AVALON ALISO VIEJO PROJECT

PUBLIC REVIEW DRAFT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
AUGUST 2024

Prepared for:

City of Aliso Viejo
Community Development Department
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Aliso Viejo, CA 92656

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D e N o v o P l a n n i n g G r o u p

A Land Use Planning, Design, and Environmental Firm

Avalon Aliso Viejo Project

Public Review Draft

Initial Study/Mitigated Negative Declaration

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August 2024

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1.0 INTRODUCTION

1.1 Statutory Authority and Requirements

This Initial Study has been prepared in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Sections 21000, et seq.) and the State CEQA Guidelines (14 California Code of Regulations Title 14 Sections 15000, et seq.). This Initial Study is an informational document intended to be used as a decision-making tool for the Lead Agency and responsible agencies in considering and acting on the proposed Project.

Pursuant to CEQA Guidelines Section 15063, the City, as Lead Agency, has prepared this Initial Study to determine if the proposed Avalon Aliso Viejo Project (Project) would have a significant effect on the environment. If, as a result of the Initial Study, the Lead Agency finds that there is evidence that mitigation cannot reduce the impact to a less than significant level for any aspect of the proposed Project, then the Lead Agency must prepare an Environmental Impact Report (EIR) to analyze project-related and cumulative environmental impacts. Alternatively, if the Lead Agency finds that there is no evidence that the Project, as proposed, may cause a significant effect on the environment, the Lead Agency may prepare a Negative Declaration (ND). If the Lead Agency finds that there is evidence of a significant impact, but the impact can be reduced through mitigation, the Lead Agency may prepare a Mitigated Negative Declaration (MND). Such determination can be made only if "there is no substantial evidence in light of the whole record before the Lead Agency" that such significant environmental impacts may occur (PRC Section 21080(c)).

Pursuant to CEQA Guidelines Section 15063(c), the purposes of an Initial Study are to:

1. Provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR, MND or a ND;
2. Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an MND or ND;
3. Assist in the preparation of an EIR, if one is required, by;
    a. Focusing the EIR on the effects determined to be significant,
    b. Identifying the effects determined not to be significant,
    c. Explaining the reasons for determining that potentially significant effects would not be significant, and
    d. Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environment effects.
4. Facilitate environmental assessment early in the design of a project;
5. Provide documentation of the factual basis for the finding in a MND or ND that a project will not have a significant effect on the environment;
6. Eliminate unnecessary EIRs; and
7. Determine whether a previously prepared EIR could be used with the project.

The environmental documentation, which is ultimately selected by the City in accordance with CEQA, is intended as an informational document undertaken to provide an environmental basis for subsequent discretionary actions upon the proposed Project. The resulting environmental documentation is not, however, a policy document and its approval and/or certification neither presupposes nor mandates any actions on the part of those agencies from whom permits and other discretionary approvals would be required.

1.2 Summary of Findings

Pursuant to State CEQA Guidelines Section 15367, the City of Aliso Viejo (City), as the Lead Agency, has the authority for environmental review and adoption of the environmental documentation, in accordance with CEQA. As set forth in State CEQA Guidelines Section 15070, an Initial Study leading to a Negative Declaration (IS/ND) or Mitigated Negative Declaration (IS/MND) can be prepared when:

- The Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment (resulting in a Negative Declaration), or

- The Initial Study identifies potentially significant effects, but:
    - Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
    - There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment (resulting in a Mitigated Negative Declaration).

Based on the Environmental Checklist Form and supporting environmental analysis provided in Section 4.0, *Environmental Analysis*, the proposed Project would have no impact or a less than significant impact concerning all environmental issue areas, except the following, for which the Project would have a less than significant impact with mitigation incorporated:

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

1.3 Public Review Process

The Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration has been provided to the Clerk of the County of Orange and mailed to responsible agencies and trustee agencies concerned with the Project and other public agencies with jurisdiction by law over resources affected by the Project. A 30-day public review period has been established for the IS/MND in accordance with State CEQA Guidelines Section

15073. During the public review period, the IS/MND, including the technical appendices, was made available for review at the following locations:

- City of Aliso Viejo, Community Development Department, 12 Journey, Suite 100, Aliso Viejo, CA 92656
- City of Aliso Viejo website at: https://www.avcity.org

In reviewing the IS/MND, affected public agencies and interested members of the public should focus on the document's adequacy in identifying and analyzing the potential environmental impacts and the ways in which the Project's potentially significant effects can be avoided or mitigated.

Written comments on this IS/MND may be sent to:

Rose Rivera, Senior Planner
City of Aliso Viejo, Community Development Department
12 Journey, Suite 100
Aliso Viejo, California 92656
Email: RRivera@avcity.org

Following receipt and evaluation of comments from agencies, organizations, and/or individuals, the City will determine whether any substantial new environmental issues have been raised, and if further documentation may be required. If no new environmental issued have been raised or if the issues raised do not provide substantial evidence that the Project would have a significant effect on the environment, the IS/MND will be considered for adoption and the Project for approval.

1.4 Incorporation by Reference

Pursuant to State CEQA Guidelines Section 15150, a MND may incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public. Where all or part of another document is incorporated by reference, the incorporated language shall be considered to be set forth in full as part of the MND's text.

The references outlined below were utilized during preparation of this Initial Study. Copies of these documents are available for review on the City's website (www.avcity.org) unless otherwise noted.

City of Aliso Viejo General Plan. The City adopted its comprehensive General Plan on April 21, 2004. Subsequent updates have been made to various elements as outlined within the General Plan. The 6th Cycle (2021-2029) Housing Element was adopted June 7, 2023.

The City of Aliso Viejo General Plan (General Plan) serves as the blueprint for future growth and development within the City's Planning Area, which consists solely of areas within the City Limits. The General Plan identifies a community vision for the future and establishes a framework to guide decisions regarding development, transportation, housing, resource management, public safety, public services, and general community well-being. It includes goals, policies, and plans to guide land use and development decisions. The General Plan comprises the following elements:

- Land Use Element
- Circulation Element
- Noise Element
- Safety Element
- Conservation/Open Space Element
- Housing Element

The General Plan also includes a Land Use Policy Map, which serves as a general guide to the distribution of land uses throughout the City, and Implementation Program, which identifies specific actions to achieve the goals, policies, and plans identified in each General Plan element.

Aliso Viejo General Plan Final Environmental Impact Report, SCH No. 2003101060. The Aliso Viejo General Plan Final Environmental Impact Report (General Plan FEIR) analyzed the potential environmental impacts that would result from implementation of the Aliso Viejo General Plan. The General Plan FEIR forecasts development under the Land Use Plan to result in approximately 19,404 dwelling units, 13,516 square feet of non-residential land uses, and a population of 48,071 at buildout. The General Plan FEIR concluded that significant and unavoidable impacts would occur concerning Air Quality.

Aliso Viejo Municipal Code. The Aliso Viejo Municipal Code (Municipal Code or AVMC) consists of the regulatory, penal, and administrative ordinances of the City of Aliso Viejo. The Municipal Code is the primary method used for implementing the General Plan's goals and policies. The City's Zoning Code (Municipal Code Title 15) contains regulations establishing various classes of zoning districts and governing the use of land and the placement of buildings and improvements within districts, as well as a zoning map delineating the boundaries of zoning districts within the City.

Avalon Aliso Viejo Town Center Specific Plan (SP-2). Avalon Aliso Viejo Town Center, Specific Plan No. 2 (The Commons Specific Plan, or SP-2) oversees the development of the approximately 25.3-acre Aliso Commons site, located on the west side of Aliso Creek Road between the San Joaquin Hills Transportation Corridor (State Route 73) and Enterprise, in the central portion of the City. The Commons Specific Plan acts as a tool for implementing the goals and policies of the General Plan and includes development standards, guidelines, and regulations to achieve the overall vision for the site.

1.5 Report Organization

This document is organized into the following sections:

Section 1.0, *Introduction*, provides the CEQA Statute and Guidelines applicable to the Initial Study, summarizes the findings of the Initial Study, describes the public review process, and identifies documents incorporated by reference as part of the Initial Study.

Section 2.0, *Project Description*, provides a detailed description of the proposed Project, including Project location, environmental setting, Project characteristics, construction program and phasing, and requested entitlement, permits and approvals.

Section 3.0, *Environmental Checklist Form*, provides Project background information and a summary of environmental factors potentially affected by the proposed Project and the Lead Agency Determination

based on the analysis and impact determinations provided in Section 4.0. The impact evaluation criteria utilized in Section 4.0 is also provided.

Section 4.0, *Environmental Analysis*, provides a detailed analysis of the environmental impacts identified in the environmental checklist, and identifies mitigation measures, if necessary.

Section 5.0, *References*, identifies the information sources utilized in preparation of the IS to support the environmental analysis.

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2.0 PROJECT DESCRIPTION

2.1 Project Location

The Avalon Aliso Viejo Project (Project) site is located in the City of Aliso Viejo within the County of Orange; refer to Figure 1, *Regional Vicinity*. The Project site is located at 26501 Aliso Creek Road in the central portion of the City. The site comprises parcel APN 629-101-16 totaling approximately 4.4 acres located at the northwest corner of Enterprise and Town Center; refer to Figure 2, *Project Location*. The Project proposes to redevelop a portion of the larger Commons at Aliso Viejo Town Center, an established commercial center located west of Aliso Creek Road.

Regional access to the site is provided via State Route 73 (SR-73), located to the northeast. Local access to the site is provided directly from Enterprise and Aliso Creek Road to the south and east, respectively. Within the Project area, Enterprise is accessible from several roadways, with Aliso Creek Road and Aliso Viejo Parkway providing primary access from the east and west, respectively.

2.2 Existing Setting

On-Site Land Uses

The Project site consists of an irregularly shaped development area located within the southwestern portion of the Commons at Aliso Viejo Town Center. The majority of the site is relatively flat with a slope that descends to the Town Center along the western site boundary. Elevations vary from approximately 350 to 400 feet above mean sea level. The site is currently developed with surface parking and a landscaped slope ascending up to Enterprise.

Two driveways provide access to the larger commercial center, including the Project site. One driveway provides access from Town Center via Enterprise to the southeast of the site; a second driveway provides access via Aliso Creek Road to the east. The western site boundary consists of a landscaped slope with groundcover, bushes, and trees. A landscape planter with ornamental landscaping, monument sign, and sidewalk are located in the southeastern portion of the site along the Town Center entrance. Landscape planters with ornamental landscaping and trees are dispersed throughout the parking aisles within the site.

General Plan and Zoning

According to the City of Aliso Viejo General Plan Land Use Policy Map, the Project site is designated High Density Residential/Town Center Commercial and Open Space. The High Density Residential land use designation provides for multiple-family units such as apartments, town homes, condominiums, senior housing, and multi-family clusters at a range of 18.0 to 30.0 dwelling units per acre (du/ac). The Town Center Commercial land use designation provides for a mixture of uses within the Aliso Viejo Town Center including: community retail and commercial services, offices, theaters, art galleries and entertainment facilities, hotels/motels and restaurants, recreation and community facilities. The maximum intensity development for the Town Center Commercial designation is a 1.25:1 floor area ratio (FAR). The Open Space land use designation provides open space for outdoor recreation, buffering of incompatible land uses, preservation of natural resources, managed production of resources, and protection of health and public safety. Areas designated as Open Space include: streams and washes, open space easements,

Regional Parks, and other private and public open space. No density or intensity standard is applied to the Open Space designation.

According to the City of Aliso Viejo Zoning Map, the Project site is zoned SP-2: The Commons Specific Plan. The Commons at Aliso Viejo Town Center, Specific Plan No. 2 (Specific Plan) envisions a mixed-use development project within the Aliso Viejo Commons (Commons) portion of the Aliso Viejo Town Center. According to the Specific Plan Zoning Districts Map (Exhibit IV-1), the Project site is located within the SP2-RH Zoning District (Residential – High Density District) and SP2-CTC Zoning District (Commercial – Town Center District).

Surrounding Uses

Uses surrounding the Project site include:

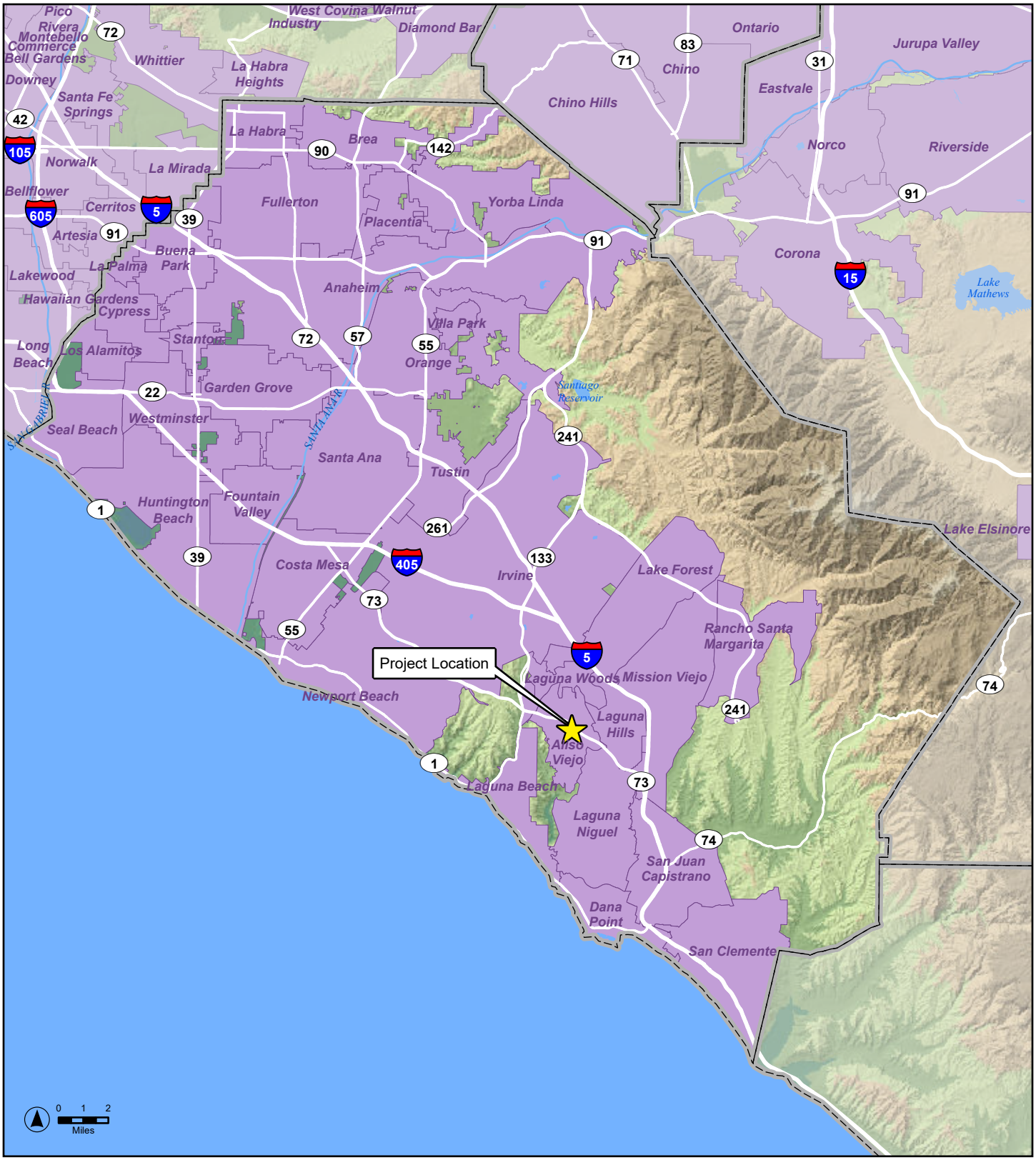
- North: North of the Project site is a parking lot, commercial structures currently undergoing renovation and improvements[1], and landscaped area within the Commons commercial center. North of the Commons is SR-73. To the northwest of the Project site are office uses within the Office Campus at the Summit. The commercial uses to the north are zoned SP-2. The office uses to the northwest are zoned PO (Professional Office).

- East: East of the Project site is a parking lot and commercial structures (e.g., restaurants, Trader Joe's, Walgreens) within the Commons commercial center. To the east of the Commons is Aliso Creek Road. The area to the east is zoned SP-2.

- South: The Project site is bounded on the south by Enterprise. South of Enterprise are commercial uses (e.g., retail, dining, entertainment, and medical office/urgent care uses) within the Aliso Viejo Town Center commercial center. The area to the south of Enterprise is zoned TC (Town Center Commercial).

- West: The Project site is bounded on the west by Enterprise. To the west of Enterprise is open space trails, followed by residential uses associated with the Vantis development. The open space trail area to the west of Enterprise is zoned OS (Open Space Recreation). The residential uses within the Vantis development are zoned SP-1: Vantis Specific Plan.

[1] In 2022 a Site Development Permit for façade modifications to the former Lowe's building and adjacent suites, a Development Agreement, and a Specific Plan Amendment was approved. In July and October 2023 permits were issued for a Tesla Sales and Showroom, 99 Ranch Market, and Daiso Japan.



Legend

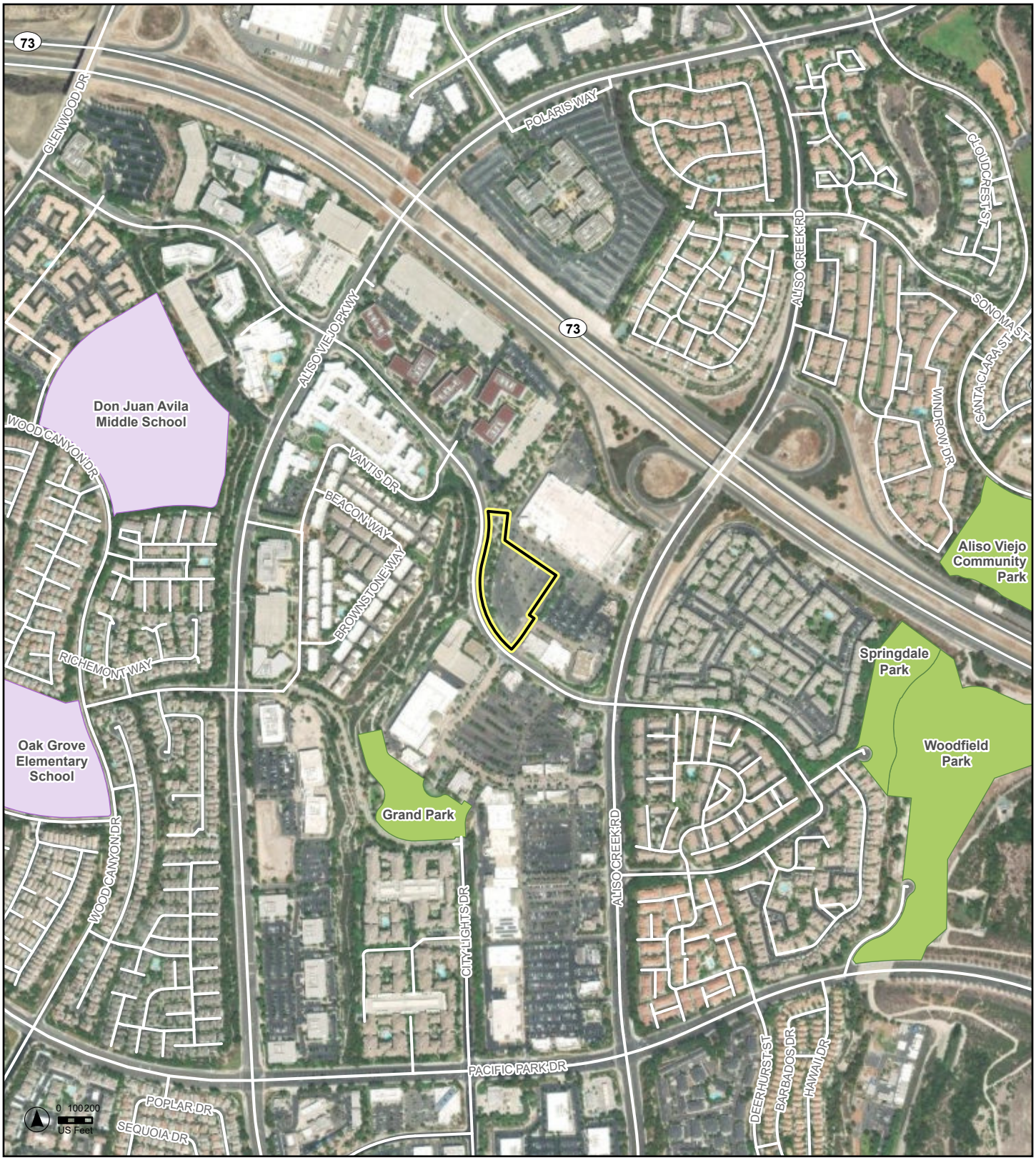
County Boundary

Incorporated Area

THE COMMONS AT ALISO VIEJO

Figure 1. Regional Vicinity

Sources: Orange County. Map date: April 22, 2024.



