 7.4 acres. The City's Conservation/Open Space Element states that as of 2003, the City had a ratio of 5.37 acres of parkland per 1,000 residents. It further states that the standard is 5 acres per 1,000 residents. Additionally, Aliso Viejo Community Association (AVCA) is

⁸¹ City of Aliso Viejo. 2025. Police Services. Website: <https://avcity.org/212/Police-Services>. Accessed April 30, 2025.

⁸² California Department of Education Data Reporting Office. 2024. Capistrano Unified Report (30-66464). Website: <https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?aggllevel=District&year=2023-24&cds=3066464>. Accessed January 17, 2026.

⁸³ King Consulting. 2024. Developer Fee Justification Study, Capistrano Unified School District. Website: <https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf>. Accessed January 17, 2026.

⁸⁴ California Department of Education Data Reporting Office. 2024. Capistrano Unified Report (30-66464). Website: <https://dq.cde.ca.gov/dataquest/dqcensus/enrgrdlevels.aspx?aggllevel=District&year=2023-24&cds=3066464>. Accessed January 17, 2026.

⁸⁵ Ibid.

⁸⁶ King Consulting. 2024. Developer Fee Justification Study, Capistrano Unified School District. Website: <https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf>. Accessed January 17, 2026.

responsible for an estimated 179 acres of parkland.⁸⁷ The closest park is Hillview Park, located 1 mile southeast of the project site.

Libraries

Orange County provides a range of public libraries, cultural facilities, and recreation services. The nearest Orange County Public Library branch to the project site is the Laguna Hills Branch, located at 25555 Alicia Parkway in the City of Laguna Hills, approximately 2.6 miles north of the project site. Additionally, the Aliso Viejo Branch is located at 1 Journey, approximately 0.5 mile north of the project site. Orange County Public Libraries provides library services to the City of Aliso Viejo through its system-wide network of 32 branches across Orange County. Aliso Viejo residents have access to all services as membership is not specific to individual branches; as such, residents of the City have access to resources and services throughout the entire Orange County Public Library system. The most current tenant projections are from 2023, during which the Aliso Viejo Branch had 140,931 visitors, with an average daily attendance of 470 people.

The Aliso Viejo Branch reopened to the public in March 2026 and has resumed full public service, following an approximately two-year closure for a comprehensive renovation project. The renovation includes expanded and updated amenities intended to improve functionality and accessibility for patrons, including new quiet study areas, upgraded electrical access, enhanced seating, and a reconfigured program room to accommodate community events and activities.

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

a) Fire protection?

Less than significant impact.

As discussed in Section 2.14, Population and Housing, the proposed project would generate an estimated 181 new residents. Fire protection and emergency service by the OCFA are currently provided to the area under existing conditions. The closest fire station to the project site is OCFA Fire Station 57, located at 57 Journey, which is 1 mile north of the project site by roadway, which equates to a 3-minute drive.

The proposed residential uses at the project site would be expected to increase the demand for fire protection and emergency medical services to the site relative to existing conditions. As discussed in Section 2.14, Population and Housing, the population growth resulting from the proposed project is consistent with SCAG's growth projections for the City, and the 181 new residents would be

⁸⁷ Weaver, Chris. Director of Parks & Landscape, Aliso Viejo Community Association. Personal communication: email. December 18, 2024.

considered planned growth that can be served by existing facilities. In addition, the project site was included in the General Plan's Housing Element under Existing Site Inventory, which identified the ability to accommodate 509 units. The total number of units falls within what was already anticipated by the City and is therefore not considered substantial unplanned growth. Therefore, the proposed project would not create a need for new or physically altered fire facilities to maintain acceptable service ratios, response times, or other performance objectives.

The proposed project would be required to comply with the California Fire Code, as amended, in accordance with Municipal Code Chapter 13.04, 2025 Edition of the California Fire Code, and would be subject to approval by OCFA. Adherence with Fire Code standards and approval by OCFA would reduce the potential demand for fire services by decreasing the likelihood and/or severity of a fire emergency at the project site. A total of three new fire hydrants would be installed and would connect to existing water lines. Additionally, the proposed project would be required to pay the applicable OCFA planning and development fees.⁸⁸ Furthermore, the OCFA reviewed the proposed project and determined that impacts related to the need for new or physically altered fire protection facilities, or substantial adverse physical impacts from such facilities, would be less than significant. The OCFA confirmation letter is included in Appendix H.

Implementation of City requirements, including compliance with the California Fire Code and approval of site plans by OCFA, as well as payment of planning and development fees, would ensure that there would be no substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities for fire protection services. As such, impacts would be less than significant.

b) Police protection?

Less than significant impact.

Police protection services to the project site occurs under the existing conditions. While the proposed project would generate an estimated 181 residents, this would be considered planned growth, as discussed previously in Section 2.14, Population and Housing.

Because the proposed project would not induce substantial unplanned population growth, it is anticipated that the proposed project would be adequately served by OCSD and would not create a need for new or physically altered police facilities to maintain acceptable service ratios, response times, or other performance objectives. The proposed project would also be required to comply with the City's Crime Prevention Through Environmental Design (CPTED) requirements in accordance with Municipal Code Section 15.50.020. OCSD would review the project plans to ensure the proposed project adheres to all applicable security requirements prior to issuing the building permit. Implementation of City requirements and approval of site plans by OCSD would further reduce

⁸⁸ Orange County Fire Authority (OCFA) Planning and Development Services. 2024. 2024-25 Community Risk Reduction Fee Study. Website: <https://ocfa.org/Uploads/CommunityRiskReduction/OCFA%202024-25%20Fee%20Schedule%20-%20Planning%20and%20Development.pdf>. Accessed April 30, 2025.

potential impacts concerning police protection services. As such, impacts would be less than significant.

c) Schools?

Less than significant impact.

The schools that would serve the proposed project would be Canyon Vista Elementary School, Don Juan Avila Middle School, and Aliso Niguel High School. The estimate of the current standard student generation factors for elementary, middle, and high school students for single-family detached units showed that as a result of the proposed project, Canyon Vista Elementary would expect an additional 25 students, Don Juan Avila Middle school would expect an additional 16 students, and Aliso Niguel High School would expect an additional 23, for a total of 63⁸⁹ new students.⁹⁰ CUSD shows no concerns about the potential growth associated with the housing development and states that the school district can accommodate the number of projected students.⁹¹

The 2024 Developer Fee Justification Study conducted by CUSD concluded that while there is capacity for students in transitional kindergarten through grade 5, student capacity at the CUSD is currently exceeded for grades 6 through 12.⁹² The proposed project would be subject to payment of school impact fees in accordance with Government Code Section 65995. As mandated in Section 65995(3)(h), payment of statutory fees is deemed to be “full and complete mitigation of impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use or development of real property” The developer would be required to pay Level 1 Developer Fees in accordance with Government Code Section 65995(3)(h). Developer fees collected by CUSD pursuant to the Government Code are used for the provision of additional and reconstructed or modernized school facilities. The project applicant would be required to pay all statutory fees in place at the time and demonstrate proof of payment to the City for approval of a building permit. With payment of the Level 1 Developer Fees, CUSD would be able to accommodate the additional students generated by the proposed project, and potential impacts to schools would be less than significant.

d) Parks?

Less than significant impact.

⁸⁹ Elementary school $181 \times 0.1360 = 24.62$. Middle school $181 \times 0.0837 = 15.15$. High school $181 \times 0.1236 = 22.37$. Total students $181 \times 0.3433 = 62.14$.