Legend

- Project Site
- Park
- School

AVALON ALISO VIEJO

Figure 2. Project Location

Sources: Orange County; ArcGIS Map Service. Map date: April 22, 2024.

2.3 Project Characteristics

The Project Applicant requests approval of the Avalon Aliso Viejo Project. The Project includes a Specific Plan Amendment, Vesting Tentative Map, Site Development Permit, and Development Agreement to allow construction of a mixed-use residential and retail development on the 4.4-acre site, as further described below.

Proposed Mixed-Use Development

As part of the Project, the existing surface parking, landscaping, and improvements would be removed and a mixed-use development consisting of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements would be constructed. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage (basement level B1) and rooftop residential amenity space; refer to Figure 3a, *Proposed First Floor Plan* and Figure 3b, *Proposed Second Floor Plan*, Figure 3c, *Proposed Third-Fifth Floor Plan*[2], Figure 3d, *Proposed Sixth Floor Plan*, Figure 3e, *Proposed Seventh Floor Plan*, Figure 3f, *Proposed Eighth Floor Plan*, and Figure 3g, *Proposed Subterranean Parking Garage Plan*.

The 343 residential units would be located within all six levels of the six-story mixed-use building. Of the 343 units, 34 units would be deed restricted affordable units, including 26 units for moderate-income households, five units for low-income households, and three units for very low-income households. The units would consist of 48 studio apartments, 168 one-bedroom units, 119 two-bedroom units, and eight three-bedroom units, ranging in size from 612 to 1,446 square feet.

Nine commercial spaces for retail or dining uses totaling 17,273 square feet would be located on the ground floor within the southeastern portion of the site. Additionally, a 1,000-square-foot leasing office, 1,385-square-foot residential amenity, and 995 square foot mail room would be located on the ground floor within the southern portion of the site. A pedestrian walkway along the eastern and northern building perimeter would provide access to the commercial spaces from Enterprise and Town Center. Three outdoor courtyards would be located on the ground floor within the western and southwestern portions of the site. An electrical room and commercial trash room would be located on the ground floor along the northwest portion of the site, along with a loading dock for new residents. Two outdoor roof decks would be located on the sixth floor, which is the top residential floor, in the south-southwestern portion of the site. Rooftop mechanical equipment would be located on the seventh floor. A retaining wall would separate the landscaped embankment along the west-southwest boundary of the Project site from the proposed mixed-use building.

The eight-level parking structure would include parking within the subterranean parking level (basement level B1) and levels one (ground floor) through seven. A roof deck would be provided on the eighth level of the parking structure and would consist of residential amenities including an approximately 5,271 square foot clubhouse and corresponding patio with seating and fire pit tables, an outdoor fitness patio, a covered outdoor bar and seating areas, and an outdoor recreation area with pool and spa. The Project

[2] Floors three through five provide the same number of units and unit types.

includes a minimum setback of 15 feet and an average setback of 20 feet from Enterprise, 15 feet from the northern site boundary, and 10 feet on the eastern and western boundaries.

A residential use trash room and utility rooms would be located within the subterranean parking garage (basement level B1). An EV electrical room, telecommunications (MPOE) room, and utility rooms would be located within the parking structure on the ground floor. A mechanical room would be located within the parking structure on levels one through seven and the subterranean parking garage (basement level B1).

Open Space, Landscaping, and Amenities

Each one-, two-, and three-bedroom residential unit would have private open space ranging from 40 to 140 square feet within a balcony; studio units would not provide private open space. Three outdoor courtyards would be located on the ground floor within the western and southwestern portions of the site; refer to Figure 3a. Residents would have access to two outdoor roof decks located on the sixth floor with residential amenities that include seating areas, fire pits, and barbeques. Additionally, residents would have access to a 28,437-square-foot rooftop deck on the eighth level consisting of residential amenities, including an approximately 5,271-square-foot clubhouse and corresponding patio with seating and fire pit tables, an outdoor fitness patio, a covered outdoor bar and seating areas, and an outdoor recreation area with pool and spa.

The Project contains approximately 50,188 square feet of common open space; refer to Figure 4, *Proposed Landscape Plan*[3]. Bicycle parking would also be provided in the northeastern corner of the site, adjacent to the retail space. Landscaping including groundcover, bushes, and trees would be located around the northern, eastern, western, and southern perimeters of the building. An entry monument would be provided within the southern portion of the site, adjacent to Enterprise.

Access and Parking

Similar to existing conditions, vehicular access to the Project site would be provided via two existing driveways. One driveway would provide access from Town Center via Enterprise to the southeast of the site; a second driveway would provide access via Aliso Creek Road to the east. The Project would provide a total of 590 automobile parking spaces for residents and guests distributed across the subterranean parking garage (basement level B1) and levels one through seven of the proposed parking structure. The 590 parking spaces would include 504 resident spaces and 86 guest spaces. Vehicle parking for the proposed commercial uses and the leasing office would be accommodated in the existing surface parking lot adjacent to the Project site. A bicycle room would be provided within the subterranean parking garage (basement level B1), providing long term storage of 50 bicycles for the residents.

Pedestrian access to the Project site would be provided from a pedestrian walkway along Town Center and from three outdoor staircases providing access from Enterprise. A pedestrian walkway would be provided along the southeastern and northeastern boundaries of the proposed mixed-use structure. The

[3] The Proposed Landscape Plan shows an illustrative composite plan containing landscaping from the ground floor (level one), level six, and level eight.

commercial uses would be accessible from ground floor entrances at the eastern and northern boundaries of the proposed mixed-use structure. The residential uses, parking, and amenities within the proposed structure would be accessible from two elevators located on opposite sides of the parking garage and four stairwells located throughout the building.

Architecture

The proposed building would be 89 feet to the top of the parapet wall; refer to Figure 5a, *Proposed Building Elevation – North*, Figure 5b, *Proposed Building Elevation – East*, Figure 5c, *Proposed Building Elevation – South*, and Figure 5d, *Proposed Building Elevation – West*. The exterior walls would be a stucco finish with composite siding as shown on Figures 5a, 5b, 5c, and 5d and Figure 6, *Proposed Project Rendering*. Decorative elements would include awnings. The balconies would include a mix of perforated metal panel railing, picket railing, and glass railing. Vinyl windows would be used throughout the site. The commercial uses and leasing office would include glass storefront.

Utilities

The Project would connect to existing utilities within the Project area, as described below.

The existing public water line within the Project site would be removed and relocated to the east of the proposed mixed-use building. An existing fire hydrant within the southeastern portion of the Project site would be removed. A total of three fire hydrants and two Double Check Detector Assemblies (DCDAs) would be installed along the northern and eastern perimeters of the Project site and would connect to existing water lines. A proposed domestic water lateral would connect to the existing water line.

A proposed sewer lateral would connect to the existing sewer lateral in the southeastern portion of the site.

Existing underground storm drain lines and inlets within the Project site would be removed. The Project would install a new underground storm drainage system that would convey flows into an underground detention system consisting of two detention basins. Low flows equivalent to the required treatment volume or treatment flow rate from the underground detention system would be conveyed into a Modular Wetland System best management practice (BMP), which would discharge into the existing storm drain system.

The existing electrical equipment box in the southwestern corner of the Project site would be removed. The Project would connect to existing electrical, natural gas, and telecommunications infrastructure adjacent to the Project site.

Requested Entitlements

Approval of the following entitlements are requested:

- Site Development Permit pursuant to AVMC Section 15.74.020 to allow for a new project that involves building construction. The Project Site is currently developed as surface parking. The Project includes the development of a mixed-use project comprising 343 dwelling units and 17,273 square feet of ground-floor retail/restaurant space.

- Vesting Tentative Map pursuant to AVMC Section 14.08.030 to merge the existing contiguous lots and re-subdivide the Project site.

- Development Agreement pursuant to AVMC Section 15.82.010 to provide further site-specific regulations and community benefits in connection with the proposed Project.

Project Construction and Phasing

The Project's construction phase is anticipated to occur over a 29-month period. Construction of the Project would include demolition, grading, site preparation, paving, building construction, and architectural coating.

Permits and Approvals

The City of Aliso Viejo, as the Lead Agency, has discretionary authority over the proposed Project. The proposed Project would be subject to various City permits and approvals, including, but not limited to:

- Adoption of a Final Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program
- Site Development Permit
- Vesting Tentative Map
- Development Agreement

AVALON ALISO VIEJO

Figure 3a. Proposed First Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 3b. Proposed Second Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 3c. Proposed Third-Fifth Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 3d. Proposed Sixth Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.

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Figure 3e. Proposed Seventh Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.

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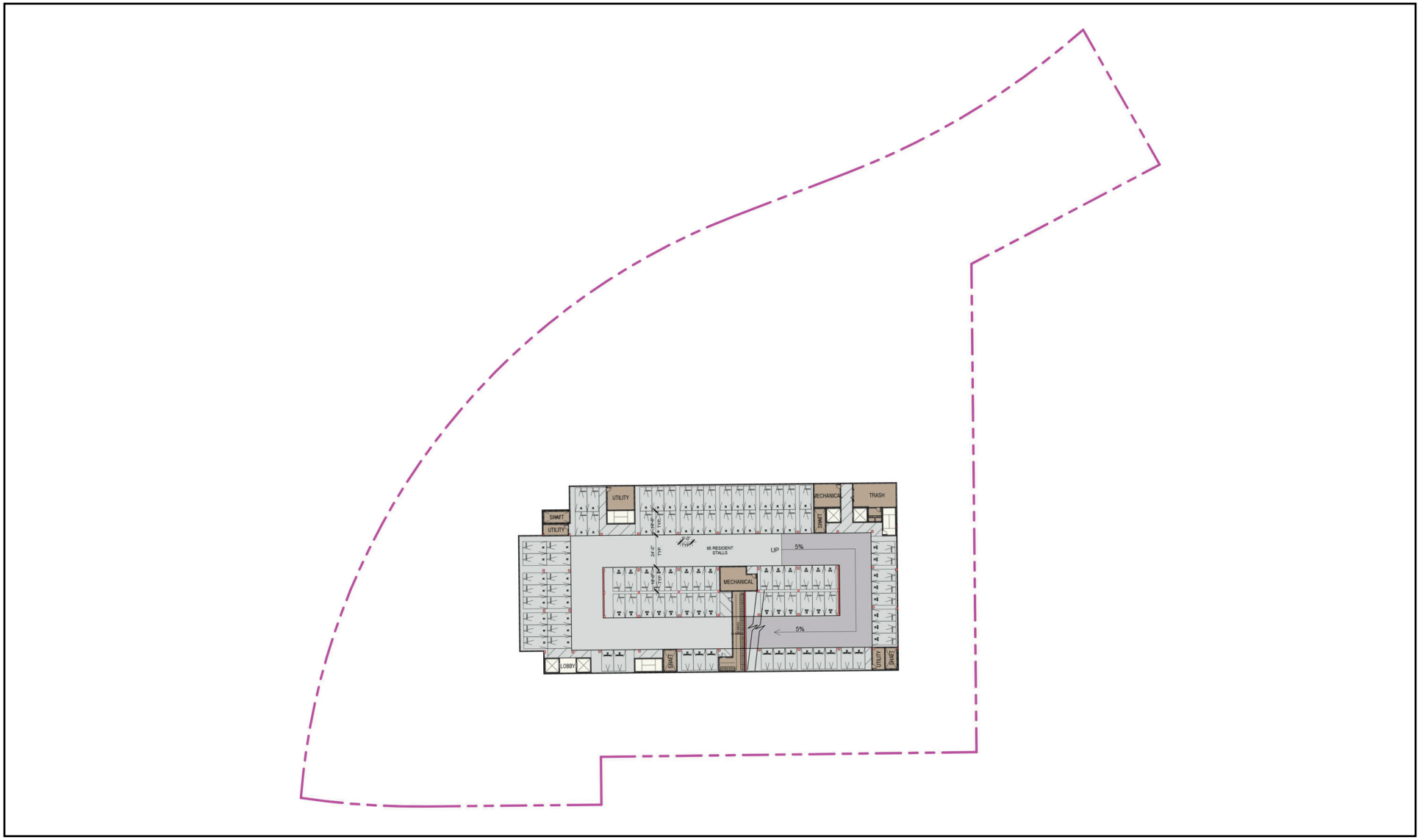
Figure 3f. Proposed Eighth Floor Plan

Sources: TCA Architects. Map date: April 22, 2024.



AVALON ALISO VIEJO

Figure 3g. Proposed Subterranean Parking Garage Plan

Sources: TCA Architects. Map date: April 22, 2024.

LEGEND

1. Ground Level Courtyards (A,B,C)
2. Ground Level Retail/Pedestrian Access
3. 6th Floor Roof Decks
4. 8th Floor Rooftop Pool Club

AVALON ALISO VIEJO

Figure 4. Proposed Landscape Plan

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 5a. Proposed Building Elevation – North

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 5b. Proposed Building Elevation – East

Sources: TCA Architects. Map date: April 22, 2024.

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Figure 5c. Proposed Building Elevation – South

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 5d. Proposed Building Elevation – West

Sources: TCA Architects. Map date: April 22, 2024.

AVALON ALISO VIEJO

Figure 6. Proposed Project Rendering

Sources: TCA Architects. Map date: April 22, 2024.

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3.0 ENVIRONMENTAL CHECKLIST FORM

Background

1. Project Title: Avalon Aliso Viejo Project
2. Lead Agency Name and Address: City of Aliso Viejo Community Development Department 12 Journey, Suite 100 Aliso Viejo, California 92656
3. Contact Person and Address: Rose Rivera Senior Planner City of Aliso Viejo, Community Development Department 12 Journey, Suite 100 Aliso Viejo, California 92656 Email: RRivera@avcity.org
4. Project Location: 26501 Aliso Creek Road, Aliso Viejo, California
5. Project Sponsor's Name and Address: Avalon Bay Communities, Inc. 2050 Main Street, #1200 Irvine, CA 92614
6. General Plan Designation: High Density Residential/Town Center Commercial and Open Space
7. Zoning: SP-2: The Commons Specific Plan
8. Description of the Proposed Project: See Section 2.3.
9. Surrounding Land Uses and Setting: See Section 2.2.
10. Other public agencies whose approval is required: See Section 2.4.
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? In compliance with AB 52, the City distributed letters to applicable Native American tribes informing them of the Project on February 27, 2024 via certified mail. The Gabrieleño Band of Mission Indians – Kizh Nation has requested tribal consultation; refer to Response 4.18.

Environmental Factors Potentially Affected

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

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources	X	Cultural Resources		Energy
X	Geology and Soils		Greenhouse Gasses		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
	Noise		Population and Housing		Public Services
	Recreation	X	Transportation	X	Tribal Cultural Resources
	Utilities and Service Systems		Wildfire	X	Mandatory Findings of Significance

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.
X	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

CITY OF ALISO VIEJO

8/22/2024

So Kim
Community Development Director

Date

Evaluation of Environmental Impacts

The environmental analysis in this section is patterned after CEQA Guidelines Appendix G. An explanation is provided for all responses with the exception of “No Impact” responses, which are supported by the cited information sources. The responses consider the whole action involved, including on- and off-site project level and cumulative, indirect and direct, and short-term construction and long-term operational impacts. The evaluation of potential impacts also identifies the significance criteria or threshold, if any, used to evaluate each impact question. If applicable, mitigation measures are identified to avoid or reduce the impact to less than significant. There are four possible responses to each question:

- Potentially Significant Impact. This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries, upon completion of the Initial Study, an EIR is required.

- Less than Significant With Mitigation Incorporated. This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

- Less than Significant Impact. A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.

- No Impact. These issues were either identified as having no impact on the environment, or they are not relevant to the project.

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4.0 ENVIRONMENTAL ANALYSIS

4.1 Aesthetics

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

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

Less Than Significant Impact. The Aliso Viejo General Plan describes the City as being characterized by a variety of scenic resources including hillsides, ridgelines, canyons, and view corridors. Policy COS-4.1 of the General Plan Open Space/Conservation Element directs the City 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. While scenic vistas are not specifically identified in the General Plan, the General Plan identifies a number of scenic resources in the City, including canyon views and scenic highways, which are cited as examples of scenic qualities benefiting the community. The General Plan Conservation/Open Space Element identifies areas of the City bordering the Aliso and Woods Canyons as being situated with highly valued viewsheds or scenic overlooks of the canyons. The Conservation/Open Space Policy Map further designates roadways within the City that have scenic qualities worth preserving. These roadways are classified as either Viewscape Corridors or Landscape Corridors, and are depicted on the Conservation/Open Space Policy Map. Viewscape Corridors are defined as "[a] route that traverses a corridor within which unique or unusual scenic resources and aesthetic values are found. This designation is intended to minimize the impact of the highway and land

development upon the significant scenic resources along the route." Landscape Corridors are defined as "[a] corridor that traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement." Landscape Corridors identified within the vicinity of the Project site include Aliso Creek Road and the San Joaquin Hills Transportation Corridor (State Route 73 [SR-73]).

The Project site is located within an area that is generally developed and urbanized. The Project site is currently developed with surface parking, landscaping, and improvements. The majority of the site is relatively flat with a northeast-east facing slope along the western site boundary. The Project site is not identified as a scenic vista and does not contain any unique or distinguishing features that would qualify the site for designation as a scenic vista.

Views from the Project site include short- to middle-range views of parking, landscaping, and commercial structures to the north and east; parking, landscaping, commercial structures, and Enterprise to the south; and parking, landscaping, and residential uses to the west. Long-range views of hillsides, ridgelines, or canyons associated with Aliso and Woods Canyons, or designated Viewscape Corridors or Landscape Corridors, including Aliso Creek Road and the San Joaquin Hills Transportation Corridor, are not available from the Project site due to topography and intervening trees and structures. Partial long-range views of the Santa Ana Mountains, located to the east, are available within some southern and western portions of the Project site; however, these views are already obstructed by the existing commercial building.

Views of the Project site from SR-73 mainline, SR-73 Aliso Creek Road offramp, and Aliso Creek Road (Landscape Corridors) are primarily obscured or intermittent due to the existing geography, intervening development, and landscaping. Aliso Creek Road, adjacent to the Commons commercial center is at a lower elevation than the Project site, furthering limiting views of the site.

The Project proposes to remove the existing surface parking, landscaping, and improvements and construct a mixed-use development consisting of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space. The maximum building height would be 89 feet.

Although the Project site is located in an area surrounded by multiple story office, residential, and commercial uses, the proposed development would be taller than the existing commercial buildings within the immediate area. However, the Project would not substantially alter long-range views from designated Viewscape Corridors or Landscape Corridors. The Project would not be visible from designated Viewscape Corridors, including El Toro Road and Wood Canyon Drive, due to distance and topography. Although the Project may be visible intermittently from designated Landscape Corridors, including SR-73 and Aliso Creek Road, long-range views afforded to motorists traveling along these roadways would not be substantially altered, as the proposed development would be substantially setback from these roadways. Further, the Project is designed to tuck into the adjacent slope to the southwest and contains a number of design features such as setbacks to reduce building massing and reduce the visual impact from surrounding areas.