⁹⁰ Capistrano Unified School District. 2018. Residential Development School Fee Justification Study. Website: <https://www.danapoint.org/files/assets/city/v/1/community-development/documents/capistrano-unified-develop.pdf>. Accessed November 13, 2025.

⁹¹ Hampton, Clark D. Deputy Superintendent, Business and Support Services, Capistrano Unified School District. Personal communication: email, April 4, 2025.

⁹² King Consulting. 2024. Developer Fee Justification Study, Capistrano Unified School District. Website: <https://www.capousd.org/documents/Developer%20Fees/Residential-and-Commercial-Industrial-Fee-Study-May-2024-Res.-2324-30.pdf>. Accessed February 10, 2026.

The proposed project would consist of 71 dwelling units, which would generate an estimated 181 new residents (See Section 2.14, Population and Housing). The new residents would increase the demand on existing neighborhood and regional parks. The additional use would further contribute to the need for maintenance and improvements.

The Quimby Act, California Government Code Section 66477, requires the dedication of land and/or fees for park and recreational purposes as a Condition of Approval of a tentative map or parcel map. The Quimby Act establishes procedures that can be used by local jurisdictions to provide neighborhood and community parks and recreational facilities and services for new residential subdivisions. New developments in the City involving a tentative map or parcel map would pay fees to the City of Aliso Viejo for park and recreation purposes in accord with the Quimby Act.

The General Plan outlines a standard of 5.0 acres of community or neighborhood parkland per 1,000 residents. The City exceeds this standard at 5.37 acres of parkland per 1,000 residents. The addition of 181 new residents would create a demand for 0.91 acres of parkland at a ratio of 5 acres per 1,000 residents.⁹³

The proposed project includes a total of 17,232.45 square feet of usable open space and 137,584.8 square feet of other open space (including a 90,724 square-foot slope area). The common open space total would be 154,817.25 square feet. The usable open space throughout the project site would be available to residents and would partially offset impacts to parks facilities. These recreational amenities would include walkways, gathering spaces with electric barbeques, open lawn area for free play, and a tot lot (See Exhibit 7). Furthermore, the applicant would comply with Municipal Code Chapter 14.16, which requires developers to dedicate land for park facilities or pay park and recreation impact fees to offset incremental demand on local parks. By providing on-site recreational amenities and open space that exceed the minimum open space required by the Municipal Code, and paying applicable park development fees, the proposed project would ensure that the incremental increase in recreational demand would not result in substantial physical deterioration of existing neighborhood and regional parks.

Although project residents would likely use public parks, implementation of the proposed project would not require new or physically altered park facilities, the construction of which could cause significant environmental impacts. Therefore, impacts would be less than significant.

e) Other public facilities?

Less than significant impact.

Although the proposed project would increase demand for library services, the anticipated growth generated by the proposed project would be within the population growth projections anticipated and planned for by local and regional planning documents. In addition, the Aliso Viejo Library recently

⁹³ City of Aliso Viejo. 2004. Aliso Viejo General Plan, Conservation/Open Space Element. Website: <https://avcity.org/DocumentCenter/View/394/Conservation--Open-Space-Element-PDF>. Accessed February 9, 2026.

underwent renovation, which created more modern and accessible services for residents.⁹⁴ Upgrades include revamped children's area, dedicated teen lounge, updated study rooms with new technology, and improved HVAC/lighting. The proposed project's impacts to the overall availability per capita of books, media, computers, and library public service space would not result in significant physical or environmental impacts, as the population growth resulting from the proposed project is within current City projections. Therefore, impacts would be less than significant.

Mitigation Measures

None.

⁹⁴ Orange County Public Library. Aliso Viejo Library. Website: <https://www.ocpl.org/libraries/aliso-viejo>. Accessed April 30, 2026.

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

Environmental Evaluation

Setting

The nearest public parks include Hillview Park, located approximately 0.38 mile east of the project site; Oak Park, located approximately 0.4 mile northwest of the project site; and Foxborough Park approximately 0.7 mile northeast of the project site. These parks provide public amenities such as trails, picnic tables, barbecues, playgrounds, and basketball courts.⁹⁵

- 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?**

Less than significant impact. The proposed project would consist of up to 71 three-story dwelling units. The City has an estimated population of 50,213 persons as of January 1, 2025.⁹⁶ The average household size in the City is 2.54 persons per household.⁹⁷ As discussed previously in Section 2.14, Population and Housing, given the proposed project would develop 71 dwelling units, the proposed project would generate an estimated 181 new residents, which would increase the demand on existing neighborhood and regional parks.

⁹⁵ Fun Orange County Parks. Website: <https://funorangecountyparks.com/oc-playground-map>. Accessed February 6, 2026.

⁹⁶ California Department of Finance (CDF). 2025. Table 2: E-5 Population and Housing Estimates for Cities, Counties, and State, January 2021-2025, with 2020 Benchmark. Website: <https://dof.ca.gov/Forecasting/Demographics/Estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/>. Accessed February 6, 2026.

⁹⁷ Ibid.

The City's residential development standards require a minimum common open area of 25 percent of the site for RM.⁹⁸ The proposed open space, including the slope area, landscaped common area, and usable open space would total approximately 137,585 square feet (54.7 percent of total site area), exceeding the City's required minimum. This open space includes decorative walkways, gathering spaces with electric barbecues, a tot lot, and an open lawn area for free play. It is expected that these on-site recreational amenities would reduce the demand on neighborhood and regional parks and recreation facilities, reducing the proposed project's contribution to the deterioration of existing parks and recreational facilities.

As discussed in Section 2.15(d), the General Plan outlines a standard of 5.0 acres of community or neighborhood parkland per 1,000 residents. The City exceeds this standard at 5.37 acres of parkland per 1,000 residents. The addition of 181 new residents would create a demand for 0.91 acres of parkland at a ratio of 5 acres per 1,000 residents.⁹⁹

To address the incremental increase in demand associated with the proposed project, the applicant would comply with Chapter 14.16 of the Municipal Code, which requires developers to dedicate land for park facilities or pay park and recreation impact fees.¹⁰⁰ Additionally, new developments in the City involving a tentative map or parcel map would be required to pay fees to the City of Aliso Viejo for park and recreation purposes in accord with the Quimby Act. By providing on-site recreational amenities that exceed the minimum open space required by the Municipal Code and paying applicable park development fees, the proposed project would ensure that the incremental increase in recreational demand would not result in substantial physical deterioration of existing neighborhood and regional parks. Therefore, impacts would be less than significant.

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?

Less than significant impact. The proposed project would result in the construction of up to 71 three-story dwelling units and would generate an estimated 181 new residents, which would increase the demand for existing recreational facilities, including the nearest parks, Hillview Park, Oak Park, and Foxborough Park. The proposed project would provide common space, which includes pedestrian walkways, landscaping, and a recreational amenity area within the project site. These facilities are designed to reduce the demand for off-site recreational facilities. Landscaping and common area facilities are included in the analyses throughout this IS/MND. The construction-related analyses indicate that project emissions and associated physical impacts would be less than

⁹⁸ City of Aliso Viejo. 2025. Aliso Viejo Municipal Code Table 15.10.030: Residential Development Standards. Website: <https://www.codepublishing.com/CA/AlisoViejo/html/AlisoViejo15/AlisoViejo1510.html>. Accessed February 2, 2026

⁹⁹ City of Aliso Viejo. 2004. Aliso Viejo General Plan, Conservation/Open Space Element. Website: <https://avcity.org/DocumentCenter/View/394/Conservation--Open-Space-Element-PDF>. Accessed February 2, 2026.

¹⁰⁰ City of Aliso Viejo. 2025. Aliso Viejo Municipal Code Chapter 14.16: Dedication of Land for Park Facilities and Payment of In Lieu Fees. Website: <https://www.codepublishing.com/CA/AlisoViejo/html/AlisoViejo14/AlisoViejo1416.html>. Accessed February 2, 2026.

significant with mitigation; therefore, the inclusion of recreational and common area facilities would not result in significant impacts.

Further, the applicant would comply with Chapter 14.16 of the Municipal Code, which requires payment of park and recreation impact fees to offset incremental demand on local parks. Impacts related to the construction of improvements have been addressed throughout this IS/MND and would be reduced through the implementation of the mitigation measures included in this Draft IS/MND.

By incorporating on-site recreational facilities that exceed the required minimum open space and complying with applicable park development fees, the proposed project would not require the construction or expansion of off-site recreational facilities that could result in significant adverse physical impacts. Therefore, impacts would be less than significant.

Mitigation Measures

None.

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

Environmental Evaluation

Setting

This section is based, in part, on the Freedom Lane Trip Generation Assessment and the Freedom Lane Vehicle Miles Traveled (VMT) Analysis, prepared by Urban Crossroads on November 3, 2025, and July 9, 2026, respectively. These documents are included as Appendix I of this report.

Would the project:

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

Less than significant impact.

Transit Facilities

Public transportation services within the project site and surrounding area are provided by Orange County Transportation Authority (OCTA). Bus Route 177 provides service from Laguna Niguel to Mission Viejo via Alicia Parkway, Muirlands Boulevard, Lake Forest Drive, Portola Parkway, and Santa Margarita Parkway. The nearest bus stop, the Alicia-Aliso Creek stop, is located at the intersection of Aliso Creek Road and Alicia Parkway, 1.2 miles east of the project site. There are no

existing or planned transit facilities adjacent to the project site. Project implementation would not conflict with a program plan, ordinance, or policy addressing transit facilities.

Roadway Facilities

Vehicles would access the project site via a proposed driveway at the northeast portion of the project site along Freedom Lane and another driveway on the southwest portion of the site along Liberty, which has been constructed as part of the adjacent Kaiser Permanente project. An internal private roadway system would provide two-way access to each unit's parking garage as well as to guest parking spaces that would be distributed throughout the project site. Roadway facilities would continue to serve the project site and surrounding development. The proposed project would not involve modifications to any roadways and, thus, would not conflict with a program, plan, ordinance, or policy addressing roadway facilities.

Bicycle Facilities

The General Plan Circulation Element (Figure C-2) identifies existing bicycle facilities within the City.¹⁰¹ According to the General Plan Circulation Element and the OCTA 2009 Commuter Bikeways Strategic Plan, Class II¹⁰² on-road bicycle lanes currently exist along Aliso Viejo Parkway and Aliso Creek Road, as well as Pacific Park Drive.¹⁰³ There are no planned bicycle facilities near the project site.¹⁰⁴ The proposed project would not involve modifications to any of these roadways or bicycle lanes and, thus, would not conflict with a program, plan, ordinance, or policy addressing bicycle facilities.

Pedestrian Facilities

Pedestrian facilities, including crosswalks, sidewalks, and traffic lights are currently available along the southern side of Freedom Lane and along both sides of Liberty. Signalized crosswalks are available at the intersection of Freedom Lane and Liberty, at the intersection of Liberty and Aliso Viejo Parkway, and at the intersection of Liberty and Aliso Creek Road. Pedestrians would circulate within the site via proposed internal pedestrian walkways and concrete sidewalks. The proposed internal pedestrian walkways and sidewalks would connect to the existing sidewalks along Freedom Lane via the proposed driveway on the northeast side of the project site.

The proposed project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities. Therefore, impacts would be less than significant.

¹⁰¹ City of Aliso Viejo. 2004. General Plan Circulation Element, Figure C-2, Bikeways.

¹⁰² Class II bikeways are defined as on-road striped and signed bicycle lanes.

¹⁰³ Alta Planning + Design, KOA Corporation. 2009. Final 2009 OCTA Commuter Bikeways Strategic Plan for the Orange County Transportation Authority. Map 1-1. Website: <https://www.octa.net/pdf/bikeways09.pdf>. Accessed February 2, 2026.

¹⁰⁴ Orange County Transportation Authority (OCTA). 2025. Bikeways Planning, Orange County Bikeways Map. Website: <https://www.octa.net/getting-around/active/oc-bike/bikeways-planning/overview/>. Accessed February 2, 2026.

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

Less than significant impact. VMT is a measurement of miles traveled by vehicles within a specified region and for a specified period of time. VMT is a measure of the use and efficiency of the transportation network and is calculated based on individual vehicle trips generated and their associated trip lengths. VMT accounts for two-way (round-trip) travel and is often estimated for a typical weekday for the purposes of measuring transportation impacts.

In September 2013, SB 743 was signed into law, which fundamentally changed transportation impact analysis as part of CEQA compliance. These changes include the elimination of auto delay, Level of Service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant traffic impacts. SB 743 identifies VMT as the most appropriate CEQA transportation metric. The justification for this paradigm shift is that LOS impacts lead to improvements that increase roadway capacity and, thus, induce more traffic and GHG emissions.

In May 2020, the City adopted its Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency (AVTIG), which serves as the City's transportation analysis guidelines. The AVTIG includes screening criteria that are intended to provide a simplified way to determine whether a project's VMT would be expected to cause a less than significant CEQA transportation impact without having to conduct a detailed VMT Analysis. Below is a discussion of the various screening criteria outlined in the AVTIG and an analysis of whether the proposed project would be "screened" from requiring a detailed VMT Analysis, either in its entirety or partially, based on individual land uses.

City Guidelines outline appropriate screening criteria for identifying when a proposed land use project is expected to have a less than significant impact, thus avoiding the need for a more detailed analysis. The screening criteria are divided into the following:

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

A land use project needs only to meet one of the above screening criteria to result in a less than significant impact.

Consistent with guidance identified in the City Guidelines, projects located within a TPA or High-quality Transit Area (i.e., within 0.5 mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, consistent with City Guidelines, Aliso Viejo does not have any TPAs within the City. Therefore, Step 1: TPA screening criterion is not met.

The proposed project is not located within a low VMT-generating area and would not qualify for Step 2: Low VMT Area screening criterion.

The City Guidelines state that local-serving uses such as day care centers, non-destination hotels, affordable housing, places of worship, municipal services, and other local essential services may be presumed to have a less than significant impact as local-serving in nature and would tend to shorten vehicle trips. The proposed project does not include any local-serving uses and therefore does not qualify for Step 3: Project Type screening criterion.

The proposed project was not found to meet eligible screening criteria. Therefore, consistent with the City Guidelines, a project-level VMT Analysis was prepared. City Guidelines identifies the following impact thresholds for project-level VMT Analysis:

1. The baseline project-generated VMT per service population exceeds the City of Aliso Viejo General Plan Buildout VMT per service population, or
2. The cumulative project-generated VMT per service population exceeds the City of Aliso Viejo General Plan Buildout VMT per service population.

Consistent with City Guidelines, VMT was estimated using the Origin/Destination (O/D) method and boundary method. For both methods, VMT is presented as total VMT and VMT per service population. Total VMT is an estimate of total vehicle travel and considers all vehicle trips and trip purposes; whereas VMT per service population is an efficiency metric that represents VMT generated on a typical weekday per person who lives and/or works in the City of Aliso Viejo or, in the case of the proposed project, per person who resides within the project. Total VMT provides an estimate of the total vehicle travel, while VMT per service population measures the efficiency of travel. Consistent with City Guidelines, the efficiency metric VMT per service population has been adopted by the City of Aliso Viejo for transportation impact analysis.