Visual simulations of the Project site were prepared by the Orange County Council of Governments (OCCOG) to depict the views of the Project from the open space/trail areas adjacent to the Vantis

Residences, which are situated at a higher elevation to the west of Enterprise and the Project site; refer to Figure 7, *Key View Map* and Figures 8a through 8f, *Visual Simulation*.

As seen in Figures 8a and 8b, *Visual Simulation – Key View 1* and *Visual Simulation – Key View 2*, views of the Project site and the proposed mixed-use structure would be obscured by existing landscaping. For Key View 1, existing middle ground views of the rooftops of commercial structures within the Commons commercial center and of the office building within the Town Center and a portion of Enterprise would continue. Long-range views of existing developed hillsides, SR-73, the Santa Ana mountains, and skyline would continue to be afforded from this area. Views from Key View 2 would continue to be of existing landscaping within the foreground with intermittent views of Enterprise.

As seen in Figure 8c, *Visual Simulation – Key View 3*, the upper levels of the proposed mixed-use building would be visible. Existing landscaping in the foreground would obscure views of the lower levels of the structure. This view would replace existing views of the multi-family development east of Aliso Creek Road, intermittent views of Aliso Creek Road, and more distant views of developed hillsides and portions of SR-73. Long-range views of existing developed hillsides, the Santa Ana mountains, and skyline would continue to be afforded from this area.

As seen in Figure 8d, *Visual Simulation – Key View 4*, the rooftop level of the proposed mixed-use building would primarily be visible. Existing landscaping in the foreground would obscure views of the lower levels of the structure. This view would replace existing intermittent views of the Commons commercial area, partially replace existing elevation and rooftop views of the office and commercial uses within the Town Center, and a portion of the multi-family development east of Aliso Creek Road. Long-range views of existing developed hillsides, SR-73, the Santa Ana mountains, and skyline would continue to be afforded from this area.

As seen in Figure 8e, *Visual Simulation – Key View 5*, the southern-most portion of the mixed-use structure, closest to Enterprise, would be visible. The remaining portions of the building would be obscured by existing landscaping in the foreground and due to the topography of the area and slope within the Project site. This view would replace existing views of surface parking and commercial uses with the Commons commercial center and the multi-family development east of Aliso Creek Road. Limited long-range views (due to existing landscaping) of existing developed hillsides, the Santa Ana mountains, and skyline would continue to be afforded from this area.

As seen in Figure 8f, *Visual Simulation – Key View 6*, the upper levels and rooftop of the proposed mixed-use building would primarily be visible. The remaining portions of the building would be obscured by existing landscaping in the foreground and due to the topography of the area and slope within the Project site. This view would partially replace existing views of the commercial uses within the Town Center and a portion of the multi-family development east of Aliso Creek Road. Long-range views of existing developed hillsides, SR-73, the Santa Ana mountains, and skyline would continue to be afforded from this area.

The Project is a discretionary project subject to various City permits and approvals, including a Site Development Permit. The Project would be required to undergo design review, in accordance with Municipal Code Chapter 15.62, *Design Standards*. The design standards would ensure high quality physical design for the Project, including visual compatibility with existing development, and that development

protects, to the greatest extent feasible, existing vistas and panoramas of open space, major landforms, ocean, and special landmarks. Additionally, the Project is subject to the development standards, guidelines, and regulations of The Commons Specific Plan, which would ensure the physical design of the development is consistent with the overall vision for the site. Thus, compliance with the City's established regulatory framework, which would be verified through the City's development review process, would ensure that the proposed Project would not have a substantial adverse effect on a scenic vista, and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The nearest officially designated State scenic highway is a portion of State Route 91, approximately 19 miles north of the Project site.[4] The nearest eligible State scenic highway is a portion of State Route 1, located approximately four miles southwest of the Project site. The Project site is not located adjacent to or within view of a designated State scenic highway. As such, the Project would not substantially damage scenic resources within a State scenic highway; no impacts would occur.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Public Resources Code Section 21071 defines an "Urbanized area" as:

(a) An incorporated city that meets either of the following criteria:

(1) Has a population of at least 100,000 persons.

(2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons.

According to the California Department of Finance, the City of Aliso Viejo has a current (2023) population of 50,766.[5] The adjacent city of Laguna Niguel has a population of 64,702. Combined, the cities have 115,468, which exceeds 100,000 persons; thus, the City qualifies as being within an urbanized area. Since

[4] California Department of Transportation, *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed March 15, 2024.
[5] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023*, https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2023/, accessed March 20, 2024.

the Project is within an urbanized area, a significant impact would occur if the Project conflicts with applicable zoning and other regulations governing scenic quality.

Construction

Short-term construction activities associated with development of the Project would temporarily influence the Project site and immediate surroundings. Project conditions of approval would require the use of screening to buffer views of construction equipment and material. Construction fencing would reduce potential impacts to sensitive viewers in the area (e.g., public street users). Additionally, construction-related impacts would be temporary in nature and all construction equipment would ultimately be removed following completion of construction activities. Therefore, Project construction activities would not conflict with applicable zoning and other regulations governing scenic quality, and impacts would be less than significant.

Operational

The Project site is located within an area that is generally developed and urbanized. The Project site is surrounded by commercial uses to the north, east, and south; and bounded by Enterprise to the west, followed by open space trails and residential uses. The Project site is currently developed with surface parking and landscaping. The site is designated High Density Residential/Town Center Commercial and Open Space, and is zoned SP-2, which corresponds to The Commons Specific Plan. The Commons Specific Plan envisions a mixed-use development project within the Commons portion of the Aliso Viejo Town Center. The Specific Plan Zoning Districts Map identifies the Project site as being located within the SP2-RH Zoning District (Residential – High Density District) and SP2-CTC Zoning District (Commercial – Town Center District).

The Project requires approval of a Site Development Permit and Development Agreement. The Site Development Permit would allow for discretionary review of the Project's appropriateness, scale, architecture, site design, and compatibility with the surrounding area. The decision-making authority would be required to make findings for approval including consistency with the General Plan, consistency with the Zoning Code, compliance with CEQA, architectural design and site design that is compatible with surrounding development, and landscape design that provides a unifying influence to enhance the visual continuity of the project. The Development Agreement allows the City to provide further site-specific regulations, including permitted levels of development, and community benefits. These processes would provide an opportunity for public review and evaluation of site-specific requirements and characteristics, to minimize adverse effects on surrounding properties and the environment, and to ensure that all site development regulations and performance standards are provided in accordance with the City's General Plan, The Commons Specific Plan, and Municipal Code.

The Project would be required to undergo design review, in accordance with Municipal Code Chapter 15.62, *Design Standards*. The design standards would ensure high quality physical design for the Project, including visual compatibility with existing development, and that development protects, to the greatest extent feasible, existing vistas and panoramas of open space, major landforms, and special landmarks. Additionally, the Project would be subject to the development standards of the Development Agreement and guidelines and regulations of The Commons Specific Plan, which would ensure the physical design of the development is consistent with the overall vision for the site. Thus, compliance with the City's

established regulatory framework, which would be verified through the City's development review process, would ensure that the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality.

Mitigation Measures: No mitigation measures are required.

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

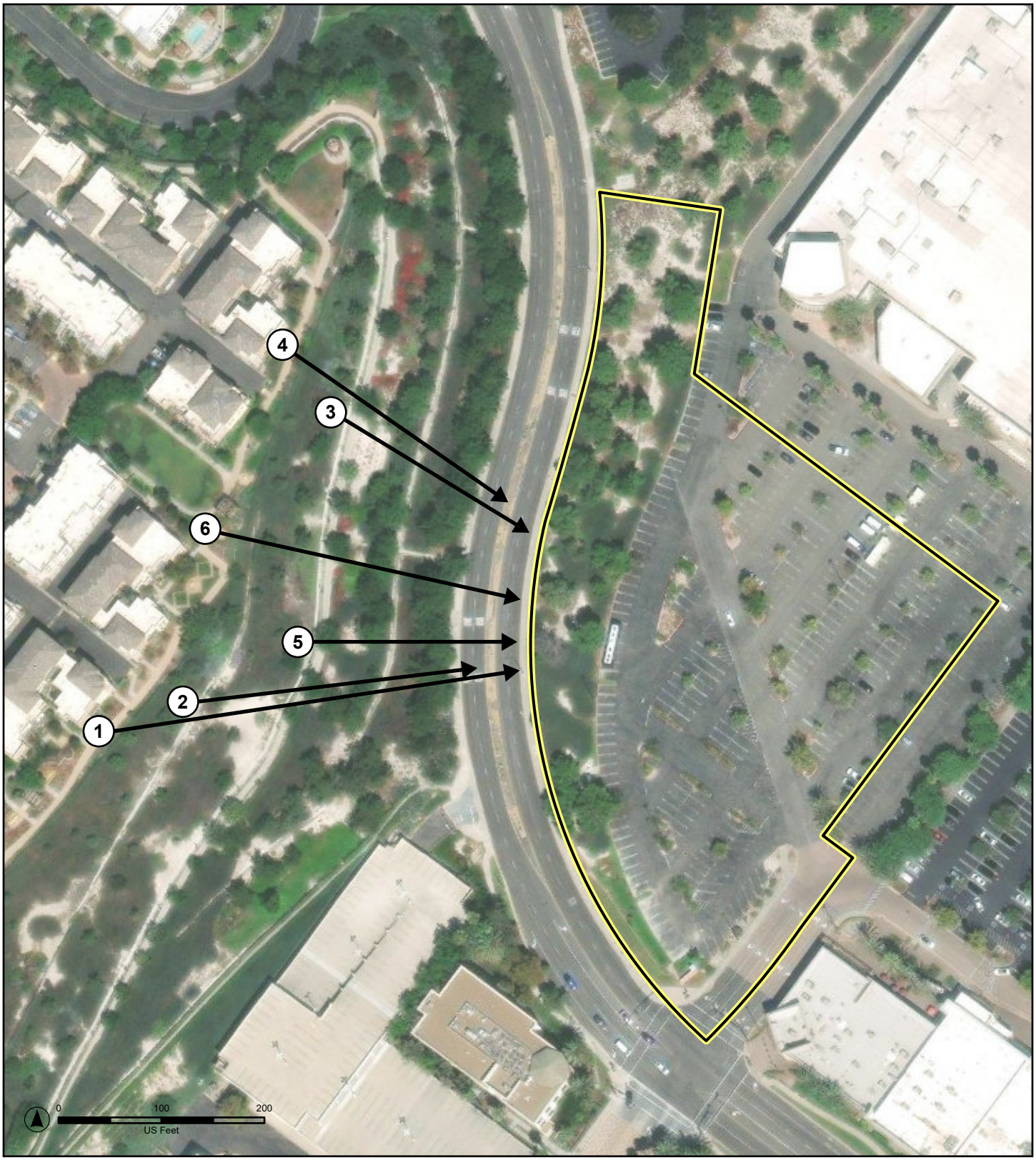
Less Than Significant Impact. The Project site is currently developed with surface parking and landscaping. The site is surrounded by commercial, office, and residential uses, as well as a major transportation corridor, and therefore currently experiences lighting and glare typical of a developed and urbanized area (e.g., security and landscape lighting, automobile headlights, glare from glass surfaces).

The Project proposes to remove the existing surface parking, landscaping, and improvements and construct a mixed-use development consisting of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space. The maximum building height would be 89 feet.

The proposed building materials would include glass railing, windows, and storefronts; however, these materials are not anticipated to exhibit highly reflective properties potentially resulting in significant glare impacts. Access to the Project site would continue to occur from the two existing driveways to the southeast and east of the site. Thus, the Project would not introduce new conditions related to headlights from vehicles entering and exiting the site.

All lighting installed as part of the Project would be subject to compliance with the City's lighting requirements. Specifically, Municipal Code Section 15.62.070, *Outdoor Lighting*, requires outdoor lighting to be designed and shielded to minimize spillover onto neighboring properties. Additionally, Section 5.3, *Lighting Guidelines*, of the Specific Plan requires exterior lighting to be shielded or recessed to minimize direct glare and reflection, and for lighting to be directed away from residential areas. Compliance with the Municipal Code and Specific Plan provisions specific to lighting would ensure proper design, installation, and operation of all exterior lighting, thereby reducing the potential for glare effects, light spillover onto adjacent properties, or conflicts with adjacent land uses. The Project would be required to submit a lighting plan identifying the type, location, and height of proposed lighting fixtures, with an associated photometric analysis showing lighting illumination levels and spillover, in accordance with Municipal Code Section 15.74.020, *Site Development Permits*. The lighting plan would be reviewed prior to the issuance of a building permit to ensure the proposed lighting would not adversely impact surrounding development. Thus, compliance with the City's established regulatory framework, which would be verified through the City's development review process, would ensure potential impacts associated with proposed Project lighting and glare would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.



Legend

Project Site

AVALON ALISO VIEJO

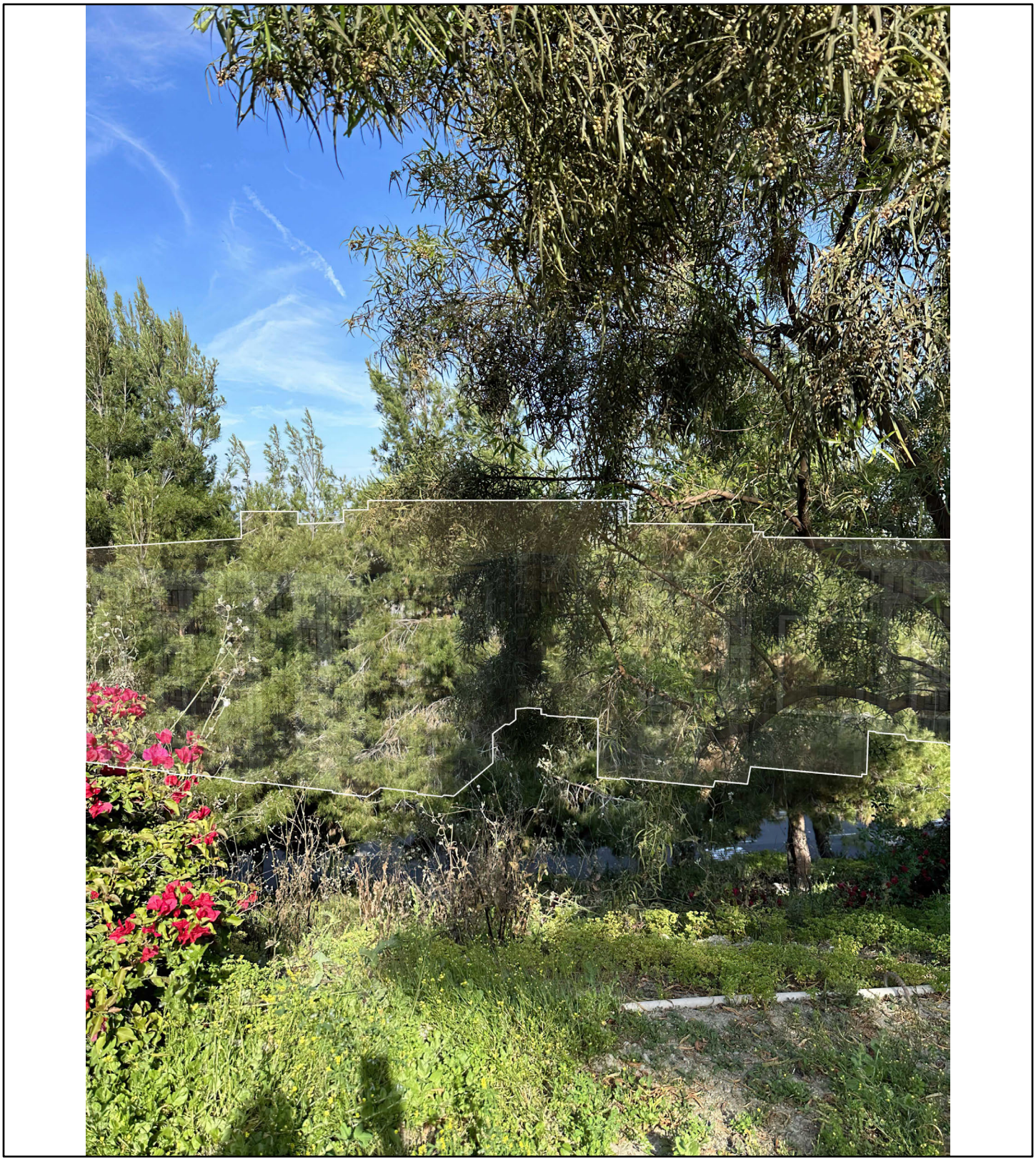
Figure 7. Key View Map

Sources: AvalonBay Communities, Inc. Map date: May 6, 2024.

AVALON ALISO VIEJO

Figure 8a. Visual Simulation – Key View 1

Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.



AVALON ALISO VIEJO

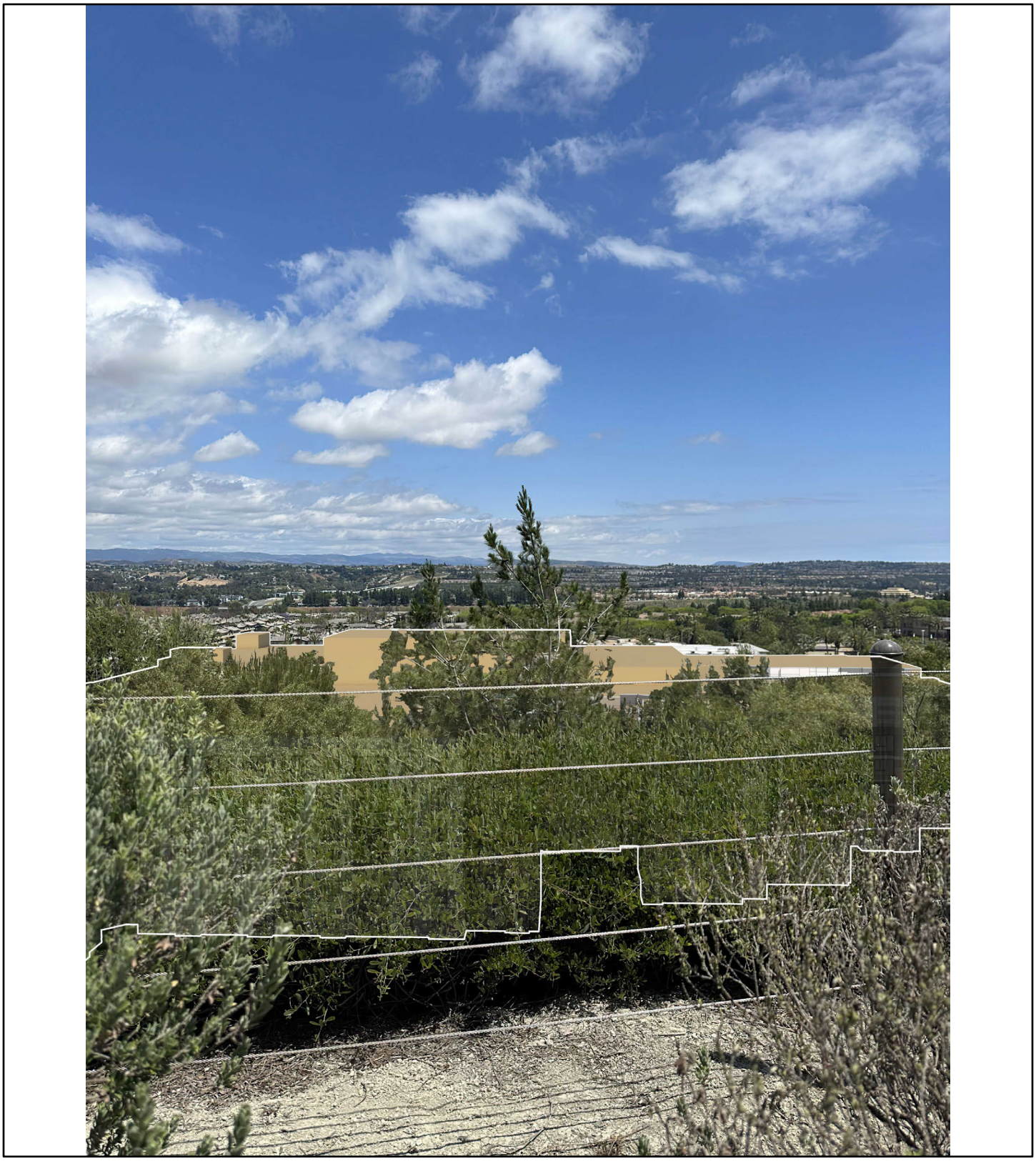
Figure 8b. Visual Simulation – Key View 2

Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.