To establish the City's adopted impact threshold for the VMT Analysis, the City's baseline VMT per service population was calculated utilizing the Orange County Transportation Analysis Model (OCTAM) future year (2050) traffic model. Based on the analysis, the City's General Plan Buildout VMT per service population threshold was determined to be 26.2. As shown on Table 4 of the VMT Analysis (Appendix I), it was determined that for the proposed project, O/D VMT per service population would be 19.2 for baseline conditions and 19.6 for cumulative conditions. This is below the City's VMT threshold of 26.2 under baseline and cumulative conditions.

The VMT Analysis concluded that the VMT per service population remained unchanged for the citywide boundary. Therefore, the proposed project's cumulative effect on VMT does not exceed the City's impact threshold. Furthermore, the proposed project's cumulative effect on VMT was found to be reduced under the With Project scenarios in the baseline condition and would remain the same in the cumulative condition and is below the City's threshold of significance. As such, impacts would be less than significant.

c) 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. The proposed project would include the development of a new residential community consisting of 71 residential units. Because the land use designation of the proposed project would change to MDR, this would be consistent with the updated designation and with the existing development in the surrounding area. Therefore, the proposed project would not introduce an incompatible use to the project site. Additionally, the proposed project would not provide any off-site roadway improvements that could substantially increase hazards due to a design feature. Freedom Lane currently provides access to the project site. No modifications to Freedom Lane are proposed under the proposed project. Access to Liberty, constructed as part of the adjacent Kaiser Permanente project, would provide another access route to the project site. Further, the internal roadway system would provide two-way access to each unit, as well as guest parking spaces distributed throughout the site. This internal roadway would be consistent with the Municipal Code.

As part of the City's Site Development Permit process required under Municipal Code Section 15.74.020, Site Development Permits, the proposed project would be reviewed and only approved after finding the proposed development conforms with applicable requirements and standards set forth in the Municipal Code and General Plan, including the Circulation Element's standards and requirements related to design, access and circulation. Therefore, impacts would be less than significant.

d) Result in inadequate emergency access?

Less than significant impact. As discussed in Impact 2.9(f), the City has developed an EOP outlining the City's response to extraordinary emergency situations associated with natural disasters, technological incidents, and national security emergencies. The EOP establishes evacuation routes. Additionally, the General Plan Safety Element identifies evacuation routes in the City. Within the vicinity of the project site, the Safety Element identifies Aliso Creek Road and Pacific Park Drive as primary evacuation routes.¹⁰⁵

The project site is within Zone 12 of the City's Evacuation Zones. Designated Evacuation Zones within Zone 12 include Liberty, Aliso Creek Road, and Aliso Viejo Parkway.¹⁰⁶ The project site is adjacent to Liberty, and construction would not require closure or partial closure of Liberty. The proposed project would be constructed completely within the project site, and construction equipment would access the project site via Freedom Lane, which is the main access point to the project site. If any road closures to Freedom Lane are required, the project applicant and construction crew would be required to coordinate with the City of Aliso Viejo Public Works Department to ensure that emergency access routes are maintained during construction. Thus, construction of the proposed

¹⁰⁵ City of Aliso Viejo. 2004. General Plan, Figure S-1 Safety Policy Map. Website: <https://avcity.org/DocumentCenter/View/384/Safety-Policy-Map-PDF>. Accessed February 2, 2026.

¹⁰⁶ City of Aliso Viejo. 2024. Citywide Evacuation Zones. Website: <https://avcity.org/DocumentCenter/View/3750>. Accessed February 2, 2026.

project would not impede the use of surrounding roadways for emergencies or access for emergency response vehicles.

The proposed project has been designed to provide emergency service providers access to the site from any of the public streets or the drive aisles. The design of the proposed project would provide adequate emergency access consistent with City and OCFA requirements, including the required number and design of access points and safety features. Therefore, the proposed project would not result in significant impacts to emergency access during construction and/or operation. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.18 Tribal Cultural Resources				
<i>Would the project:</i>				
a) cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:	☐	☒	☐	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Environmental Evaluation

Setting

Senate Bill 18 and Assembly Bill 52 Consultation

Tribal consultation efforts conducted by the City, pursuant to SB 18 and Assembly Bill (AB) 52, to identify additional significant TCRs meeting the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, were initiated on February 26, 2026, and remain ongoing. Additional details are provided in the discussion below.

Tribal Cultural Resources

- a) **cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:**
- i) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or**

Less than significant impact with mitigation incorporated. A review of the CRHR, local registers, historic resources, and a records search conducted with the SCCIC indicate there is one recorded pre-contact archaeological resource (P-30-000416) within the project site. Additionally, the NAHC SLF search results and outreach to Tribal representatives were positive for the presence of TCRs within the project site. However, the CRHR and local registers did not list any TCRs for the project site. In addition, the pedestrian survey did not identify any pre-contact or historic resources within the project site. Should any undiscovered TCRs be encountered during project construction, implementation of MM TCR-1, MM TCR-2, and MM CUL-3 would reduce potential impacts to a less than significant level.

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

Less than significant impact with mitigation incorporated. On February 26, 2026, the City of Aliso Viejo initiated Tribal consultation under SB 18 and AB 52 by sending consultation letters to the Tribes identified on the Native American Heritage Commission (NAHC) consultation list. The consultation was intended to determine whether the proposed project could affect significant TCRs, as defined in Public Resources Code Section 5024.1(c). On March 2, 2026, the Gabrieleño Band of Mission Indians–Kizh Nation requested consultation. A meeting was scheduled for March 31, 2026, but the Kizh Nation later canceled the meeting. The Kizh Nation then agreed to continue consultation by email and, on April 3, 2026, submitted proposed mitigation measures and supporting materials for the City's review. On July 24, 2026, the City informed the Kizh Nation that mitigation measures received from consulting Tribes would be incorporated into the environmental document. The City provided draft mitigation measures to the Kizh Nation on August 17, 2026, and no response has been received to date. The Juaneño Band of Mission Indians, Acjachemen Nation–Belardes also requested proposed mitigation measures on April 6, 2026. The City sent draft mitigation measures to the Tribe on August 17, 2026. On August 18, 2026, the Acjachamen Nation approved the City's draft mitigation measures and closed consultation.

Should any undiscovered TCRs be encountered during project construction, implementation of MM TCR-1, MM TCR-2, and MM CUL-3 will ensure that potential impacts to TCRs will be reduced to a level of less than significant.

Mitigation Measures

Implementation of MM CUL-3 (as described in Section 2.5, Cultural Resources).

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 the consulting Tribes (Gabrieleño Band of Mission Indians – Kizh Nation and Juaneño Band of Mission Indians, Acjachemen Nation- Belardes). The Tribal 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 commencement of any ground-disturbing activity or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The Tribal Monitor shall complete daily monitoring logs that shall 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 shall 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., (collectively, Tribal Cultural Resources, or “TCRs”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall 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 consulting Tribe(s) 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 consulting Tribe(s) 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 TCRs.

MM TCR-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Non-funerary/Non-ceremonial).

Upon discovery of any Tribal Cultural Resources (TCRs), all construction activities shall cease in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Tribal Monitor and Project Archaeologist. The Tribal Monitor shall 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.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.19 Utilities and Service Systems				
<i>Would the project:</i>				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Environmental Evaluation

Setting

According to the City's 2020 Urban Water Management Plan (UWMP), MNWD relies on a combination of imported water and recycled water. MNWD's potable water demands are supplied from imported sources via the Metropolitan Water District of Southern California (Metropolitan) through the Municipal Water District of Orange County (MWDOC).

Imported water represents approximately 79 percent of MNWD's total water supply. Metropolitan's water supply originates from two principal sources—the Colorado River via the Colorado River Aqueduct and the Feather River Watershed/Lake Oroville in Northern California through the State Water Project (SWP). Recycled water provides 21 percent of the district's water supplies and is produced at one of two local treatment plants.¹⁰⁷

The MNWD is responsible for maintenance of the City's sewer and storm drain lines. Wastewater is collected via the MNWD's wastewater collection system and sent to the Regional Treatment Plant operated by SOCWA.

Telecommunication services would be provided by AT&T and Cox Communications.

Individual trash service would be provided through CR&R Incorporated, with collection occurring on a weekly basis. Waste from the City is disposed of at a number of solid waste facilities, with the majority of waste disposed at the Prima Deshecha Sanitary Landfill.¹⁰⁸

Would the project:

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

Less than significant impact.

Water

Existing water facilities in the project area include a 16-inch line along Liberty, a 12-inch line that runs along Freedom Lane, and a 12-inch line the runs under the project site in the southwest–northeast direction. The proposed project would construct a 12-inch water line and an 8-inch sewer system, which would connect to existing sewer and water lines in the area. Construction of the proposed project, including the water and wastewater infrastructure, are evaluated throughout this IS/MND and were found to have less than significant impacts with mitigation incorporated. The proposed project would be served by the MNWD. In addition, as described in Impact 2.18(b), the proposed project would generate a total water demand of 24.8 acre-feet per year (AFY), which would be approximately 0.08 percent of the total projected water supply during a normal year, single dry year, and multiple dry year scenario. Therefore, the proposed project does not require and would not result in the

¹⁰⁷ Moulton Niguel Water District. 2021 (MNWD). 2020 Urban Water Management Plan. Website: <https://www.mnwd.com/wp-content/uploads/2021/12/2020-Urban-Water-Management-Plan.pdf>. Accessed February 2, 2026.

¹⁰⁸ California Department of Resources Recycling and Recovery (CalRecycle). 2025. RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination. Website: <https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial>. Accessed February 2, 2026.

construction of new water facilities or expansion of existing water facilities. Impacts would be less than significant.

Wastewater

Wastewater is collected via the MNWD's wastewater collection system and sent to the Regional Treatment Plant operated by SOCWA. Existing wastewater infrastructure in the area includes a 12-inch sewer line along Freedom Lane. The proposed project would connect to existing wastewater infrastructure in Freedom Lane. As described in Impact 2.18(c), MNWD has sufficient capacity to accommodate wastewater generated by the proposed project. Therefore, impacts would be less than significant.

Stormwater

Stormwater from the project site would include an on-site underground MWS system that would route stormwater to a subsurface detention basin. Peak flows from the site would ultimately discharge through a proposed 18-inch pipe connection into an existing 18-inch RCP storm drain downstream. Construction of the proposed project, including the proposed stormwater infrastructure, is evaluated throughout the IS/MND and was found to have less than significant impacts with mitigation incorporated. Therefore, the proposed project would not substantially increase stormwater drainage such that new or expanded facilities or relocation would be required. Impacts would be less than significant.

Electric Power and Natural Gas

The proposed project would connect to existing electrical infrastructure. The proposed project would be served by the development of three new transformers, which would be placed throughout the project site, with one located in the southwest corner and two on the eastern side (Exhibit 5). Electrical service is currently available in the project area and would be provided by SCE. The proposed project would be all electric in design and would not include natural gas plumbing. Impacts associated with the proposed project's electricity demand is discussed in Section 2.6, Energy.

Telecommunications

The proposed project would require new connections to the project site, which would connect to the existing telecommunications infrastructure in the project area. The proposed project would not require the installation or development of new or improved telecommunications facilities such that environmental impacts would occur. Impacts would be less than significant.

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

Less than significant impact. The 2020 UWMP includes a supply and demand assessment for projected years between 2025 and 2045 for normal year, single dry year, and multi-dry year scenarios. Table 14, below, shows the multiple dry year supply and demand comparison through 2045.

Table 14: Multiple Dry Year Supply and Demand Comparison (AFY)

		2025	2030	2035	2040	2045
First year	Supply totals	33,435	33,111	32,934	32,790	32,588
	Demand totals	33,435	33,111	32,934	32,790	32,588
	Difference	0	0	0	0	0
Second year	Supply totals	33,419	33,124	32,953	32,797	32,636
	Demand totals	33,419	33,124	32,953	32,797	32,636
	Difference	0	0	0	0	0
Third year	Supply totals	31,969	31,714	31,556	31,396	31,280
	Demand totals	31,969	31,714	31,556	31,396	31,280
	Difference	0	0	0	0	0
Fourth year	Supply totals	31,906	31,680	31,529	31,357	31,280
	Demand totals	31,906	31,680	31,529	31,357	31,280
	Difference	0	0	0	0	0
Fifth year	Supply totals	31,844	31,646	31,501	31,319	31,280
	Demand totals	31,844	31,646	31,501	31,319	31,280
	Difference	0	0	0	0	0

The demands are expected to be met through a combination of imported and recycled water. MNWD works together with two primary agencies, MWDOC and Metropolitan, to ensure a safe and reliable water supply that would serve the community in periods of drought and shortage.¹⁰⁹ The UWMP accounts for projected water demand based on water consumption by single- and multi-family residences, commercial, and institutional/government customers.¹¹⁰ The UWMP also accounts for projected land use, population, economic growth, and future conservation.¹¹¹ As noted in the UWMP and as shown in Table 14, the City would have sufficient water supplies for normal year, single dry year, and multiple years.

According to the CDF, the City has an average of 2.54 persons per household.¹¹² The proposed project would include the construction of 71 residential units, which would increase the City's

¹⁰⁹ Moulton Niguel Water District (MNWD). 2021. 2020 Urban Water Management Plan. Website: <https://www.mnwd.com/wp-content/uploads/2021/12/2020-Urban-Water-Management-Plan.pdf>. Accessed February 2, 2026.

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² California Department of Finance (CDF). 2025. Table 2: E-5 Population and Housing Estimates for Cities, Counties, and State, January 2020–2025, with 2020 Benchmark. Website: <https://dof.ca.gov/media/docs/forecasting/Demographics/estimates/e-5->

population by approximately 181 persons based on the average household size.¹¹³ MNWD's 2020 actual consumption was 121 gallons per capita per day (GPCD). For the estimated 181 residents under the proposed project, this would result in an estimated 21,901 gallons per day (GPD) or 24.6 AFY.¹¹⁴ As noted in the UWMP, the projected normal year water use in 2025 is 32,093 AFY.¹¹⁵ The proposed project's demand would be less than 0.08 percent of the total projected normal year 2025 demand. As noted in the UWMP, during the fifth year of the multiple dry year scenario, the projected water demand and supply would be 31,844 AFY. The proposed project's demand would be less than 0.08 percent of the total projected fifth multiple dry year demand. Therefore, the small projected water use of the proposed project would be nominal, and water supplies would be sufficient to serve the proposed project. As such, the proposed project would not significantly impact water supplies. Impacts would be less than significant.

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?