AVALON ALISO VIEJO

Figure 8c. Visual Simulation – Key View 3

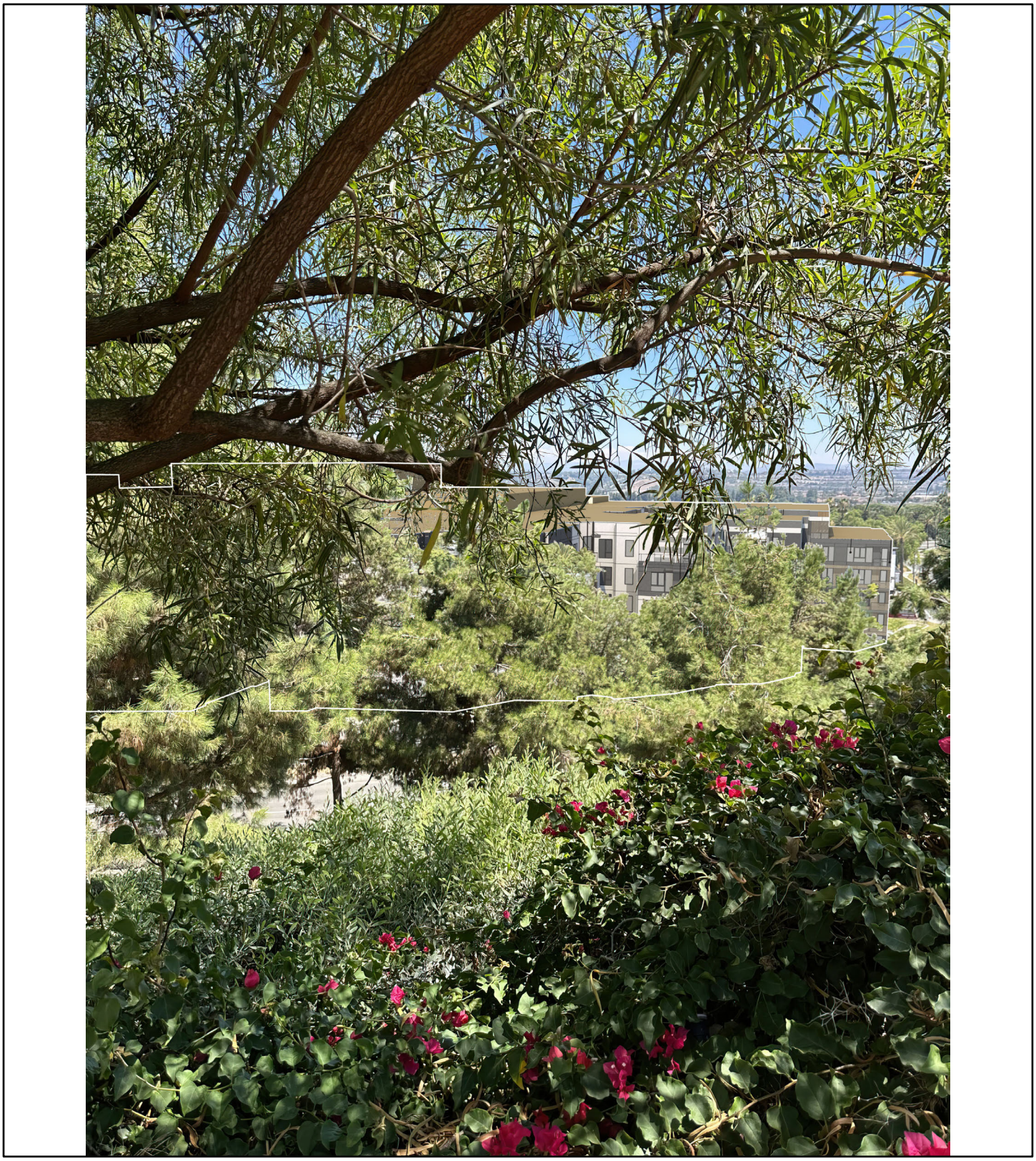
Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.



AVALON ALISO VIEJO

Figure 8d. Visual Simulation – Key View 4

Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.



AVALON ALISO VIEJO

Figure 8e. Visual Simulation – Key View 5

Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.

AVALON ALISO VIEJO

Figure 8f. Visual Simulation – Key View 6

Sources: AvalonBay Communities, Inc. Map date: May 3, 2024.

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4.2 Agriculture and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 1222(g)) or timberland (as defined in Public Resources Code section 4526)?				X
d. Result in the loss of forest land or conversion of forest land to non-forest use?				X
e Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

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

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

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

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

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

No Impact. The City does not contain any mapped Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program.[6] The Project site is zoned the SP-2: The Commons Specific Plan and is not zoned for agricultural use. The site is currently developed with surface parking and is not under a Williamson Act contract. Thus, the Project would not involve the conversion of farmland to a non-agricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract. Additionally, the Project site is not zoned for forest land, timberland, or Timberland Production. No forest land, timberland, or timberland zoned Timberland Production occurs within the vicinity of the Project site. Thus, the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

[6] California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/agriculture/, accessed March 14, 2024.

4.3 Air Quality

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

This section is based, in part, on the *Technical Air Quality and GHG Emissions Calculations* (CalEEMod Results), prepared by Noah Tanski Environmental Consulting, dated December 2023, and included in its entirety as Appendix A, CalEEMod and Energy Data.

South Coast Air Quality Management District (SCAQMD) Thresholds

Mass Emissions Thresholds

The South Coast Air Quality Management District's (SCAQMD) significance criteria is relied upon to assess the potential for significant impacts to air quality. According to the SCAQMD, an air quality impact is considered significant if a proposed project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality during project construction and operations, as shown in Table 4.3-1, *South Coast Air Quality Management District Emissions Thresholds*.

Table 4.3-1
South Coast Air Quality Management District Emissions Thresholds

Criteria Air Pollutants and Precursors (Regional)	Construction-Related	Operational-Related
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)
Volatile Organic Compounds (VOC)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxides (NO_x)	100	55
Sulfur Oxides (SO_x)	150	150
Coarse Particulates (PM_{10})	150	150
Fine Particulates ($PM_{2.5}$)	55	55
Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, 1993 ($PM_{2.5}$ threshold adopted June 1, 2007).		

Localized Carbon Monoxide

In addition to the daily thresholds listed above, the proposed Project would be subject to the ambient air quality standards. These are addressed through an analysis of localized Carbon Monoxide (CO) impacts. The California 1-hour and 8-hour CO standards are:

- 1-hour = 20 parts per million (ppm)
- 8-hour = 9 ppm

The significance of localized impacts depends on whether ambient CO levels near a project site exceed State and federal CO standards. The South Coast Air Basin (SCAB) has been designated as attainment under the 1-hour and 8-hour standards.

Localized Significance Thresholds

In addition to the CO hotspot analysis, the SCAQMD developed Localized Significance Thresholds ("LSTs") for emissions of Nitrogen Oxide (NOx), CO, Coarse Particulate Matter (PM_{10}), and Fine Particulate Matter ($PM_{2.5}$) generated at new development sites (off-site mobile source emissions are not included in the LST analysis). LSTs represent the maximum emissions that can be generated at a project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or State ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. For the purposes of CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. The nearest sensitive receptors include the Vantis Residences, a collection of multi-family residential properties located approximately 350 feet west of the Project site, across Enterprise; and the St. Moritz Resort Apartments, a multi-family residential complex located over 500 feet east of the Project site, across Aliso Creek Road. The SCAQMD also suggests that LSTs based on shorter averaging periods, such as Nitrogen Dioxide (NO_2) and CO, may also be applied to receptors such as commercial and industrial facilities since it is reasonable to assume that workers at these sites may be present for up to eight hours.

Nearby receptors where workers or other users may be present for one to eight or more hours include a multitude of commercial, retail, and other land uses surrounding the Project site. The nearest such land uses to the Project include commercial and retail uses less than 100 feet from the Project site, within The Commons commercial center.

LST analysis for construction is applicable for projects that disturb 5.0 acres or less on a single day, such as the proposed Project, which is 4.4 acres. The City of Aliso Viejo is located within SCAQMD SRA 20 (Central Orange County Coastal). Table 4.3-2, *Localized Significance Thresholds (Construction/Operations)*, shows the LSTs for the Project site.

Table 4.3-2
Localized Significance Thresholds (Construction/Operations)

Project Size	Nitrogen Oxide (NOx)^2 – lbs/day	Carbon Monoxide (CO)^2 – lbs/day	Coarse Particulates (PM_{10})^3 – lbs/day	Fine Particulates ($PM_{2.5}$)^3 – lbs/day
1.0 acres[1]	92/92	647/647	27/7	9/3

Source: South Coast Air Quality Management District, *Air Quality Significance Thresholds*, revised April 2019; South Coast Air Quality Management District, *Localized Significance Threshold Methodology – Appendix C*, revised October 21, 2009.
Notes:
1. 1-acre maximum daily disturbed acreage, consistent with the Project's maximum grading activities. This is the smallest project size used for analysis in the LST guidance document and is consistent with the SCAQMD's "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" document. Utilizing a 1-acre project size for construction results in the most stringent emissions thresholds.
2. For NOx and CO a receptor distance of 25 meters (approximately 80 feet) was utilized, which roughly corresponds with the distance to nearby receptors where workers and other users may be present for one to eight hours. This is the shortest distance used for analysis in the LST guidance document.
3. For PM_{10} and $PM_{2.5}$ a receptor distance of 100 meters (approximately 330 feet) was utilized, which roughly corresponds with the distance to the nearest residential sensitive receptor where occupants may be present for 24-hour periods (Vantis Residences).

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

Less Than Significant Impact. As part of its enforcement responsibilities, the United States Environmental Protection Agency (EPA) requires that each state with nonattainment areas prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under State law, the California Clean Air Act (CCAA) requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the federal and State ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The Project site is located within the SCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the Federal Clean Air Act (FCAA), to reduce emissions of criteria pollutants for which SCAB is in non-attainment. To reduce such emissions, the SCAQMD adopted the 2022 Air Quality Management Plan (AQMP) in December 2022, as an update to the 2016 AQMP. The 2022 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving

State and national air quality standards. The AQMP is a regional and multi-agency effort including the SCAQMD, the California Air Resources Board (CARB), the Southern California Association of Governments (SCAG), and the EPA. The 2022 AQMP's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's Connect SoCal (2020-2045 RTP/SCS)[7], updated emission inventory methodologies for various source categories, and SCAG's growth forecasts. SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is subject to the SCAQMD's AQMP.

Criteria for determining consistency with the AQMP are defined by the following indicators:

- **Consistency Criterion No. 1**: A 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 the timely attainment of the AQMP's air quality standards or the interim emissions reductions.

- **Consistency Criterion No. 2**: A proposed project would not exceed the AQMP's assumptions or increments based on the years of the project build-out phase.

Consistency Criterion No. 1 refers to the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As shown in Tables 4.3-3 and 4.3-4, the proposed Project construction and operational emissions would be below SCAQMD's thresholds. As the Project would not generate localized construction or regional construction or operational emissions that would exceed SCAQMD thresholds of significance, the Project would not violate any air quality standards. Thus, no impact would occur, and the Project would be consistent with the first criterion.

Consistency Criterion No. 2 refers to SCAG's growth forecasts and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG's growth projections, which are based, in part, on the general plans of cities located within the SCAG region. Therefore, projects that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP.

With respect to determining consistency with Consistency Criterion No. 2, it is important to recognize that air quality planning within the air basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Determining whether or not a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

[7] Since initiation of the analysis presented in this Initial Study, SCAG adopted Connect SoCal 2024 (2024–2050 RTP/SCS). However, the 2022 AQMP utilizes growth forecasts and measures from Connect SoCal 2020 (2020-2045 RTP/SCS). Therefore, for purposes of this Initial Study and the air quality analysis, Connect SoCal 2020 is relevant and appliable to consistency with the 2022 AQMP.

1. *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?*

Growth projections included in the 2022 AQMP form the basis for the projections of air pollutant emissions and are based on the General Plan land use designations and SCAG's Connect SoCal 2020-2045 RTP/SCS demographics forecasts. The population, housing, and employment forecasts within the 2020-2045 RTP/SCS are based on local general plans as well as input from local governments, such as the City of Aliso Viejo. The SCAQMD has incorporated these same demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment) into the 2022 AQMP.

As discussed in Section 4.14, *Population and Housing*, the Project would be within the population growth projections anticipated and planned for by local and regional planning documents and would not induce substantial unplanned population growth in the area. Thus, the Project would not increase growth beyond the AQMP's projections.

2. *Would the project implement all feasible air quality mitigation measures?*

The proposed Project would result in less than significant air quality impacts. Compliance with all feasible emission reduction measures identified by the SCAQMD would be required as identified in Responses (b) and (c). As such, the proposed Project meets this 2022 AQMP consistency criterion.

3. *Would the project be consistent with the land use planning strategies set forth in the AQMP?*

Project construction activities would generate short-term emissions of criteria air pollutants. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance. The Project site is currently developed with surface parking, landscaping, and improvements. The Project proposes to remove the existing surface parking, landscaping, and improvements and construct a mixed-use development consisting of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space. Project-related construction activities would include demolition, grading, building construction, paving, architectural coating, and landscaping. This short-term and minor construction would not exceed the SCAQMD's daily emission thresholds at the regional level, and therefore impacts associated with Project construction emissions would be less than significant. As such, the proposed Project would not delay the timely attainment of air quality standards or 2022 AQMP emissions reductions.

In conclusion, the determination of 2022 AQMP consistency is primarily concerned with the long-term influence of a project on air quality in the air basin. The proposed Project would not result in a long-term impact on the region's ability to meet State and federal air quality standards. Further, the proposed Project's long-term influence on air quality in the air basin would also be consistent with the SCAQMD and SCAG's goals and policies and is considered consistent with the 2022 AQMP. Therefore, the Project would be consistent with the above criteria and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact.

Construction Emissions

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project site include ozone-precursor pollutants (i.e., Volatile Organic Compounds [VOC] and NOx) and PM_{10} and $PM_{2.5}$. Construction-generated emissions are short term and temporary, lasting only while construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

For purposes of this analysis, the duration of the proposed Project's construction activities was estimated to last approximately 29 months. The Project's construction-related emissions were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Proposed Project demolition, site grading, building construction, and paving phases are anticipated to begin in 2025. Building construction and architectural coating were estimated to begin in 2026 and extend into 2027. The demolition phase was anticipated to last two weeks; the grading three months; building construction approximately 25 months; paving approximately two months; and architectural coating phase approximately 10 months. Although the exact construction timeframe is currently unknown, the 2025 construction start date used in the modeling results in a conservative analysis because CalEEMod uses cleaner emissions factors in future years due to improved emissions controls and fleet turnover; refer to Appendix A for additional information regarding the construction assumptions used in this analysis.

The Project's predicted maximum daily construction-related emissions are summarized in Table 4.3-3, *Construction-Related Emissions (Maximum Pounds Per Day)*.

As shown in Table 4.3-3, all criteria pollutant emissions would remain below their respective thresholds. While impacts would be considered less than significant, the proposed Project would be subject to compliance with SCAQMD Rules 402 (Public Nuisance), 403 (Fugitive Dust), and 1113 (Architectural Coatings), which would further reduce specific construction-related emissions. As the proposed Project emissions would not worsen ambient air quality, create additional violations of federal and State standards, or delay SCAB's goal for meeting attainment standards, impacts associated with Project construction emissions would be less than significant.

Table 4.3-3
Construction-Related Emissions (Maximum Pounds Per Day)

Construction Activity	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Sulfur Oxides (SOx)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
2025 (Demolition, Grading, Building Construction, Paving)	3.54	25.5	47.8	0.06	6.63	2.15
2026 (Building Construction, Architectural Coatings)	16.2	16.2	40.3	0.05	6.97	1.98
2027 (Building Construction, Architectural Coatings)	16.0	15.3	38.7	0.05	6.92	1.93
Maximum Daily	**16.2**	**25.5**	**47.8**	**0.06**	**6.97**	**2.15**
SCAQMD Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Source: CalEEMod version 2022.1; refer to Appendix A for model outputs.						

Operational Emissions

The Project's operational emissions would be associated with mobile, energy, and area sources. Energy source emissions include electricity and natural gas for heating and cooling; area sources include gasoline-powered landscaping and maintenance equipment, and consumer products (such as household cleaners); and mobile sources emissions are generated from vehicle operations associated with Project operations.

CalEEMod estimated unmitigated emissions from Project operations are summarized in Table 4.3-4, *Operational-Related Emissions (Maximum Pounds Per Day)*. As shown in Table 4.3-4, emission calculations generated from CalEEMod demonstrate that Project operations would not exceed the SCAQMD thresholds for any criteria air pollutants. Therefore, Project operational impacts would be less than significant.

Table 4.3-4
Operational-Related Emissions (Maximum Pounds Per Day)

Emissions Source	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Sulfur Oxides (SOx)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
Area Source	14.3	0.29	32.1	<0.01	0.03	0.02
Energy Source	0.03	0.52	0.44	<0.01	0.04	0.04
Mobile Source	6.23	4.71	50.7	0.13	12.9	3.33
Total	**20.6**	**5.23**	**83.2**	**0.14**	**13.0**	**3.39**
SCAQMD Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Source: CalEEMod version 2022.1; refer to Appendix A for model outputs.						

Cumulative Short-Term Emissions

SCAB is designated nonattainment for O_3, PM_{10}, and $PM_{2.5}$ for State standards and nonattainment for O_3 and $PM_{2.5}$ for Federal standards. As discussed above, the Project's construction-related emissions by themselves would not exceed the SCAQMD significance thresholds for criteria pollutants.

Since these thresholds indicate whether individual Project emissions have the potential to affect cumulative regional air quality, it can be expected that the Project-related construction emissions would not be cumulatively considerable. The SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the AQMP pursuant to the federal Clean Air Act mandates. Fugitive dust controls would be utilized during construction, including frequent water applications. SCAQMD rules, mandates, and compliance with adopted AQMP emissions control measures would also be imposed on construction projects throughout the SCAB, which would include related cumulative projects. As concluded above, the Project's construction-related impacts would be less than significant. Compliance with SCAQMD rules and regulations would further minimize the proposed Project's construction-related emissions. Therefore, Project-related construction emissions, in combination with those from other projects in the area, would not substantially deteriorate the local air quality. The Project's construction-related emissions would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

Cumulative Long-Term Impacts

The SCAQMD has not established separate significance thresholds for cumulative operational emissions. The nature of air emissions is largely a cumulative impact. As a result, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, individual project emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the operational thresholds of significance based on the level above which individual project emissions would result in a cumulatively considerable contribution to SCAB's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution to a significant cumulative impact.