Less than significant impact. As discussed above, the proposed project would require new connections to existing sanitary sewer lines in the area. The MNWD is responsible for the City's sewer lines. The MNWD collects and treats more than 10 million gallons of wastewater per day from residential and commercial customers throughout the district's service area. MNWD utilizes three different treatment plants to appropriately treat the wastewater, with two of those treatment plants equipped to produce recycled water. The 3A Treatment Plant in Mission Viejo is owned and operated by MNWD and has a capacity of 6 million GPD. The Regional Treatment Plant in Laguna Niguel is currently operated by a regional operator, SOCWA, but is also home to the largest recycled water facility that is owned and operated by the MNWD. Regional Treatment Plant has a capacity of 9.4 million GPD. Additionally, the J.B. Latham Treatment Plant in Dana Point, which is also operated by SOCWA, provides an additional facility for treatment of wastewater and has a capacity of 13 million GPD.¹¹⁶ Any treated wastewater that cannot be utilized for irrigation purposes is then discharged to the ocean through one of two ocean outfalls, the Aliso Creek Ocean Outfall and the San Juan Creek Ocean Outfall. The MNWD works closely with SOCWA, as the regional permitting entity, and the appropriate regulatory agencies to ensure that all treated wastewater, whether used for irrigation purposes or discharged to the ocean, is compliant with all regulatory requirements.¹¹⁷

population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/E-5_2025_InternetVersion.xlsx. Accessed February 2, 2026.

¹¹³ 2.54 persons per household * 71 residential units = 180.34

¹¹⁴ 121 gallons per day * 181 people = 21,901 GPD

¹¹⁵ Moulton Niguel Water District (MNWD). 2021. 2020 Urban Water Management Plan. Website: <https://www.mnwd.com/wp-content/uploads/2021/12/2020-Urban-Water-Management-Plan.pdf>. Accessed February 2, 2026.

¹¹⁶ Moulton Niguel Water District (MNWD). 2024. Wastewater Collection and Treatment. Website: <https://www.mnwd.com/wastewater-treatment/>. Accessed February 2, 2026.

¹¹⁷ Moulton Niguel Water District (MNWD). 2024. Wastewater Collection and Treatment. Website: <https://www.mnwd.com/wastewater-treatment/>. Accessed February 2, 2026.

A Municipal Service Review was prepared for the Southwest Region of Orange County in 2023, which included a review of the MNWD.¹¹⁸ The purpose of the review was, in part, to review and study future growth in the service area and to determine whether Southwest Region of Orange County can efficiently, equitably, and reliably provide services. The review determined that MNWD existing and planned operations and infrastructure can meet current and future service demands.¹¹⁹ The proposed project would result in approximately 19,710.9 total GPD of wastewater, which is equivalent to 0.02 MGD.¹²⁰ Based on a total combined wastewater treatment capacity of 28.4 GPD, the proposed project's wastewater generation would be approximately 0.07 percent of the total daily capacity, which is a nominal amount. Therefore, MNWD would have adequate capacity to serve the wastewater demands of the proposed project, and impacts would be less than significant.

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?

Less than significant impact. The project site is currently undeveloped and does not generate solid waste. Construction and operational activities associated with the proposed project would generate solid waste requiring disposal. CR&R Incorporated is a private recycling and nonhazardous solid waste hauler and provides solid waste services to the City, including the project site.¹²¹ CR&R Incorporated collects solid waste for all residential, commercial, and industrial waste and recycling services. Solid waste is disposed of in Orange County landfills.

Solid waste within the City is primarily disposed of at the Prima Deshecha Sanitary Landfill. Other sanitary landfills, including Chiquita Canyon, El Sobrante, Frank R. Bowerman, Simi Valley, and Olinda Alpha received relatively small amounts of solid waste from the City. The Prima Deshecha Landfill is the closest facility to the City and would likely be the solid waste facility most often receiving waste from the project site.¹²² According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS), the Prima Deshecha Landfill has a maximum daily capacity of 4,000 tons per day and a remaining capacity of 128,800,000 cubic yards. The facility's maximum permitted capacity is 172,100,000 cubic yards.¹²³

¹¹⁸ Orange County Local Agency Formation Commission (Orange County LAFCo). 2023. Municipal Service Review and Sphere of Influence Reviews. August 9. Website: https://oclafco.org/wp-content/uploads/2024/01/OCLAFCO_Southwest_MSR_-_Final_8.28.23.pdf. Accessed February 2, 2026.

¹¹⁹ Orange County Local Agency Formation Commission (Orange County LAFCo). 2023. Municipal Service Review and Sphere of Influence Reviews. August 9. Website: https://oclafco.org/wp-content/uploads/2024/01/OCLAFCO_Southwest_MSR_-_Final_8.28.23.pdf. Accessed February 2, 2026.

¹²⁰ Based on the assumption that wastewater generated is approximately 90 percent of indoor water use. $21,901/100 = 219.01$. $219.01 * 90 = 19,710.9$.

¹²¹ City of Aliso Viejo. 2025. Services. Website: <https://avcity.org/101/Services>. Accessed February 2, 2026.

¹²² California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details. Website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085>. Accessed February 2, 2026.

¹²³ California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details. Website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085>. Accessed February 2, 2026.

CalRecycle provides a solid waste generation factor to estimate the amount of solid waste generated by residential projects. Using the generation rate of 12.23 pounds (lbs) per household per day for residential development, the proposed project would generate approximately 868.33 lbs per day of solid waste, or approximately 0.43 tons per day (based on 71 units), which represents approximately 0.01 percent of the maximum daily capacity of the Prima Deshecha Sanitary Landfill.

Therefore, the Prima Deshecha Landfill would have sufficient capacity to serve the proposed project and solid waste generated during construction, and operations would represent a negligible increase compared to the daily permitted tonnage. The proposed project would also include recycling, reuse, and/or salvage programs to reduce solid waste and comply with all applicable regulations for solid waste. The impact would be less than significant, and no mitigation is required.

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

Less than significant impact. The City complies with all federal, State, and local statutes and regulations related to solid waste. Regulations specifically applicable to the proposed project include the California Integrated Waste Management Act of 1989 (AB 939), SB 2202, SB 1016, 2019 CALGreen Section 4.408, SB 1383, and AB 341, which requires multiple-family residential development and commercial uses to implement recycling programs. Municipal Code Chapter 7.05, Solid Waste Disposal, addresses solid waste disposal, including recycling and organic waste. Compliance with the Municipal Code would achieve compliance with State law, including SB 1383.

The City has a per capita population disposal rate target of 3.3 pounds per person per day and a per capita employment disposal rate of 9.4 pounds per person per day. Since 2007, the City has met these targets through its diversion programs. The most recent population disposal rate (2024) was 3.5 pounds per day per capita for population and 8.9 pounds per day per capita for employment.¹²⁴ The City would continue to implement its diversion programs and requires compliance with all federal, State, and local statutes and regulations for solid waste, including those identified under the most current CALGreen standards and in compliance with SB 1383.

In 1989, the Legislature adopted AB 939, in order to, “reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible.” AB 939 established a waste management hierarchy and required each county to prepare a new Integrated Waste Management Plan and each city to prepare a Source Reduction and Recycling Element (SRRE) by July 1, 1991. The SRRE was required to identify how each jurisdiction would meet the mandatory State waste diversion goal of 50 percent by and after the year 2000.

SB 2202 made a number of changes to the municipal solid waste diversion requirements under AB 939. These changes included a revision to the statutory requirement for 50 percent diversion of solid

¹²⁴ California Department of Resources Recycling and Recovery (CalRecycle), Jurisdiction Per Capita Disposal Rate Trends. Website: <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports>. Accessed February 6, 2026.

waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

SB 1016 introduced a per capita disposal measurement system that measures the 50 percent diversion requirement using a disposal measurement equivalent. SB 1016 repealed the California State Water Resources Control Board (State Water Board) 2-year process, requiring instead that the State Water Board make a finding whether each jurisdiction was in compliance with diversion requirements for calendar year 2006 and determine compliance for the 2007 calendar year and beyond based on the jurisdiction's change in its per capita disposal rate. The State Water Board is required to review a jurisdiction's compliance with those diversion requirements in accordance with a specified schedule, which is conditioned upon the State Water Board finding that the jurisdiction complies with those requirements or has implemented its SRRE and household hazardous waste element. SB 1016 requires the State Water Board to issue an order of compliance if the State Water Board finds that the jurisdiction has failed to make a good faith effort to implement its SRRE or its household hazardous waste element, pursuant to a specified procedure. The per capita disposal rate is a jurisdiction-specific index, which is used as one of several "factors" in determining a jurisdiction's compliance with the intent of AB 939 and allows CalRecycle and jurisdictions to set their primary focus on successful implementation of diversion programs.

SB 1383 requires counties to take the lead in collaborating with jurisdictions located within the county in planning for the necessary organic waste recycling and food recovery capacity needed to divert organic waste from landfills into recycling activities and food recovery organizations.

CALGreen Section 4.408 requires preparation of a Construction Waste Management Plan that provides an overview of ways in which the applicant would recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition debris. As discussed above, during the construction phase, the proposed project would be required to comply with CALGreen through the recycling and reuse of at least 65 percent of the nonhazardous construction and demolition debris from the project site.

Participation in the City's recycling programs during project construction and operation, including CalRecycle's requirements, would ensure that the proposed project would not conflict with federal, State, and local statutes and regulations related to solid waste. Additionally, solid waste would be disposed of at existing Orange County Waste and Recycling landfills. Disposal of solid waste would comply with all federal, State, and local statutes and regulations related to solid waste. During operation, the proposed project would include receptacles for recyclables and garbage. Thus, impacts would be less than significant, and no mitigation is required.

Mitigation Measures

None.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.20 Wildfire <i>If located in or near State Responsibility Areas or lands classified as very high fire hazard severity zones, would the project:</i>				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Environmental Evaluation

Setting

According to the Aliso Viejo Local Hazard Mitigation Plan, fires are one of the most prevalent potential hazards in the City.¹²⁵ As such, the City of Aliso Viejo has mapped very high fire hazard severity zones within the City. According to the map, the project site is not located within the area mapped as a High Fire Severity Rating and Open Space with Fire Potential zone.¹²⁶ The CAL FIRE FHSZ Map indicates that the project site is not within a State Responsibility Area (SRA). The project site is mapped in an area designated as a Moderate to High FHSZ in the Local Responsibility Area (LRA).¹²⁷

¹²⁵ City of Aliso Viejo. 2004. Aliso Viejo General Plan Safety Element. Website:

<https://www.avcity.org/DocumentCenter/View/395/Safety-Element-PDF>. Accessed February 2, 2026.

¹²⁶ Ibid.

¹²⁷ California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zones in Local

The closest SRA is approximately 0.48 miles west of the project site, near the intersection of Lions Way and University Circle. No part of the City is listed as an SRA.¹²⁸ VHFHSZs are located along the southern and western boundaries of the City.¹²⁹ The General Plan indicates that the closest VHFHSZ is located along Wood Canyon Drive, 0.24 mile west of the project site.¹³⁰

The information in this section is based in part on the materials provided in Appendix J, which includes a Fuel Modification Plan and a Fire Behavior Modeling Analysis, which are incorporated into the project plans as required Conditions of Approval.

Would the project:

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

No impact. The project site is located within an urbanized area with existing infrastructure. As discussed above, according to the CAL FIRE FHSZ Map, the project site is not located within a VHFHSZ, nor is it within or near an SRA.

The City is divided into 22 all-hazard Evacuation Zones. According to the citywide Evacuation Zones map, the project site is located in Evacuation Zone 12.¹³¹ Traffic in Evacuation Zone 12 is directed to Aliso Viejo Parkway and Aliso Creek Road via Liberty during an emergency evacuation. Aliso Creek Road provides a main north–south evacuation route out of the project site vicinity.¹³² The proposed project would have access to the emergency evacuation routes as shown on the Evacuation Zone maps and would not impair access to the emergency evacuation routes. Furthermore, the proposed project would not interfere with the evacuation plan or evacuation routes identified City’s EOP and the General Plan Safety Element (see Impact 2.9(f)).

The proposed project would comply with all City and OCFA requirements for fire prevention and safety measures, including adequate site access. Construction and operation of the proposed project would not interfere with any of these emergency evacuation routes. Fire lanes and emergency access

Responsibility Area. Website: https://avcity.org/DocumentCenter/View/4207/FHSZ_City_LRA_11x17_AlisoViejo. Accessed February 2, 2026.

¹²⁸ California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zones in State Responsibility Area. Website: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008>. Accessed February 2, 2026.

¹²⁹ City of Aliso Viejo. 2004. General Plan Figure S-1 Safety Policy Map. Website: <https://www.avcity.org/DocumentCenter/View/384/Safety-Policy-Map-PDF>. Accessed February 2, 2026.

¹³⁰ Ibid.

¹³¹ City of Aliso Viejo. 2024. Citywide Evacuation Zones. Website: <https://avcity.org/DocumentCenter/View/3750>. Accessed February 2, 2026.

¹³² City of Aliso Viejo. 2024. Evacuation Zone 12. Website: https://avcity.org/231/Protecting-Your-Home-Preparing-to-Evacuate#tab8a3a84c5-531c-450e-9da4-44cc6f94da32_12. Accessed February 2, 2026.

to the site are included in the site plan. The proposed project would be consistent with the City's EOP and evacuation routes, no impacts related to emergency response or evacuation plans would occur.

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?

Less than significant impact. The proposed project site is located in a developed urban area and is not identified as having significant wildfire risk by the General Plan and is not located in a VHFHSZ. The surrounding area is also not designated as a VHFHSZ according to the CAL FIRE FHSZ Map. As shown in the General Plan, the project site is not located along an urban-wildfire interface and is not located in the Aliso and Woods Canyon Wilderness Park within a VHFHSZ, where wildfires are of the greatest risk in the City.¹³³ However, the project site is located in a Moderate to High FHSZ in the LRA.¹³⁴ Therefore, the proposed project is required to provide a Fuel Modification Plan that complies with the requirements of OCFA.

Fire behavior modeling completed for the project site assessed nearby hazardous fuels and potential ignition sources. The nearest natural and native hazardous vegetation is located approximately 0.75 mile to the west adjacent to the residential development on Oak View Drive and the Soka University of America campus and 0.5 mile to the east in the Aliso Creek open space. Wildfires ignited and burning in either area could carry embers to the project site. The modeling also determined that a human-caused vegetation fire could be ignited in the landscaping on the manufactured slope along the west side of Aliso Creek Road and extend into the landscaping on the slope in the southern portion of the project site. However, the fire risk assessment states that the potential for off-site wildfire showering embers into the site is considered low, and the risk of ignition from such encroachments or ember showers is considered low given the ignition-resistant construction and landscaping, along with fire protection features that would be provided for the structures.