As shown in Table 4.3-4, the Project's operational emissions would not exceed SCAQMD thresholds. As a result, the Project's operational emissions would not result in a cumulatively considerable contribution to significant cumulative air quality impacts. Additionally, adherence to SCAQMD rules and regulations would alleviate potential impacts related to cumulative conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Localized Construction Significance Analysis

As discussed, the nearest sensitive receptor to the Project site is the Vantis Residences, located approximately 350 feet west of the Project site at its nearest location. The nearest land uses with the potential for workers to be present for up to eight hours, include commercial and retail uses less than 100 feet from the Project site, within The Commons commercial center.

To identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance.[8] The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific emissions.

LST analysis for construction is applicable for projects that disturb 5.0 acres or less on a single day, such as the proposed Project, which is 4.4 acres. The maximum daily disturbed acreage for the Project would be less than 5.0 acres. The appropriate SRA for the LSTs is the SCAQMD SRA 20 (Central Orange County Coastal), since SRA 20 includes the Project site. LSTs apply to CO, NOx, PM_{10}, and $PM_{2.5}$.

The SCAQMD's methodology 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 emissions included in the CalEEMod "on-site" emissions outputs were considered. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, as recommended by the SCAQMD, LSTs for receptors located at a receptor distance of 100 meters was used for PM_{10} and $PM_{2.5}$ which roughly corresponds with the distance to the nearest residential sensitive receptor where occupants may be present for 24-hour periods (Vantis Residences); and a receptor distance of 25 meters was used for NOx and CO, which roughly corresponds with the distance to nearby receptors where workers and other users may be present for one to eight hours. Table 4.3-5, *Localized*

[8] South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, June 2003 revised July 2008).

Significance of Construction Emissions (Maximum Pounds per Day), presents the results of localized emissions during proposed Project construction.

Table 4.3-5
Localized Significance of Construction Emissions (Maximum Pounds per Day)[1]

Construction Activity	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
Demolition (2025)	21.9	24.8	2.83	1.18
Grading (2025)	13.6	16.5	3.15	1.85
Building Construction (2025)	11.3	14.1	0.47	0.43
Paving (2025)	7.8	10.5	0.34	0.31
Overlap of Building Construction (2025) and Paving (2025)	19.1	24.6	0.81	0.71
Building Construction (2026)	10.7	14.1	0.41	0.38
Architectural Coatings (2026)	1.14	1.51	0.13	0.03
Overlap of Building Construction (2026) and Paving (2026)	11.84	15.61	0.44	0.41
Building Construction (2027)	10.2	14.0	0.36	0.34
Architectural Coatings (2027)	1.11	1.50	0.03	0.02
Overlap of Building Construction (2027) and Architectural Coatings (2027)	11.31	15.50	0.39	0.36
Maximum Localized Emissions	**21.9**	**24.8**	**3.15**	**1.85**
Localized Significance Threshold	**92**	**647**	**27**	**9**
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod Version 2022.1; refer to Appendix A for model outputs.
Notes:
1. Emissions reflect on-site construction emissions only, per SCAQMD guidance.

As shown in Table 4.3-5, the emissions of these pollutants on the peak day of Project construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Further, the Project would be subject to compliance with SCAQMD Rules 402 (Public Nuisance), 403 (Fugitive Dust), and 1113 (Architectural Coatings), which would further reduce specific construction-related emissions. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during construction activities.

Localized Operational Significance Analysis

The on-site operational emissions are compared to the LSTs in Table 4.3-6, *Localized Significance of Operational Emissions (Maximum Pounds per Day)*. Table 4.3-6 shows that the maximum daily emissions of these pollutants during Project operations would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the proposed Project would result in a less than significant impact concerning LSTs during operational activities.

Table 4.3-6
Localized Significance of Operational Emissions (Maximum Pounds per Day)

Emission Sources	Nitrogen Oxides (NOx)	Carbon Monoxide (CO)	Coarse Particulates (PM_{10})	Fine Particulates ($PM_{2.5}$)
On-Site Emissions	0.81	32.51	0.34	0.24
SCAQMD Localized Screening Thresholds	**92**	**647**	**7**	**3**
Exceed SCAQMD Threshold?	**No**	**No**	**No**	**No**
Source: CalEEMod Version 2022.1; refer to Appendix A for model outputs.				

The Project would not involve the use, storage, or processing of carcinogenic or non-carcinogenic toxic air contaminants, and no significant toxic airborne emissions would result from operation of the proposed Project. Construction activities are subject to the regulations and laws relating to toxic air pollutants at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations of these emissions. Therefore, impacts associated with the release of toxic air contaminants would be less than significant.

Criteria Pollutant Health Impacts

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (Sierra Club v. County of Fresno [Friant Ranch, L.P.] [2018] 6 Cal.5th 502). The SCAQMD has set its CEQA significance thresholds based on the FCAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the SCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program was created by the FCAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based federal ambient air quality standards. The federal ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts would occur.

NOx and VOC are precursor emissions that form ozone in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. Breathing ground-level ozone can result in health effects that include: reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

According to SCAQMD's 2022 AQMP, ozone, NOx, and VOC have been decreasing in the SCAB since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled (VMT) in the SCAB continue to increase, NOx and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NOx emissions from electric utilities have also decreased due to the use of cleaner fuels and renewable energy. In addition, since NO_X emissions also lead to the formation of $PM_{2.5}$, the NOx reductions needed to meet the ozone standards will likewise lead to improvement of $PM_{2.5}$ levels and attainment of $PM_{2.5}$ standards.

SCAQMD's air quality modeling demonstrates that NOx reductions prove to be much more effective in reducing ozone levels and will also lead to a significant decrease in $PM_{2.5}$ concentrations. NOx-emitting stationary sources regulated by the SCAQMD include Regional Clean Air Incentives Market (RECLAIM) facilities (e.g., refineries, power plants, etc.), natural gas combustion equipment (e.g., boilers, heaters, engines, burners, flares) and other combustion sources that burn wood or propane. The 2022 AQMP identifies robust NOx reductions from new regulations on RECLAIM facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NOx emissions levels achievable but there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and backup power equipment. The AQMP plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies.

As previously discussed, Project emissions would be less than significant and would not exceed SCAQMD thresholds; refer to Table 4.3-3 and Table 4.3-4. Localized effects of on-site Project emissions on nearby receptors were also found to be less than significant; refer to Table 4.3-5 and Table 4.3-6. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable NAAQS or CAAQS. LSTs were developed by SCAQMD based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The ambient air quality standards establish the levels of air quality necessary, with an adequate margin of safety, to protect public health, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. As shown above, Project-related emissions would not exceed the regional thresholds or LSTs, and therefore would not exceed the ambient air quality standards or cause an increase in the frequency or severity of existing violations of air quality standards. Therefore, sensitive receptors would not be exposed to criteria pollutant levels more than the health-based ambient air quality standards.

Construction-Related Diesel Particulate Matter

Project construction would generate diesel particulate matter (DPM) emissions from the use of off-road diesel equipment required. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to toxic air contaminants emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer.

The use of diesel-powered construction equipment would be temporary and episodic. The duration of exposure would be short and exhaust from construction equipment would dissipate rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. The closest sensitive receptors to the Project site are located approximately 350 feet west of the Project site at its nearest location.

California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction activities would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes to further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. For these reasons, DPM generated by Project construction activities, in and of itself, would not expose sensitive receptors to substantial amounts of air toxins and the proposed Project would result in a less than significant impact.

Carbon Monoxide Hotspots

An analysis of CO "hot spots" is needed to determine whether the change in the level of service of an intersection resulting from the proposed Project would have the potential to result in exceedances of the CAAQS or NAAQS. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The 2016 AQMP is the most recent version that addresses CO concentrations. As part of the SCAQMD CO Hotspot Analysis, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with approximately 100,000 average daily traffic (ADT), was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35-ppm Federal standard. The proposed Project would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD's CO Hotspot Analysis. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 ADT, it can be reasonably inferred that CO hotspots would not be experienced at any Project area intersections from the new 2,081 ADT attributable to the proposed Project. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact.

Construction

Odors that could be generated by construction activities are required to follow SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

During construction, emissions from construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities may generate odors. However, these odors would be temporary, are not expected to affect a substantial number of people and would disperse rapidly. Therefore, impacts related to odors associated with the Project's construction-related activities would be less than significant.

Operational

The SCAQMD CEQA Air Quality Handbook identifies certain land uses as sources of odors. These land uses include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Project proposes development of residential and commercial uses, which would not involve the types of uses that would emit objectionable odors affecting substantial numbers of people. The Project would not include any of the land uses that have been identified by the SCAQMD as odor sources. Therefore, the proposed Project would not create objectionable odors and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.4 Biological Resources

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

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

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

Less Than Significant Impact. The Project site is currently developed with surface parking, landscaping, and improvements as part of a larger commercial center development. The western site boundary consists of a landscaped slope with groundcover, bushes, and trees. Landscape planters with ornamental landscaping and trees are located within the southeastern portion of the site along the Town Center entrance and dispersed throughout the parking aisles within the site. Vegetation within the site is not associated with natural vegetation communities. The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space. The Project proposes landscaping including groundcover, bushes, and trees located around the northern, eastern, western, and southern perimeters of the building.

As indicated in the Aliso Viejo General Plan FEIR, much of the City is comprised of urbanized or disturbed lands that generally have low habitat value for wildlife. The General Plan FEIR identifies the Aliso and Wood Canyons Wilderness Park as being a significant source of ecological and biological resources. The Project site is not located within the vicinity of the Aliso and Wood Canyons Wilderness Park and is physically separated from this area by extensive development. The General Plan FEIR does not identify the Project site as containing important vegetative communities, including scrub, grassland, chaparral, woodland, or riparian habitat or vernal pools.[9] The disturbed and maintained condition of the Project site is generally not suitable for candidate, sensitive, or special status plant or wildlife species. The area surrounding the Project site is generally urbanized and developed with commercial uses and roadway infrastructure. West of the Project site is land containing open space trails. This area is physically separated from the Project site by Enterprise (a public street) and landscaped hillsides. Further, the Project does not propose any improvements or development within this area. Therefore, the proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any special status plant or wildlife species, any riparian habitat or other sensitive natural community, or on any State or federally protected wetlands.

[9] Cotton/Bridges/Associates, *Final Environmental Impact Report Aliso Viejo General Plan*, April 2004. Figure 5.3-1.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. As previously stated, the Project site is currently developed with surface parking, landscaping, and improvements as part of a larger commercial center development. The Project site does not contain an open body of water that serves natural habitat for any native resident or migratory fish. The western site boundary consists of a landscaped slope with groundcover, bushes, and trees. Landscape planters with ornamental landscaping and trees are located within the southeastern portion of the site along the Town Center entrance and dispersed throughout the parking aisles within the site. The disturbed and maintained condition of the Project site is generally not suitable for wildlife species. Additionally, the site is surrounded by urban development and is not part of a known migratory wildlife corridor or native wildlife nursery.

Mature trees within the Project site could provide habitat for migratory birds during nesting season. Development of the Project would require the removal of ornamental vegetation onsite, including trees distributed within the surface parking area. Thus, the Project could result in potential impacts to nesting birds protected by the Migratory Bird Treaty Act (MBTA). The MBTA prohibits activities that result in the direct take (defined as killing or possession) of a migratory bird. Project construction activities have the potential to impact nesting birds if construction activities occur during the nesting season.

The Project would be required to comply with the MBTA and implement Mitigation Measure BIO-1 to avoid disturbance of nesting birds and to protect nesting birds if they are present onsite during construction. Specifically, in conformance with the MBTA, tree removal activities would take place outside of the nesting season (February 15 to September 15) to the greatest extent practicable. To the extent that vegetation removal activities must occur during the nesting season, a biological monitor would be present during the removal activities to ensure that no active nests would be impacted, or a pre-construction nesting bird survey is to be completed within 14 days prior to construction to document all active bird nests. If active nests are found, a buffer (up to 500 feet, determined by the biologist) would be established until the fledglings have left the nest. Implementation of Mitigation Measure BIO-1 and compliance with the existing regulatory environment would ensure that Project impacts to native resident or migratory avian species would be less than significant.

Mitigation Measures:

BIO-1: To avoid impacts to nesting birds and to comply with the Migratory Bird Treaty Act (MBTA), clearing of vegetation and removal of trees should occur outside of the bird nesting season (February 15 to September 15). If this avoidance schedule is not feasible, the Project Applicant shall retain a qualified biologist and carry out the following activities:

A qualified biologist shall conduct a pre-construction nesting bird survey no more than 14 days prior to initiating ground disturbance activities. The survey will consist of full coverage of the proposed disturbance limits and up to a 500-foot buffer area, determined by the biologist and taking into account the species nesting in the area and the habitat present.

If no active nests are found, the biologist shall document the negative results with a brief letter report, submitted to the City of Aliso Viejo Community Development Department, before construction can proceed. No additional measures are required in this scenario.

If "occupied" nests are found, their locations shall be mapped, species documented, and, to the degree feasible, the status of the nest (e.g., incubation of eggs, feeding of young, near fledging) recorded. The biologist shall establish a no-disturbance buffer around each active nest. The buffer area will be determined by the biologist based on the species present, surrounding habitat, and type of construction activities proposed in the area.

No construction or ground disturbance activities shall be conducted within the buffer until the biologist has determined the nest is no longer active and has informed the construction supervisor that activities may resume. The biologist shall document and submit a brief letter report to the City of Aliso Viejo Community Development Department, before activities may resume.

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

No Impact. The City of Aliso Viejo does not have any local policies or ordinances specific to tree preservation, but the Aliso Viejo General Plan Conservation/Open Space Element does contain Goal COS-3 and related policies aimed at the protection of ecological and biological resources. In addition, The Commons Specific Plan contains development standards, guidelines, and regulations related to landscaping within the Specific Plan area, including requirements that landscaping and street trees be incorporated and maintained as part of overall site design.

As previously stated, the Project site is currently developed with surface parking, landscaping, and improvements as part of a larger commercial center development. The western site boundary consists of a landscaped slope with groundcover, bushes, and trees. Landscape planters with ornamental landscaping and trees are located within the southeastern portion of the site along the Town Center entrance and dispersed throughout the parking aisles within the site. The Project proposes to remove some of the existing landscaping to construct a mixed-use development and associated parking and improvements. The Project proposes new landscaping in accordance with The Commons Specific Plan, including groundcover, bushes, and trees located around the northern, eastern, western, and southern perimeters of the building. Thus, the Project would not conflict with any local policies or ordinances protecting biological resources; no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. As indicated in the Aliso Viejo General Plan FEIR, portions of the City lie within the Coastal subregion of the Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP); however, the Project site is not located within or adjacent to designated Non-Reserve Open Space or NCCP Habitat Reserve within the NCCP/HCP. The Project site is currently developed and located within an urbanized area, and is not located within the boundaries of the NCCP/HCP reserve system. As

such, the proposed Project would not conflict with the NCCP/HCP or other approved local, regional, or State habitat conservation plan. No impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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4.5 Cultural Resources

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

This section is based on the *Cultural and Paleontological Resources Assessment Report for the Avalon Bay (AVB) Commons Project, City of Aliso Viejo, Orange County, California* (Cultural Resources Assessment), prepared by Cogstone, dated March 2024 and included in its entirety as Appendix B, Cultural Resources Assessment.

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

No Impact. According to CEQA Guidelines Section 15064.5, a historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant.

A search of the California Historic Resources Information System (CHRIS) was performed at the South Central Coastal Information Center (SCCIC) that includes the Project site and a one-half mile radius. Results of the records search indicate that four previous cultural resource studies had been completed within the Project site area, while an additional 13 previously recorded cultural resources were identified within a one-half-mile radius of the Project site. No cultural resources have been recorded within the Project site. Outside of the Project site, two cultural resources, both of which are prehistoric archaeological sites, have been previously documented within a quarter- to half-mile radius of the Project site. In addition to the SCCIC records search, additional sources were consulted, including the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), Built Environment Resource Directory (BERD), California Historical Landmarks (CHL), and the California Points of Historical Interest (CPHI). Review of historic-era maps and documents and aerial photographs were also conducted. Based on the results of the records search and review of additional sources, the Cultural Resources Assessment concluded that the Project site has a low sensitivity for buried historic-aged cultural deposits.

For purposes of identifying potential on-site resources, a survey of the Project site was conducted on February 28, 2024 using two- to five-meter transects in all non-hardscaped or landscaped area. All

undeveloped ground surface areas within the ground disturbance portion of the Project site were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools or fire-affected rock), soil discoloration that might indicate the presence of a cultural midden, soil depressions and features indicative of the former presence of structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Existing ground disturbances (e.g., cutbanks, ditches, animal burrows, etc.) were visually inspected. No cultural resources were observed during the pedestrian survey.

The Project site is currently developed with surface parking and landscaping. As no historic or potentially historic built environment resources are located within the site, the Project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5 and no impact would occur.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. As stated above, results of the records search indicate that four previous cultural resource studies had been completed within the Project site area, while an additional 13 previously recorded cultural resources were identified within a one-half-mile radius of the Project site. No cultural resources have been recorded within the Project site. Outside of the Project site, two cultural resources, both of which are prehistoric archaeological sites, have been previously documented within a quarter- to half-mile radius of the Project site. A Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on December 18, 2023. On January 18, 2024, the NAHC responded with a positive search result, indicating that a tribal cultural resource is located within the same township, range, and section as the Project site. A pedestrian survey of the Project site was conducted on February 28, 2024, yielding no evidence of cultural resources.

The Cultural Resources Assessment concluded that, based on the results of the records search and review of additional sources, the Project site has a low sensitivity for buried prehistoric archaeological resources. However, the positive SLF search result may indicate that there are tribal cultural resources present that are unknown to the SCCIC that elevate the cultural sensitivity of the Project site.

The Project site has been altered by previous ground disturbance and is currently developed with surface parking and landscaping. As indicated in the Cultural Resources Assessment, a cultural resource records search and pedestrian survey identified no archaeological resources within the Project site. As such, archaeological resources are not anticipated to occur; however, there is the potential for unknown or undiscovered resources to be uncovered through ground-disturbing construction activities. Should ground disturbing activities during Project construction encounter archaeological resources, Mitigation Measure CUL-1 would require all work within 50 feet of the find to be suspended until the resource is evaluated by a qualified archaeologist. Construction would not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Director of Community Development, or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological resources. With implementation of Mitigation Measure CUL-1, the Project would not cause a substantial adverse change in the significance

of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 and impacts would be less than significant.

For potential impacts related to tribal cultural resources, refer to Section 4.18, *Tribal Cultural Resources*.

Mitigation Measures:

CUL-1: If previously unidentified cultural resources are encountered during ground-disturbing activities, work within 50 feet of the find shall cease and the Director of Community Development shall be notified and a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology, shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP) eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the Project, additional work such as data recovery excavation may be warranted to mitigate any significant impacts. In the event an identified cultural resource is Native American in origin, the qualified archaeologist shall consult with the Project owner and the Director of Community Development, or designee, to implement Native American consultation procedures. Construction shall not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Director of Community Development, or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological resources.

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

Less Than Significant Impact. There are no dedicated cemeteries within the Project site or surrounding area. Most Native American human remains are found in association with prehistoric archaeological sites. As discussed above, there are no known archaeological resources within the Project site. Based on the results of the records search and review of additional sources, the Project site is assessed to have a low sensitivity for buried prehistoric archaeological resources. The Project site has been altered by previous ground disturbance and is currently developed with surface parking and landscaping. Due to the extensive ground disturbance that has occurred on the Project site and in the surrounding area associated with construction of the existing development, the potential for the proposed Project to disturb previously undiscovered human remains is unlikely.

In the unlikely event that human remains are encountered during project development, those remains would require proper treatment, in accordance with applicable laws. These include California Health and Safety Code Section 7050.5, Public Resources Code Section 5097.98, and the California Code of Regulations Section 15064.5(e), which mandate procedures of conduct following the discovery of human remains on non-federal lands. According to these applicable regulations, should human remains be encountered, all work in the immediate vicinity of the burial would be required to cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The County Coroner would be immediately notified and must then determine whether the remains are Native American in origin. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who would in turn, notify the person they identify as the Most-Likely-Descendent of any human remains.

Following compliance with State regulations, which detail the appropriate actions necessary in the event human remains are encountered, impacts in this regard would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.6 Energy

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

This section is based primarily on the *Technical Air Quality and GHG Emissions Calculations* (CalEEMod Results), prepared by Noah Tanski Environmental Consulting, dated December 2023, and included in its entirety as Appendix A, CalEEMod and Energy Data.

REGULATORY FRAMEWORK

Federal and State agencies regulate energy use and consumption through various means and programs. At the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy, and the U.S. EPA are three federal agencies with substantial influence over energy policies and programs. At the State level, the California Public Utilities Commission (CPUC) and the California Energy Commissions (CEC) are two agencies with authority over different aspects of energy. Key federal and State energy-related laws and plans are summarized below.

California Building Energy Efficiency Standards (Title 24)
The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as "Title 24," became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The Title 24 standards require installation of energy efficient windows, insulation, lighting, ventilation systems, rooftop solar panels, and other features that reduce energy consumption in homes and businesses.

California Green Building Standards (CALGreen)
The 2022 California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as CALGreen, went into effect on January 1, 2023. CALGreen is the first-in-the-nation mandatory green buildings standards code. The California Building Standards Commission developed CALGreen in an effort to meet the State's landmark initiative Assembly Bill (AB) 32 goals, which established a comprehensive program of cost-effective reductions of greenhouse gas (GHG) emissions to 1990 levels by 2020. CALGreen was developed to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, and healthier places to live and work; (3) reduce energy and

water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Senate Bill 100
Senate Bill (SB) 100 (Chapter 312, Statutes of 2018) requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt-hours (kWh) of those products sold to their retail end-use customers achieve 44 percent of retail sales by December 31, 2024; 52 percent by December 31, 2027; 60 percent by December 31, 2030; and 100 percent by December 31, 2045. The bill requires the CPUC, CEC, CARB, and all other State agencies to incorporate the policy into all relevant planning. In addition, SB 100 requires the CPUC, CEC, and CARB to utilize programs authorized under existing statutes to achieve that policy and, as part of a public process, issue a joint report to the Legislature by January 1, 2021, and every four years thereafter, that includes specified information relating to the implementation of SB 100.

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?

Less Than Significant Impact. The means to achieve the goal of conserving energy include decreasing overall energy consumption, decreasing reliance on natural gas and oil, and increasing reliance on renewable energy sources. In particular, the proposed Project would be considered "wasteful, inefficient, and unnecessary" if it were to violate State and federal energy standards and/or result in significant adverse impacts related to project energy requirements, energy inefficiencies, energy intensiveness of materials, cause significant impacts on local and regional energy supplies or generate requirements for additional capacity, fail to comply with existing energy standards, otherwise result in significant adverse impacts on energy resources, or conflict or create an inconsistency with applicable plan, policy, or regulation.

The Project proposes to remove existing surface parking, landscaping, and improvements to construct a mixed-use development and associated parking and improvements. The amount of energy used at the Project site would directly correlate to the size of the proposed structures, the energy consumption of associated facility uses, and outdoor lighting. Other major sources of Project energy consumption include fuel used by vehicle trips generated during Project construction and operation, and fuel used by off-road construction vehicles during construction.

The following discussion provides calculated levels of energy use expected for the proposed Project, based on commonly used modelling software. It should be noted that many of the assumptions provided by CalEEMod are conservative relative to the Project; thus, this discussion provides a conservative estimate of proposed Project emissions.

Project Construction

During Project construction, energy would be consumed in connection with the conveyance of water used for dust control and on a limited basis, powering lights, electronic equipment, or other construction activities necessitating electrical power. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction worker travel to and from the Project site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities). Construction activities, including those anticipated to construct the Project, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support Project construction activities, and there would be no associated demand.

As shown in Table 4.6-1, *Project Construction Energy Usage*, a total of approximately 5,558 kWh of electricity is anticipated to be consumed during Project construction. The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. When not in use, electric equipment would be powered off so as to avoid unnecessary or wasteful energy consumption.

Table 4.6-1
Project Construction Energy Usage

Fuel Type	Quantity
Electricity	
Water Consumption (Dust Control)	5,558 kWh
Gasoline	
On-Road Construction Equipment	174,737 gallons
Off-Road Construction Equipment	0 gallons[1]
Total Gasoline	**174,737 gallons**
Diesel	
On-Road Construction Equipment	75,168 gallons
Off-Road Construction Equipment	30,392 gallons
Total Diesel	**105,560 gallons**
Total Petroleum-Based Fuel	**280,297 gallons**

Source: Detailed calculations are included in Appendix A.
Notes:
1. Off-road construction equipment uses diesel fuel.

Project construction would involve off-road construction vehicles that use diesel fuel. The Project would also generate on-road vehicle trips during Project construction (from construction workers and vendors). As shown in Table 4.6-1, on- and off-road vehicles would consume an estimated 174,737 gallons of gasoline and approximately 105,560 gallons of diesel fuel throughout the Project's construction.

Project Operation

During operation of the Project, energy would be consumed for multiple purposes, including, but not limited to HVAC, lighting, and the use of electronics, equipment, and machinery. Energy would also be consumed during Project operations related to water usage, solid waste disposal, and vehicle trips.

Electricity and natural gas used by the Project would be used primarily to power on-site buildings. Total annual natural gas (kBTU) and electricity (kWh) usage associated with the operation of the Project are shown in Table 4.6-2, *Project Operational Natural Gas and Electricity Usage*.

Table 4.6-2
Project Operational Natural Gas and Electricity Usage

Emissions	Project Annual Consumption	Orange County Annual Consumption (2022)	Percent Increase
Natural Gas Consumption (kBTU)	1,941,585	57,245,474,400	0.003%
Electricity Consumption (kWh/year)	2,201,311	20,243,721,856	0.011%
Sources: CalEEMod version 2022.1 (refer to Appendix A for model outputs); California Energy Commission, *Electricity Consumption by County*, https://ecdms.energy.ca.gov/elecbycounty.aspx, accessed April 19, 2024; California Energy Commission, *Natural Gas Consumption by County*, https://ecdms.energy.ca.gov/gasbycounty.aspx, accessed April 19, 2024. Notes: kWh = kilowatt-hour; kBTU = 1,000 British Thermal Units			

As shown in Table 4.6-2, Project operational natural gas usage is forecast to represent an approximately 0.011 percent increase above the County's typical annual electricity consumption, and approximately 0.003 percent increase above the county's typical natural gas consumption. These increases are minimal in the context of the County as a whole.

The Project would generate vehicle trips during its operational phase. As shown in Table 4.6-3, *On-Road Mobile Fuel Generated by Project Operation,* the Project would generate vehicle trips that would use approximately 320,018 gallons of gasoline and diesel per year.

Table 4.6-3
On-Road Mobile Fuel Generated by Project Operation

Fuel Type	Gallons Per Year
Gasoline	256,437
Diesel	63,581
Total	**320,018**
Source: Detailed calculations are included in Appendix A.	

Conclusion

The proposed Project would use energy resources for the operation of the Project building, for on-road vehicle trips (e.g. gasoline and diesel fuel) generated by the Project (both during Project construction and operation), and from off-road construction activities associated with the Project (e.g. diesel fuel). Each of these activities would require the use of energy resources. The Project would be responsible for conserving energy, to the extent feasible, and would be required to comply with Statewide and local measures regarding energy conservation, such as Title 24 building efficiency standards.

The proposed Project would be in compliance with all applicable federal, State, and local regulations regulating energy usage. For example, Southern California Edison (SCE) is responsible for the mix of energy resources used to provide electricity for its customers, and it is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy (e.g. solar and wind) within its energy portfolio. SCE has achieved at least a 33 percent mix of renewable energy resources, and will be required to achieve a renewable mix of at least 50 percent by 2030. Additionally, energy-saving regulations, including the latest State Title 24 building energy efficiency standards ("part 6"), would be applicable to the proposed Project. Other statewide measures, including those intended to improve the energy efficiency of the statewide passenger and heavy-duty truck vehicle fleet (e.g. the Pavley Bill and the Low Carbon Fuel Standard) are improving vehicle fuel economies, thereby conserving gasoline and diesel fuel. These energy savings would continue to accrue over time.

As a result, the Project would not result in any significant adverse impacts related to Project energy requirements, energy use inefficiencies, and/or the energy intensiveness of materials by amount and fuel type for each stage of the Project including construction, operations, maintenance, and/or removal. Both SCE, the electricity provider to the site, and Southern California Gas Company, the natural gas provider to the site, maintain sufficient capacity to serve the proposed Project. The Project would be required to comply with all existing energy efficiency standards, and would not result in significant adverse impacts on energy resources. Therefore, the proposed Project would not result in a wasteful, inefficient, or unnecessary of energy resources during Project construction or operation. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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4.7 Geology and Soils

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

This section is based primarily on the *Preliminary Geotechnical Due Diligence Study, Proposed Commons Mixed-Use Apartment Development, City of Aliso Viejo, California* (Preliminary Geotechnical Due Diligence Study), dated June 20, 2022, and *Preliminary Summary of Geotechnical Findings, Proposed Commons Mixed-Use Apartment Development, City of Aliso Viejo, California* (Preliminary Geotechnical Study), dated August 30, 2022, prepared by NMG Geotechnical, Inc., and included in their entirety as Appendix C, Geotechnical Studies.

The analysis for paleontological records is based on the *Cultural and Paleontological Resources Assessment Report for the Avalon Bay (AVB) Commons Project, City of Aliso Viejo, Orange County, California* (Cultural Resources Assessment), prepared by Cogstone, dated March 2024 and included in its entirety as Appendix B, Cultural Resources Assessment.

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

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

Less than Significant Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. The Act requires the State Geologist to establish regulatory zones, known as "Alquist-Priolo Earthquake Fault Zones," around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically 50 feet). According to the Preliminary Geotechnical Due Diligence Study, there are no known active faults mapped across the Project site, and the site is not located within a fault-rupture hazard zone as defined by the Alquist-Priolo Earthquake Fault Zoning Act. Based on review of published maps, historic aerial photographs, and topographic maps, the Preliminary Geotechnical Due Diligence Study concludes that the potential for primary ground rupture due to an earthquake is considered to be very low. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

2) Strong seismic ground shaking?

Less Than Significant Impact. The Project site is located in the seismically active southern California region and could be subjected to moderate to strong ground shaking in the event of an earthquake on one of the many active southern California faults. According to the Preliminary Geotechnical Study, the primary seismic hazard is the San Joaquin Hills Blind Thrust Fault. There are several other active and potentially active faults within the region, including the Newport-Inglewood (Offshore), Elsinore Glen Ivy, and Oceanside faults.

Pursuant to AVMC Chapter 13.02, *Building Regulations*, the City has adopted the 2022 California Building Code (CBC) and related codes. The Project would be required to comply with all applicable regulations in the 2022 CBC as amended by the AVMC, which includes design requirements to mitigate the effects of

potential hazards associated with seismic ground shaking. The City would review Project design and construction plans for compliance with the CBC and AVMC, as well as the recommendations of the soil engineering and engineering geology reports pursuant to AVMC Chapter 13.08, *Grading and Excavation Code*. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's plan review process, would ensure potential impacts associated with strong seismic ground shaking at the Project site would be reduced to a less than significant level.

Mitigation Measures: No mitigation measures are required.

3) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors involved in controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and depth to groundwater.

As indicated in the Preliminary Geotechnical Due Diligence Study, the Project site is not located in a seismic hazard zone for liquefaction. Groundwater in the form of seepage was previously encountered at a depth of 20 feet below the existing parking lot grades. Project construction and operation is not anticipated to increase the potential for liquefaction to occur. The Project would be required to comply with all applicable regulations in the CBC as amended by the AVMC, which would reduce the likelihood of impacts from seismic-related hazards, including liquefaction. Further, pursuant to AVMC Chapter 13.08, *Grading and Excavation Code,* the Project would incorporate applicable site-specific recommendations of the soil engineering and engineering geology reports, which would address any identified potential soil and geologic hazards. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4) Landslides?

Less Than Significant. Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. As indicated in the Preliminary Geotechnical Due Diligence Study, the buttress slope along the western boundary of the Project site is located within a seismic hazard zone for earthquake-induced landslides. The Study anticipates that slope stabilization measures conducted during prior grading of the buttress slope has adequately mitigated the potential for earthquake-induced landslides.

The proposed site plan reviewed as part of the Preliminary Geotechnical Study indicates significant cuts into the toe of the slope, up to 60 feet horizontally, which would essentially remove the earthen buttress and potentially create an unstable condition for the slope. In order to address the potential unstable slope condition, as part of the Project, an anchored retaining wall (i.e., tiebacks) would be constructed, separating the landscaped embankment along the west-southwest boundary of the Project site from the proposed mixed-use building. Further, the Project would be required to comply with all applicable regulations in the CBC as amended by the AVMC, as well as the recommendations of the soil engineering and engineering geology reports pursuant to AVMC Chapter 13.08, *Grading and Excavation Code*. Compliance with the City's established regulatory framework and standard engineering practices and

design criteria, which would be verified through the City's plan review process, would reduce the likelihood of impacts from seismic-related hazards. Therefore, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The Project site is currently developed with surface parking, landscaping, and improvements associated with The Commons commercial center. Grading and earthwork activities associated with Project construction would expose soils to potential short-term erosion by wind and water. Project construction activities would be required to comply with applicable City requirements to control erosion and reduce or eliminate stormwater runoff containing sediment, including AVMC 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 applicable water quality measures, including the City's Water Quality Ordinance (AVMC Chapter 7.35, *Stormwater Management*), which include conditions and requirements established by the City related to the reduction or elimination of storm water runoff pollutants during construction and operational phases of the Project. In accordance with AVMC Section 7.35.070, *Control of urban runoff- Construction projects*, prior to issuance of a grading permit, the Project Applicant would be required 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 obtain and submit evidence of coverage under the Statewide Construction General Permit.

Development of the Project would increase the amount of impervious area when compared to existing conditions associated with the proposed structure, hardscape, landscape, and reduced hillside area; refer to Section 4.10, *Hydrology and Water Quality*. The Project would be required to implement operational BMPs in accordance with the Project's Water Quality Management Plan (WQMP) (refer to Section 4.10), including common area landscape management, which would ensure landscaped areas would be maintained and properly irrigated to reduce the amount of potential soil erosion or the loss of top soil. Following compliance with the established regulatory framework identified in the AVMC regarding stormwater and runoff pollution control and implementation of the Project's WQMP, potential impacts associated with soil erosion and the loss of topsoil would be less than significant.

Mitigation Measures: No mitigation measures are required.

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. Refer to Responses 4.7(a)(3) and 4.7(a)(4) regarding the potential for liquefaction and landslides, respectively.

Lateral spreading is a type of ground deformation that occurs when surface material extends or spreads on gentle slopes.[10] Ground shaking, especially when inducing liquefaction, may cause lateral spreading toward unsupported slopes.

Land subsidence is a gradual settling or sudden sinking of the Earth's surface due to removal or displacement of subsurface earth materials. Common causes of land subsidence include: aquifer-system compaction associated with groundwater withdrawals; drainage of organic soils; underground mining; and natural compaction or collapse.

The Project would be required to comply with all applicable regulations in the 2022 CBC as amended by the AVMC, which includes design requirements to mitigate the effects of potential soil and geologic hazards, including landslide, lateral spreading, subsidence, liquefaction, and seismic settlement. Further, pursuant to AVMC Chapter 13.08, *Grading and Excavation Code,* the Project would incorporate applicable site-specific recommendations of the soil engineering and engineering geology reports, which would address any identified potential soil and geologic hazards. The City would review Project design and construction plans for compliance with the CBC and the AVMC prior to construction activities. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's plan review process, would ensure potential impacts associated with a geologic unit or soil that is unstable or would become unstable at the Project site would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.

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. Expansive soils contain significant amounts of clay particles that swell considerably when wet and shrink when dried. Foundations constructed on these soils are subject to uplifting forces caused by the swelling. Without proper mitigation measures, heaving and cracking of both building foundations and slabs-on-grade could result. The Preliminary Geotechnical Study states that the bulk samples collected within the site indicate a "medium" expansion potential. However, it further notes the values are close to being considered as having a "high" expansion potential. Therefore "high" expansion potential should be expected at the Project site.

The Project would be required to comply with all applicable regulations in the 2022 CBC as amended by the AVMC. Further, pursuant to AVMC Chapter 13.08, *Grading and Excavation Code,* the Project would incorporate applicable site-specific recommendations of the soil engineering and engineering geology reports, which would address any identified potential soil and geologic hazards. The City would review Project design and construction plans for compliance with the CBC and the AVMC prior to construction activities. Thus, compliance with the City's established regulatory framework and standard engineering practices and design criteria, which would be verified through the City's plan review process, would ensure

[10] United States Geological Survey, *Lateral Spread*, https://www.usgs.gov/media/images/lateral-spread, accessed April 3, 2024.

potential impacts associated with expansive soils at the Project site would be reduced to a less than significant impact.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The Project would be served by the existing sewer system and would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact with Mitigation Incorporated. Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or diagnostically important. Significant fossils can include remains of large to very small aquatic and terrestrial vertebrates or remains of plants and animals previously not represented in certain portions of the stratigraphy. Assemblages of fossils that might aid stratigraphic correlation, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, and paleoclimatology is also critically important.

According to the General Plan FEIR, most of the City has been designated as an area of paleontological resource sensitivity by the Orange County General Plan. The Aliso Creek area and other portions of the City are highly fossiliferous with exposed outcrops of chitin shells (clams), mollusks, oyster shells, marine mammal bones, and sharks' teeth. In addition, largely intact sea lions and sea cow specimens have been discovered.

The Project site has been altered by previous ground disturbance and is currently developed with surface parking and landscaping. The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development.

A search for paleontological records was completed as part of the Cultural Resources Assessment; refer to Appendix B. The records search included a search of paleontological records by the Natural History Museum of Los Angeles County. Additional databases queried included the Los Angeles County invertebrate fossil database, the Paleobiology Database, and the University of California Museum of Paleontology online database. Pertinent geological and paleontological literature and previous records searches on file with Cogstone were also consulted. The records search did not reveal any known paleontological localities within the Project site area. However, numerous localities are recorded from the Monterey Formation in the near vicinity of the Project site. These localities have produced fossils of pinnipeds, baleen and toothed whales, dugongs, desmostylians, birds, crocodiles, sea turtles, bony fish, sharks and rays, and invertebrates. Numerous species of land plants and algae have also been recovered from these localities. As indicated in the Cultural Resources Assessment, the Project is mapped as situated upon surface exposures of the Miocene Monterey Formation. This geological unit has moderate

paleontological sensitivity. The Cultural Resources Assessment also included an intensive pedestrian survey of the Project site; no paleontological resources were observed during the pedestrian survey.

Based on the Preliminary Geotechnical Study, the Project site is underlain by artificial fill up to 20 to 40 feet thick within the buttress slope and the northeast portion of the site, and diatomaceous siltstone/claystone bedrock of the Monterey Formation exposed at existing grade for the southern and western portion of the existing parking lot. The Project would require excavation to a depth of approximately 17 feet below the ground surface for the subterranean parking level. Additionally, the Preliminary Geotechnical Evaluation recommends removal of artificial fill and overexcavation of the bedrock. The anticipated depth of removals and overexcavation would generally be on the order of five feet below existing grades throughout the site. The parking garage footprint is recommended to be overexcavated a minimum of three feet to provide a uniform compacted fill blanket beneath the slab. As a result, there is the potential for Project excavation activities to encounter paleontological resources. Thus, Mitigation Measure GEO-1 would require a qualified paleontologist to develop and implement a Paleontological Resources Impact Mitigation Plan, which shall include development of a paleontology Worker Environmental Awareness Program (WEAP) and paleontological monitoring. In the event of unanticipated discoveries, all work within a 50-foot radius of the find would be suspended until the resource is evaluated by the paleontologist. If the discovery proves to be significant, before construction activities resume at the location of the find, additional work such as data recovery excavation may be warranted, as deemed necessary by the paleontologist. With implementation of Mitigation Measure GEO-1, potential impacts to paleontological resources would be reduced to a less than significant level.