The worst-case fire conditions would be a fire during an offshore Santa Ana wind event with strong winds from the northeast. Under such wind conditions, the fire would be a flanking fire relative to the project site that would produce flame lengths of only 1.0 feet in the irrigated ground cover with minimal heat energy. The northeast winds would drive a fire on the slope away from the project site. As such, fire would not present an ignition risk to the structures due to the required fuel modification provided for the project and flames directed away from structures by the offshore wind. The project site is not adjacent to natural and native hazardous vegetation and fire behavior in the irrigated, landscaped open spaces near the project's buildings would not produce flames or heat energy that could present a risk of ignition to the buildings. Therefore, impacts would be less than significant.¹³⁵

¹³³ City of Aliso Viejo. 2004. General Plan, Safety Element. Website: <https://avcity.org/DocumentCenter/View/395/Safety-Element-PDF>. Accessed February 2, 2026.

¹³⁴ California Department of Forestry and Fire Protection (CAL FIRE). 2025. Fire Hazard Severity Zones in Local Responsibility Area. Website: https://avcity.org/DocumentCenter/View/4207/FHSZ_City_LRA_11x17_AlisoViejo. Accessed February 2, 2026.

¹³⁵ Dudek Fire Protection Planning Team. 2026. Freedom Lane Residential Development—Aliso Viejo Memorandum. February.

While the site itself is relatively flat, there is a slope on its southern and eastern bank. The fire risk assessment determined that the highest risk fire would be on the slope in the southern portion of the project site. City requirements include a minimum of 170 feet of distance from structures to the property line. However, the slope on the south side of the project site provides approximately 60 feet of distance from the structures to the property line, which does not meet the minimum requirement of 100 feet. To meet fuel modification requirements, the existing trees would need to be thinned to meet fuel modification spacing requirements for trees. As such, OCFA requires a Fuel Modification Plan. The proposed project's Fuel Modification Plan has been incorporated into the project plans as a Condition of Approval (See Appendix J). Requirements would include a Fuel Modification Plan, which provides specific requirements for combustible materials, irrigation, landscaping, and defensible space. For example, the Fuel Modification Plan specifies that the proposed project's landscaping plan must include species selected from a Fuel Modification Zone Plant List and excludes invasive species. Shrub and tree coverage is limited to prevent fire hazards. The Fuel Modification Plan contains a Roadside Protection Zone and Special Maintenance Areas.¹³⁶

Thus, with implementation of the required Conditions of Approval contained in the Fuel Modification Plan, impacts concerning exposure to wildfire pollutant concentrations or wildfire spread would be less than significant.

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?

Less than significant impact. The proposed project is located in an existing urbanized area and does not require the installation or maintenance of infrastructure such as roads, fuel breaks, emergency water sources, power lines, or other utilities that may exacerbate fire risk. Compliance with fire safety standards and coordination with the OCFA, including the proposed project's Conditions of Approval as discussed previously, ensures no additional infrastructure would create new fire risks or result in temporary or ongoing environmental impacts. Because the proposed project does not propose the construction of infrastructure that would exacerbate fire risk, the proposed project would not result in impacts due to exacerbated fire risk. Impacts would be less than significant.

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

No impact. The proposed project site is approximately 426 feet AMSL and is generally level, with a gentle slope to the east and south. There are no slopes on the site or in the general vicinity that could lead to flooding or landslides and so appreciable risk of slope instability.

¹³⁶ Dudek Fire Protection Planning Team. 2026. Freedom Lane Residential Development--Aliso Viejo Memorandum. February.

The FEMA Flood Map indicates that the project site is located outside of the local flood hazard zones.¹³⁷ The nearest Special Flood Hazard Area is located 0.6 mile east of the site, along Aliso Creek. Because of the distance from the nearest flood hazard zone, there would be no impacts with regard to slope instability or flood hazards.

Mitigation Measures

None.

¹³⁷ Federal Emergency Management Agency (FEMA). 2009. National Flood Hazard Layer FEMA Flood Map Service Center. Website: <https://msc.fema.gov/portal/search?AddressQuery=14300%20alton%20parkway.%20irvine%2C%20ca>. Accessed February 2, 2026.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.21 Mandatory Findings of Significance				
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?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Environmental Evaluation

- 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?**

Less than significant impact with mitigation incorporated. As discussed throughout this document, the proposed project does not have the potential to substantially degrade the quality of the environment or result in significant environmental impacts that cannot be mitigated or reduced to a

less than significant level through compliance with the established regulatory framework and implementation of mitigation measures.

As demonstrated in Section 2.4, Biological Resources, the proposed project would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. The proposed project would be required to comply with the MBTA and other applicable regulations and to implement MM BIO-1a and MM BIO-1b, which require a pre-construction survey and avoidance of direct and indirect impacts on active nests. Implementation of these measures would reduce potential impacts to a less than significant level. Furthermore, the proposed project would not conflict with habitat because it does not contain Covered Habitats or suitable habitat for Identified Species covered under the Orange County NCCP/HCP.

As demonstrated in Section 2.5, Cultural Resources and Section 2.18, Tribal Cultural Resources, the proposed project would not eliminate important examples of the major periods of California history or prehistory. As concluded in Section 2.5 and Section 2.18, the proposed project would not result in significant adverse impacts to archaeological resources, TCRs, or human remains. MM CUL-1 would require a WEAP training, a site survey conducted by a qualified Archaeologist, and archaeological monitoring. MM CUL-2 would require consultation with a qualified Archaeologist in the event that buried archaeological resources are discovered during construction, as well as inadvertent discovery procedures. MM CUL-3 would require specific procedures to be followed related to inadvertent discovery of human remains. MM TCR-1 requires a Native American Monitor from the consulting Tribes to be retained, submit an executed monitoring agreement to the City, and conduct on-site Tribal monitoring with the completion of daily monitoring logs to identify and describe any discovered TCRs. MM TCR-2 requires all construction activities within the immediate vicinity of an unanticipated discovery of a TCR to cease and not resume until the discovered TCR has been fully assessed by the Tribal Monitor and Project Archaeologist. Therefore, the proposed project would not 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.

- 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)?**

Less than significant impact with mitigation incorporated. The proposed project is an infill development and there are no reasonably foreseeable projects in the project vicinity. Within the City, there are currently seven active major projects. However, each project would be required to go through project-level analysis, develop applicable mitigation measures, and adhere to local, State, and federal regulations to ensure that impacts remain less than significant. Therefore, the proposed

project in addition to cumulative projects within the City would not create impacts that are cumulatively considerable.

Based on the analysis provided in this document, the proposed project's cumulative impacts would be less than significant with mitigation incorporated. Compliance with the regulatory requirements and implementation of mitigation measures at the project level would reduce the potential for incremental effects that would occur with construction and operation of the proposed project relevant to the environmental topical areas discussed within this document to below a level of significance. The mitigation measures identified in this document, including MM BIO-1a, MM BIO-1b, MM CUL-1, MM CUL-2, MM CUL-3, MM GEO-1, MM TCR-1 and MM TCR-2 would reduce the proposed project's incremental contribution to any potential cumulative impacts to below a level of significance. No additional mitigation measures would be required to address cumulative impacts. Therefore, the proposed project would cause less than significant cumulative impacts.

c) Does 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. The proposed project would improve the housing stock in the City. Based on the discussion provided in the Project Description and the analysis presented in Sections 2.1 through 2.20 of this document, the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly, because the proposed project's potential impacts would be mitigated to a less than significant level. Therefore, with implementation of MM CUL-1, MM CUL-2, MM CUL-3, MM GEO-1, MM TCR-1 and MM TCR-2 the proposed project would not result in substantial adverse effects on human beings. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Implement MM BIO-1a, MM BIO-1b, MM CUL-1, MM CUL-2, MM CUL-3, MM GEO-1, MM TCR-1 and MM TCR-2.

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