Mitigation Measures:

GEO-1: A qualified paleontologist shall be retained to develop and implement a Paleontological Resources Impact Mitigation Plan, which shall include development of a paleontology Worker Environmental Awareness Program (WEAP) and paleontological monitoring. In the event of unanticipated discoveries, all work within a 50-foot radius of the find shall halt, the Director of Community Development shall be notified, and the qualified paleontologist shall evaluate the find(s) and make recommendations. The paleontologist shall have the authority to stop or divert construction, as necessary. Documentation and treatment of the discovery shall occur in accordance with Society of Vertebrate Paleontology standards. The significance of the find shall be evaluated pursuant to the State CEQA Guidelines. If the discovery proves to be significant, before construction activities resume at the location of the find, additional work such as data recovery excavation may be warranted, as deemed necessary by the paleontologist.

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4.8 Greenhouse Gas Emissions

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

This section is based primarily on the *Technical Air Quality and GHG Emissions Calculations* (CalEEMod Results), prepared by Noah Tanski Environmental Consulting, dated December 2023, and included in its entirety as Appendix A, CalEEMod and Energy Data.

BACKGROUND

Various gases in the Earth's atmosphere, classified as atmospheric greenhouse gases (GHGs), play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

Naturally occurring GHGs include water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also GHGs, but they are, for the most part, solely a product of industrial activities. Although the direct GHGs, including CO_2, CH_4, and N_2O, occur naturally in the atmosphere, human activities have changed their atmospheric concentrations. From the pre-industrial era (i.e., ending about 1750) to 2011, concentrations of these three GHGs have increased globally by 47, 156, and 23 percent, respectively.[11]

Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs).

[11] Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis (Sixth Assessment Report of the Intergovernmental Panel on Climate Change)*, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf, accessed April 22, 2024.

Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by the industrial sector.[12]

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California produced approximately 381.3 million gross metric tons of carbon dioxide equivalents ($MMTCO_2e$) in 2021, meeting the annual statewide target set by the CARB, which required that California emissions be below 431 $MMTCO_2e$ by 2020.[13] To meet CARB's statewide targets, California emissions must further be reduced to below 260 $MMTCO_2e$ by 2030.

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Consumption of fossil fuels in the transportation sector was the single largest source of California's GHG emissions in 2021, accounting for 38.2 percent of total GHG emissions in the state.[14] This category was followed by the industrial sector (19.4 percent), the electricity generation sector (including both in-state and out-of-state sources) (16.4 percent), residential and commercial sector (10.2), agriculture sector (8.1 percent), high global warming potential gases (GWP) (5.6 percent), and waste sectors (2.2 percent).

REGULATORY FRAMEWORK

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2, CH_4, N_2O, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF_6]) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the

[12] California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2021: Trends of Emissions and Other Indicators*, https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf, December 2023, accessed April 22, 2024.
[13] California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2021: Trends of Emissions and Other Indicators*, https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf, December 2023, accessed April 22, 2024.
[14] California Air Resources Board, *California Greenhouse Gas Emissions for 2000 to 2021: Trends of Emissions and Other Indicators*, https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf, December 2023, accessed April 22, 2024.

existing Clean Air Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500-38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on Statewide GHG emissions. AB 32 requires that Statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to Assembly Bill (AB) 1493 (Pavley Bill) should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then the California Air Resources Board (CARB) should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocations. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities' strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, is required to provide each affected region with GHG reduction targets emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets are to be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding.

Executive Order S-3-05

Executive Order S-3-05 set forth a series of target dates by which Statewide emissions of GHGs would be progressively reduced, as follows:

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

The Executive Order directed the California Environmental Protection Agency (CalEPA) Secretary to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is required to submit biannual reports to the Governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with Executive Order S-3-05, the CalEPA Secretary created the California Climate Action Team, made up of members from various State agencies and commissions. The Climate Action Team released its first report in March 2006, which proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Title 24, Part 6

The California Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6 of the California Code of Regulations (CCR) and commonly referred to as "Title 24" were established in 1978 in response to a legislative mandate to reduce California's energy consumption. Part 6 of Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards took effect on January 1, 2023.

Title 24, Part 11

The California Green Building Standards Code (CCR Title 24, Part 11), commonly referred to as CALGreen, is a Statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in five green building topical areas. The 2022 CALGreen Code went into effect on January 1, 2023.

Senate Bill 3

Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). SB 32 authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

CARB Scoping Plan

On December 11, 2008, CARB adopted its Climate Change Scoping Plan (Scoping Plan), which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. The Scoping Plan contains the main strategies California will implement to reduce carbon dioxide equivalent emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions levels of 596 million $MTCO_2e$ under a business as usual (BAU) scenario. This is a reduction of 42 million $MTCO_2e$, or almost ten percent, from 2002 to 2004 average emissions, and requires the reductions in the face of population and economic growth through 2020.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB updated the Scoping Plan in 2013 (*First Update to the Scoping Plan*) and again in 2017. The 2013 Update built upon the initial Scoping Plan with new strategies and recommendations, and also set the groundwork to reach the long-term goals set forth by the state. Successful implementation of existing programs (as identified in previous iterations of the Scoping Plan) has allowed California to meet the 2020 target. The 2017 Update expands the scope of the plan further by focusing on the strategy for achieving the state's 2030 GHG target of 40 percent emissions reductions below 1990 levels (to achieve the target codified into law by SB 32), and substantially advances toward the state's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

CARB adopted the 2022 Scoping Plan Update (2022 Scoping Plan) on December 15, 2022. The 2022 Scoping Plan Update assesses progress towards the SB 32 GHG reduction target of at least 40 percent

below 1990 emissions by 2030, while laying out a path to achieving carbon neutrality no later than 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.

City of Aliso Viejo

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 Project's GHG emissions, as conducted pursuant to CEQA. However, the City maintains various policies relating to sustainability. For example, the Aliso Viejo General Plan Conservation/Open Space Element contains Goal COS-6 and related policies aimed at the conservation of energy and identification of alternative energy sources.

THRESHOLDS OF SIGNIFICANCE

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions and gives lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association, so long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (CEQA Guidelines Section 15064(h)(3)).[15,16] 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.

Neither the City of Aliso Viejo nor SCAQMD has adopted GHG significance thresholds for land use development projects such as the Project. Based on the legal standards outlined above, the City finds that analyzing the Project's GHG emissions through consistency with the plans, policies, and regulations that have been adopted to reduce GHG emissions is the appropriate methodology to analyze the Project's GHG emissions impacts. 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

[15] California Natural Resources Agency, *Final Statement of Reasons for Regulatory Action*, pp. 11-13, 14, 16, https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/Final_Statement_of_Reasons.pdf, December 2009.
[16] State of California Governor's Office of Planning and Research, *Transmittal of the Governor's Office of Planning and Research's Proposed SB97 CEQA Guidelines Amendments to the Natural Resources Agency*, https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C01.pdf, April 13, 2009.

accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects in California. These estimates have been disclosed 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.

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

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

Less Than Significant Impact. The proposed Project would generate GHGs during the construction and operational phases of the Project. Project construction would require demolition, grading, building construction, paving and architectural coating phases. The Project's primary source of construction-related GHGs would result from emissions of CO_2 associated with Project construction and worker vehicle trips; refer to Table 4.8-1, *Construction GHG Emissions (Metric Tons/Year)*.

Table 4.8-1
Construction GHG Emissions (Metric Tons/Year)

Year	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
2025	0	917	917	0.03	0.05	933
2026	0	1,216	1,216	0.04	0.07	1,239
2027	0	638	638	0.02	0.03	649
Maximum	**0**	**1,216**	**1,216**	**0.04**	**0.07**	**1,239**
Total	***0***	***2,771***	***2,771***	***0.09***	***0.15***	***2,821***

Source: CalEEMod version 2022.1 (refer to Appendix A for model outputs).
Note: Table 4.8-1 represents unmitigated results.

As shown in Table 4.8-1, Project construction-related activities would generate a maximum of approximately 1,239 $MTCO_2e$ of GHG emissions in a single year and a total of 2,821 $MTCO_2e$ of GHG emissions during construction (anticipated to last approximately 29 months). Construction GHG emissions are typically summed and amortized over the Project's lifetime (assumed to be 30 years), then added to the operational emissions.[17] The amortized Project emissions would be approximately 94 $MTCO_2e$ per year. Once construction is complete, the generation of construction-related GHG emissions would cease.

The operational phase of the Project would generate GHGs primarily from the Project's operational vehicle trips and building energy (electricity and natural gas) usage; refer to Table 4.8-2, *Operational GHG Emissions (Metric Tons/Year)*.

[17] The Project lifetime is based on SCAQMD's standard 30-year assumption (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, August 26, 2009).

Table 4.8-2
Operational GHG Emissions (Metric Tons/Year)

Category	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Area	0	11.8	11.8	< 0.005	< 0.005	11.8
Energy	0	543	543	0.05	0.01	546
Mobile	0	2,185	2,185	0.10	0.09	2,217
Waste	41.1	0	41.1	4.10	0	144
Water	5.80	19.9	25.7	0.60	0.01	44.9
Refrigerant	0	0	0	0	4.99	4.99
Total	**46.9**	**2,759.7**	**2,806.6**	**4.85**	**5.1**	**2,968.69**

Source: CalEEMod version 2022.1 (refer to Appendix A for model outputs).
Note: Table 4.8-2 represents unmitigated results.

As shown in Table 4.8-2, Project operational GHG emissions would total approximately 2,968.7 $MTCO_2e$ annually, and combined with construction-related GHG emissions, would total approximately 3,062.7 $MTCO_2e$ annually. In addition, with continued implementation of various Statewide measures, the Project's operational energy and mobile source emissions would continue to decline in the future.

Consistency with Applicable GHG Plans, Policies, or Regulations

2022 Scoping Plan Consistency

The goal to reduce GHG emissions to 1990 levels by 2020 (Executive Order S-3-05) was codified by the California Legislature as AB 32. In 2008, CARB approved a Scoping Plan as required by AB 32. The Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 implementation fee to fund the program. The 2022 Scoping Plan identifies additional GHG reduction measures necessary to achieve the 2030 target, as well as to achieve the State's target of carbon neutrality by year 2045. These measures build upon those identified in the previous Scoping Plan updates. Although a number of these measures are currently established as policies and measures, 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 subsequently as required to achieve Statewide GHG emissions targets.

Table 4.8-3, *Project Consistency with the 2022 Scoping Plan*, summarizes the Project's consistency with applicable policies and measures of the 2022 Scoping Plan. As indicated in Table 4.8-3, the Project would not conflict with any of the provisions of the 2022 Scoping Plan and would support the 2022 Scoping Plan action categories through energy efficiency, water conservation, recycling, and landscaping.

Table 4.8-3
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Area		
SCAQMD Rule 445 (Wood Burning Devices)	Restricts the installation of wood-burning devices in new development.	Mandatory Compliance. Approximately 15 percent of California's major anthropogenic sources of black carbon include fireplaces and woodstoves.[1] The Project would not include hearths (woodstove and fireplaces) as mandated by this rule.
Energy		
California Renewables Portfolio Standard, Senate Bill 350 (SB 350) and Senate Bill 100 (SB 100)	Increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020. SB 350 requires 50 percent by 2030. SB 100 requires 44 percent by 2024, 52 percent by 2027, and 60 percent by 2030. It also requires the State Energy Resources Conservation and Development Commission to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	No Conflict. The Project would utilize electricity provided by Southern California Edison (SCE), which is required to meet the 2020, 2030, 2045, and 2050 performance standards. In 2020, 33.1 percent of SCE's electricity came from renewable resources.[2] By 2030 SCE plans to achieve 80 percent carbon-free energy.[3]
California Code of Regulations, Title 24, Building Standards Code	Requires compliance with energy efficiency standards for residential and nonresidential buildings.	Mandatory Compliance. The Project is required to meet the applicable requirements of the Title 24 Building Energy Efficiency Standards and additional CALGreen requirements (see discussion under CALGreen Code requirements below).

Table 4.8-3 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
California Green Building Standards (CALGreen) Code Requirements	All bathroom exhaust fans are required to be ENERGY STAR compliant.	Mandatory Compliance. The Project construction plans are required to demonstrate that energy efficiency appliances, including bathroom exhaust fans, and equipment are ENERGY STAR compliant.
	HVAC system designs are required to meet American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.	Mandatory Compliance. The Project construction plans are required to demonstrate that the HVAC system meets the ASHRAE standards.
	Air filtration systems are required to meet a minimum efficiency reporting value (MERV) 8 or higher.	Mandatory Compliance. The Project is required to install air filtration systems (MERV 8 or higher) as part of its compliance with the Title 24 Building Energy Efficiency Standards.
	Refrigerants used in newly installed HVAC systems shall not contain any chlorofluorocarbons.	Mandatory Compliance. The Project must meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to eight percent of total parking spaces is required for such vehicles.	Mandatory Compliance. The Project would meet this requirement as part of its compliance the CALGreen Code.
Mobile Sources		
Mobile Source Strategy (Cleaner Technology and Fuels)	Reduce GHGs and other pollutants from the transportation sector through transition to zero-emission and low-emission vehicles, cleaner transit systems, and reduction of vehicle miles traveled.	Consistent. The Project would be consistent with this strategy by supporting the use of zero-emission and low-emission vehicles; refer to CALGreen Code discussion above.
Senate Bill (SB) 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	Consistent. As demonstrated in the 2020-2045 RTP/SCS Consistency discussion below, the Project would comply with the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS), and therefore, the Project would be consistent with SB 375.

Table 4.8-3 (continued)
Project Consistency with the 2022 Scoping Plan

Sector/Source	Category/Description	Consistency Analysis
Water		
CCR, Title 24, Building Standards Code	Title 24 includes water efficiency requirements for new residential and non- residential uses.	Mandatory Compliance. Refer to the discussion under Title 24 Building Standards Code and CALGreen Code, above.
Water Conservation Act of 2009 (Senate Bill X7-7)	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20 percent by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal. This is an implementing measure of the Water Sector of the AB 32 Scoping Plan. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water; it also reduces emissions from wastewater treatment.	Consistent. Refer to the discussion under Title 24 Building Standards Code and CALGreen Code, above. Also, refer to Section 4.10, *Hydrology and Water Quality*.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandates that State agencies develop and implement an integrated waste management plan which outlines the steps to divert at least 50 percent of solid waste from disposal facilities. AB 341 directs the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling and sets a Statewide goal for 75 percent disposal reduction by the year 2020.	Mandatory Compliance. The Project would be required to comply with AB 341. This would reduce the overall amount of solid waste disposed of at landfills. The decrease in solid waste would in return decrease the amount of methane released from decomposing solid waste.

Notes:
1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, Figure 4: California 2013 Anthropogenic Black Carbon Emission Sources, November 2017.
2. California Energy Commission, *2020 Power Content Label Southern California Edison,* https://www.energy.ca.gov/filebrowser/download/3902, accessed April 22, 2024.
3. Southern California Edison, *The Clean Power and Electrification Pathway,* https://newsroom.edison.com/internal_redirect/cms.ipressroom.com.s3.amazonaws.com/166/files/20187/g17-pathway-to-2030-white-paper.pdf, accessed April 22, 2024.

2020-2045 RTP/SCS Consistency

On September 3, 2020, SCAG's Regional Council adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*, referred to by SCAG as Connect SoCal or Connect SoCal 2020.[18] At the regional level, Connect SoCal is adopted for the purpose of reducing GHGs resulting from vehicular emissions by passenger vehicles and light duty trucks. In order to assess the Project's consistency with Connect SoCal, the Project's land use assumptions are reviewed for consistency with those utilized by SCAG in its SCS. Generally, projects are considered consistent with the provisions and general policies of applicable City and regional land use plans and regulations, such as Connect SoCal, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals.

Connect SoCal includes performance goals that were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. Connect SoCal is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by eight percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. Five key SCS strategies are included in Connect SoCal to help the region meet its regional VMT and GHG reduction goals, as required by the State. These strategies are all aimed at efforts to be undertaken by various levels of government, quasi-governmental agencies, and special purpose entities, rather than individual land use projects. Table 4.8-4, *Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)*, shows the Project's consistency with these five strategies found within Connect SoCal. As shown in Table 4.8-4, the proposed Project would be consistent with the GHG emission reduction strategies contained in Connect SoCal.

[18] Since initiation of the analysis presented in this Initial Study, SCAG adopted Connect SoCal 2024 (2024–2050 RTP/SCS). Connect SoCal 2024 carries forward policy direction established in Connect SoCal 2020, as well as more recent Regional Council actions that address emerging issues facing the region. For purposes of this Initial Study and the greenhouse gas analysis, Connect SoCal 2020 is relevant and is the document reviewed for consistency.

Table 4.8-4
Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Focus Growth Near Destinations and Mobility Options		
• Emphasize land use patterns that facilitate multimodal access to work, educational and other destinations • Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets • Plan for growth near transit investments and support implementation of first/last mile strategies • Promote the redevelopment of underperforming retail developments and other outmoded nonresidential uses • Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods • Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations) • Identify ways to "right size" parking requirements and promote alternative parking strategies (e.g. shared parking or smart parking)	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	Consistent. The Project proposes a mixed-use residential and commercial development on an underutilized site currently used for parking. The Project consists of infill development and has been designed in an effort to promote and support redevelopment of The Commons commercial center. The Project site is in an urbanized area and in close proximity to existing office and commercial development, providing opportunities for reduced commute times and the use of non-motorized transportation to access office and commercial destinations. The Project site is located within an area that provides pedestrian circulation opportunities, given that it fronts existing sidewalks to the south and west. The Project would provide bicycle parking spaces and infrastructure for electric vehicle charging in accordance with CALGreen Code, which would facilitate bike travel by residents and employees, as well as use of zero emissions vehicles traveling to/from the site. A Transit Priority Area (TPA) is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. There are no TPAs in Aliso Viejo. However, by increasing housing and employment density at the Project's location near major arterials (i.e., Aliso Creek Road), the Project would help leverage future efforts to expand public transportation service to this location. Therefore, the Project would focus growth near destinations and mobility options.

Table 4.8-4 (continued)
Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Promote Diverse Housing Choices		
• Preserve and rehabilitate affordable housing and prevent displacement • Identify funding opportunities for new workforce and affordable housing development • Create incentives and reduce regulatory barriers for building context sensitive accessory dwelling units to increase housing supply • Provide support to local jurisdictions to streamline and lessen barriers to housing development that supports reduction of greenhouse gas emissions	**PGA, Job Centers, HQTAs, NMA, TPAs, Livable Corridors, Green Region, Urban Greening.**	Consistent. The Project proposes a mixed-use residential and commercial development on an underutilized site currently used for parking. There is no housing within the Project site currently; the Project would not displace existing residents. However, the Project would provide new housing opportunities, including affordable housing, within proximity to existing employment and retail. The Project site is in an urbanized area and in close proximity to existing office and commercial development, providing opportunities for reduced commute times and the use of non-motorized transportation to access office and commercial destinations, supporting the reduction of greenhouse gas emissions. The Project would provide for enhanced walkability, given that the proposed pedestrian walkway and outdoor staircases would connect to existing sidewalks to the south and west. The Project would provide bicycle parking spaces and infrastructure for electric vehicle charging in accordance with CALGreen Code, which would facilitate bike travel by residents and employees, as well as use of zero emissions vehicles traveling to/from the site. Further, by increasing housing and employment density at the Project's location near major arterials (i.e., Aliso Creek Road), the Project would help leverage future efforts to expand public transportation service to this location. Therefore, the Project would promote greater housing choice in Aliso Viejo by providing studio, one-, two-, and three-bedroom residential units in a mixed-use format in The Commons commercial center.

Table 4.8-4 (continued)
Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Leverage Technology Innovations		
• Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space • Improve access to services through technology—such as telework and telemedicine as well as other incentives such as a "mobility wallet," an app-based system for storing transit and other multi-modal payments • Identify ways to incorporate "micro-power grids" in communities, for example solar energy, hydrogen fuel cell power storage and power generation	**HQTA, TPAs, NMA, Livable Corridors.**	Consistent. The Project would be required to install infrastructure for electric vehicles, as well as bike parking and storage in accordance with the 2022 Title 24 standards and CALGreen Code. The Project would provide electric vehicle charging stalls and additional infrastructure to support zero emissions vehicles. To encourage bicycle use, the Project would provide long-term storage for 50 bicycles onsite. As such, the Project is consistent with this reduction strategy.

Table 4.8-4 (continued)
Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Support Implementation of Sustainability Policies		
• Pursue funding opportunities to support local sustainable development implementation projects that reduce greenhouse gas emissions • Support statewide legislation that reduces barriers to new construction and that incentivizes development near transit corridors and stations Support local jurisdictions in the establishment of Enhanced Infrastructure Financing Districts (EIFDs), Community Revitalization and Investment Authorities (CRIAs), or other tax increment or value capture tools to finance sustainable infrastructure and development projects, including parks and open space • Work with local jurisdictions/communities to identify opportunities and assess barriers to implement sustainability strategies • Enhance partnerships with other planning organizations to promote resources and best practices in the SCAG region • Continue to support long range planning efforts by local jurisdictions • Provide educational opportunities to local decisions makers and staff on new tools, best practices and policies related to implementing the Sustainable Communities Strategy	**Center Focused Placemaking, Priority Growth Areas (PGA), Job Centers, High Quality Transit Areas (HQTAs), Transit Priority Areas (TPA), Neighborhood Mobility Areas (NMAs), Livable Corridors, Spheres of Influence (SOIs), Green Region, Urban Greening.**	Consistent. Although this strategy is focused on local governments, agencies, and organizations' actions to support the implementation of sustainability policies, the Project would implement sustainability actions supported by the City. As previously discussed, the proposed Project would promote alternative modes of transportation. Further, the Project would comply with sustainable practices included in the 2022 Title 24 standards and CALGreen Code, such as installation of electric vehicle infrastructure, bike parking and storage, high efficiency LED lighting, energy efficient appliances, low-flow fixtures, water-efficiency irrigation, and drought tolerant landscaping. Thus, the Project would not conflict with this reduction strategy.

Table 4.8-4 (continued)
Project Consistency with the Connect SoCal (2020-2045 RTP/SCS)

Reduction Strategy	Applicable Land Use Tools	Project Consistency Analysis
Promote a Green Region		
• Support development of local climate adaptation and hazard mitigation plans, as well as project implementation that improves community resiliency to climate change and natural hazards • Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration • Integrate local food production into the regional landscape • Promote more resource efficient development focused on conservation, recycling and reclamation • Preserve, enhance and restore regional wildlife connectivity • Reduce consumption of resource areas, including agricultural land • Identify ways to improve access to public park space	**Green Region, Urban Greening, Greenbelts and Community Separators.**	Consistent. Although this strategy is focused on local governments, agencies, and organizations' actions to promote a green region, the Project would implement sustainability actions that would support a green region. The proposed Project consists of mixed-use residential and commercial infill development in an urbanized area and would, therefore, not interfere with regional wildlife connectivity or consumption of agricultural land. The Project would also incorporate various common open space areas, including courtyards, outdoor decks, and a rooftop deck with amenities. The Project would be required to comply with 2022 Title 24 standards and CALGreen Code, which would help reduce energy consumption and reduce GHG emissions. Thus, the Project would support efficient development that reduces energy consumption and GHG emissions. The Project would not conflict with this reduction strategy.
Source: Southern California Association of Governments, *2020-2040 Regional Transportation Plan/Sustainable Communities Strategy – Connect SoCal*, September 3, 2020.		

Conclusion

In summary, the plan consistency analysis provided above demonstrates that the proposed Project is generally consistent with or would not conflict with strategies outlined in the Connect SoCal (2020-2045 RTP/SCS) and 2022 Scoping Plan. The Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, the Project's GHG emissions would not result in a significant impact on the environment, and the Project's contribution to climate change impacts would not be considerable.

Mitigation Measures: No mitigation measures are required.

4.9 Hazards and Hazardous Materials

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

This section is based in part on the *Phase I Environmental Site Assessment for Undeveloped Property APN 629-101-16 and a portion of 629-101-17 & 629-101-19, 26501 Aliso Creek Road, Aliso Viejo, California 92656* (Phase I ESA), prepared by California Environmental, dated June 2022 and included in its entirety as Appendix D, Phase I ESA.

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?

Less Than Significant Impact. Generally, the exposure of persons to hazardous materials could occur in the following manners: 1) improper handling or use of hazardous materials or hazardous wastes during construction or operation of future development, particularly by untrained personnel; 2) an accident during transport; 3) environmentally unsound disposal methods; or 4) fire, explosion or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of residential and ground floor commercial uses within a six-story building, and associated parking and improvements. Construction activities associated with the proposed Project may involve the routine transport, use, or disposal of hazardous materials, such as petroleum-based fuels or hydraulic fluid used for construction equipment. The construction contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for hazards associated with the transport and use of hazardous materials. Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, State, and federal law.

A Phase I ESA was prepared to provide information on potential hazardous material impacts to the soil and groundwater beneath the Project site; refer to Appendix D. The Phase I ESA identifies recognized environmental conditions (RECs) that may exist at the Project site, including current RECs, historical RECs, and controlled RECs. The term *recognized environmental conditions* (RECs) means "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property." The Phase I ESA included a site reconnaissance and research of land use records and other sources for preliminary indications of hazardous material use, storage, or disposal at the Project site, and/or on contiguous parcels.

The Phase I ESA confirmed no structures are currently present, or have been historically present on the property. The parking lot currently present the east side of the site was constructed in approximately 1996. The address associated with the Project site is identified on the standard environmental government sources searched as part of the Phase I ESA. The listing are not associated with the Project site, but are associated with the commercial structure that is located east of the Project site and shares the same address. The nearest listed contaminated site to the subject property is the 76 Station #5743

LUST cleanup site located approximately 2,000 feet to the south. This property had a release of gasoline from several underground storage tanks (USTs) on the property that was discovered in 2008. Several assessments determined impacts were confined to soil. The site received case closure from the Orange County Health Care Agency on June 15, 2012. Due to the distance and downgradient location of this offsite release it is considered unlikely that it has impacted the Project site. The former Lowes property is listed within the database search associated with a diesel generator. The facility also produced small quantities of photo processing waste, organic waste, and alkaline waste between 1996 and 2019. However, according to the Phase I ESA, these listings are not considered an environmental concern for the Project site. The Phase I ESA identified no evidence of RECs, historical RECs, or controlled RECs in connection with the Project site and therefore, no additional assessment is recommended.

The Project includes residential and commercial uses that would not involve the use or storage of hazardous substances other than limited quantities of hazardous materials such as solvents, fertilizers, pesticides, and other materials used for regular maintenance of buildings and landscaping. The quantities of these materials would not typically be at an amount that would pose a significant hazard to the public or the environment. 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. Hazardous materials would be required to be stored, used, and disposed of in compliance with local, State, and federal regulations. The 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. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are 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. Don Juan Avila Middle School is the closest school to the Project site, which is located approximately 0.3-mile northwest of the Project site. The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of residential and ground floor commercial uses. Construction and operational activities associated with the proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school. Therefore, no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Government Code Section 65962.5, commonly referred to as the "Cortese List," requires the Department of Toxic Substances Control (DTSC) and the State Water Resources Control Board (SWRCB) to compile and update a regulatory sites list (pursuant to the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Health and Safety Code Section 116395. Government Code Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. The Project site is not included on any of the data resources identified as meeting the Cortese List requirements.[19, 20] Therefore, the Project site has not been included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5; no impact would occur in this regard.

Mitigation Measures: No mitigation measures are 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 located within an airport land use plan, nor is the Project site located within two miles of a public airport or public use airport. The closest airport to the Project site is John Wayne Airport, located approximately 10 miles northwest of the Project site. Thus, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. The City of Aliso Viejo Emergency Operations Plan (EOP) focuses on the effective preparedness and response to hazard events within the City. 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 and is consistent with the statewide Standardized Emergency Management System (SEMS), which provides a framework for coordinating multi-agency responses in the case of emergencies.

[19] California Environmental Protection Agency, *Cortese List Data Resources*, https://calepa.ca.gov/sitecleanup/corteselist/ , accessed March 27, 2024.
[20] California Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/map/, accessed March 29, 2024.

The EOP also establishes evacuation routes, identifies emergency shelter facilities, and water supplies in coordination with the Moulton Niguel and El Toro Water Districts.

The Aliso Viejo General Plan Safety Element identifies evacuation routes in the City.[21] Within the vicinity of the Project site, Aliso Creek Road and SR-73 are identified as primary evacuation routes.

The Project site is currently developed and located within an urbanized area. Regional access to the Project site is provided via State Route 73 (SR-73), located to the northeast. Local access to the site is provided directly from Enterprise and Aliso Creek Road to the south and east, respectively. Access to the Project site would be provided via two existing driveways, which would provide access from Town Center via Enterprise to the southeast of the site and from Aliso Creek Road to the east. Project-related construction activities are not anticipated to result in significant traffic or queuing along Town Center, Enterprise, Aliso Creek Road, or other roadways within the area that could potentially impede emergency vehicles or impair any emergency evacuation plan. Additionally, any impacts associated with construction activities would be temporary in nature. The Project would be required to comply with all applicable requirements of the AVMC, including the CBC and California Fire Code, as amended by the AVMC, and would be subject to approval by the Orange County Fire Authority (OCFA). As such, construction and operation of the proposed Project would not impair implementation of or physically interfere with the City's EOP or emergency evacuation plan and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The Project site is currently developed and located within an urbanized area. According to the California Department of Forestry and Fire Protection (CALFIRE) Fire Hazard Severity Zone Map, the Project site and surrounding area are located within a Local Responsibility Area and are not identified as being within a very high fire hazard severity zone (VHFHSZ).[22] Thus, the Project site and surrounding area are not identified as having a significant risk associated with wildland fires. The Project site is currently developed with surface parking, landscaping, and improvements associated with The Commons commercial center. The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. AVMC Chapter 13.02, *Building Regulations,* adopts the California Fire Code, with amendments, which would further reduce potential impacts related to wildland fire. Compliance with the Municipal Code, and State and federal regulations pertaining to fire safety, would ensure the Project does not expose people to a significant risk of loss, injury or death involving wildland fires. No impacts would occur in this regard.

[21] Cotton/Bridges/Associates, *City of Aliso Viejo General Plan*, April 2004. Figure S-1.
[22] California Department of Forestry and Fire Protection, *FHSZ Viewer*, https://egis.fire.ca.gov/FHSZ/, accessed March 27, 2024.

Mitigation Measures: No mitigation measures are required.

4.10 Hydrology and Water Quality

Would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
1) Result in substantial erosion or siltation on- or off-site?			X	
2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?			X	
3) 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?			X	
4) Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

This section is based primarily on the *Water Quality Management Plan* (Preliminary WQMP) prepared by Tait & Associates, Inc., dated June 22, 2024 and included in its entirety as Appendix E, Preliminary WQMP; and the *Preliminary Hydrology Study, Avalon Bay Commons* (Preliminary Hydrology Study) prepared by Tait & Associates, Inc., dated June 12, 2023 and included in its entirety as Appendix F, Preliminary Hydrology Study.

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

Less Than Significant Impact.

Construction

Short-term construction activities associated with the proposed Project could impact water quality. Sources of potential construction-related storm water pollution include handling, storage, and disposal of construction materials containing pollutants; maintenance and operation of construction equipment; and site preparation activities, such as excavation, grading and trenching. These sources, if not controlled, can generate soil erosion and on- and off-site transport via storm run-off or mechanical equipment. Generally, standard safety precautions for handling and storing construction materials can adequately reduce the potential pollution of storm water by these materials. These types of standard procedures can be extended to non-hazardous storm water pollutants such as sawdust, concrete washout, and other wastes.

Grading activities would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Two general strategies are recommended to prevent soil materials from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed, and second, the Project site should be secured to control off-site transport of pollutants. In order to reduce the amount of on-site exposed soil, grading would be limited to the extent feasible, and any graded areas would be protected against erosion once they are brought to final grade. Furthermore, the proposed Project would be required to comply with the AVMC and the National Pollutant Discharge Elimination System (NPDES) permit program.

Construction-related erosion effects would be addressed through compliance with the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit). Construction activity subject to this 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 one acre. The Project would disturb more than one acre of land and therefore would be subject to the General Permit. To obtain coverage under the General Permit, dischargers are required to file Permit Registration Documents with the SWRCB, which include a Notice of Intent and other compliance-related documents. The General Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the General Permit to control potential construction-related pollutants. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized.

Project construction activities would be required to comply with applicable City requirements to control erosion and reduce or eliminate stormwater runoff containing sediment, including AVMC 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 of Aliso Viejo's Water Quality Ordinance (AVMC Chapter 7.35, *Stormwater Management*). The Water Quality Ordinance is designed to effectively prohibit non-stormwater discharges into the storm sewers and to reduce the discharge of pollutants, and to achieve compliance with the Clean Water Act and the Porter-Cologne Water Quality Control Act. Specifically, in accordance with 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 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 Drainage Area Management Plan (DAMP), and the City's NPDES permit. In addition to the requirements of AVMC Section 7.35.080, Project construction activities would be required to comply with AVMC Section 7.35.070, *Control of Urban Runoff – Construction Projects*, which requires the Project Applicant to submit a pollution control plan, construction best management practices (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. Thus, through adherence to the NPDES Stormwater Program and AVMC regulations, construction-related activities would not violate any water quality standards or otherwise substantially degrade surface or groundwater quality and impacts would be less than significant.

Operational

The Project site is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB) and 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 of Aliso Viejo, to control and reduce the discharge of pollutants in stormwater from new development and significant redevelopment to the maximum extent practicable. While all development projects are required to implement source control and site design practices, the Regional MS4 Permit has additional requirements for Priority Development Projects (PDPs), which are required to incorporate structural BMPs to reduce the discharge of pollutants and address potential hydromodification impacts from changes in flow and sediment supply.

The Project site is currently developed with surface parking, landscaping, and improvements. Under existing conditions, the Project site drainage pattern consists of overland flow to several drop inlets scattered across the parking lot. The drop inlets connect to an onsite storm drain system that flows south and exits the property to through a 36-inch reinforced concrete pipe (RCP) connection to a County owned 90-inch RCP within Enterprise near its intersection with Aliso Creek Road.

Under proposed conditions, existing underground storm drain lines and inlets within the Project site would be removed. The Project would install a new underground storm drainage system that would convey flows into an underground detention system consisting of two detention basins. Low flows equivalent to the required treatment volume or treatment flow rate from the underground detention system would be conveyed into a Modular Wetland System BMP, which would discharge into the existing storm drain system. Site grading would match existing grading in the parking lot area. Retaining walls

would extend into the existing slope adjacent to Enterprise in order to retain the existing grade up to Enterprise. Runoff within the Project's courtyards would be designed to freely flow away from the structures toward the roadside slope and continue down and around the complex before ultimately discharging to the existing storm drain system. The Project site would consist of three drainage management areas (DMAs). Flows from DMA-A, an approximately one-acre area located within the western portion of the site, would be captured in an underground storm drainage and detention system. The underground detention system would discharge into a Modular Wetland System BMP (or equivalent linear treatment device) with an internal high flow bypass for flows exceeding the required treatment rate, then discharge into the existing downstream storm drain system. Flows from DMA-B, an approximately 2.9-acre area located in the eastern portion of the site, would be captured in an underground storm drainage and detention system. A weir structure would divert low flows equivalent to the required treatment volume or treatment flow rate from the underground detention system into a Modular Wetland System BMP (or equivalent linear treatment device), and then discharge to the downstream storm drain system. Large storm events exceeding the water quality treatment requirements would overtop the weir, bypass the treatment system, and discharge to the downstream storm drain system. Flows from DMA-C, an approximately 0.3-acre area consisting of asphalt parking located in the southern portion of the site, would discharge to and be treated by the same underground detention system and Modular Wetland System (or equivalent linear treatment device) as DMA-B. A storm drain inlet would be added to maintain the existing drainage pattern of the parking lot.

The Preliminary WQMP identifies pollutants of concern associated with the proposed Project, including bacteria/virus/pathogens and dry weather runoff. Additionally, the Preliminary WQMP documents the various BMPs that would be implemented as part of the Project, which include structural, source control, and site design BMPs to address water quality conditions associated with the proposed Project. Proposed structural BMPs include the modular wetlands systems. Proposed non-structural source control BMPs include education for property owners, tenants, and occupants; activity restrictions; common area landscape management; hazardous materials disclosure compliance; common area litter control; common area catch basin inspection; and street sweeping. Proposed structural source control BMPs include storm drain system stenciling and signage; use of efficient irrigation systems and landscape design, water conservation, smart controllers, and source control; design of outdoor material storage areas to reduce pollution introduction; design of trash and waste storage areas to reduce pollution introduction; and hillside landscaping. Refer to Appendix E for a detailed list of proposed BMPs.

The Project would be subject to federal, State, and local regulations related to water quality, including the City's Water Quality Ordinance. Implementation of the proposed on-site stormwater system and WQMP requirements for a PDP, 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. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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 Moulton Niguel Water District (MNWD). MNWD's potable water supply is entirely imported water purchased from the Municipal Water District of Orange County (MWDOC).[23] As such, Project implementation would not substantially decrease groundwater supplies associated with water demand such that the Project would impede sustainable groundwater management of the basin.

The Project site currently consists of approximately 26 percent (1.04 acres) of pervious area and approximately 74 percent (3.02 acres) of impervious area. In the proposed condition, the Project site would consist of approximately 11 percent (0.46 acres) of pervious area and approximately 89 percent (3.60 acres) of impervious area. Thus, the Project would decrease pervious area in the proposed condition. However, the Preliminary WQMP concludes that stormwater infiltration into the subsurface soils is not considered feasible due to the presence of clayey subgrade soils and diatomaceous siltstone bedrock. Accordingly, the 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 Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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:

1) Result in substantial erosion or siltation on- or off-site?

2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

3) 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?

4) Impede or redirect flood flows?

Less Than Significant Impact. Refer to Response 4.10(a) regarding potential impacts involving erosion and water quality.

Under existing conditions, the Project site's drainage pattern consists of overland flow to several drop inlets scattered across the parking lot. The drop inlets connect to an onsite storm drain system that flows

[23] Moulton Niguel Water District, *2020 Urban Water Management Plan*, 2021.

south and exits the property through a 36-inch RCP connection to a County owned 90-inch RCP within Enterprise, near its intersection with Aliso Creek Road.

Under proposed conditions, existing underground storm drain lines and inlets within the Project site would be removed. The Project would install a new underground storm drainage system that would convey flows into an underground detention system consisting of two detention basins. As stated, the Project site would consist of three DMAs. Flows from DMA-A would be captured in an underground storm drainage and detention system. The underground detention system would discharge into a Modular Wetland System BMP (or equivalent linear treatment device) with an internal high flow bypass for flows exceeding the required treatment rate, then discharge into the existing downstream storm drain system. Flows from DMA-B would be captured in an underground storm drainage and detention system. A weir structure would divert low flows equivalent to the required treatment volume or treatment flow rate from the underground detention system into a Modular Wetland System BMP (or equivalent linear treatment device), and then discharge to the downstream storm drain system. Large storm events exceeding the water quality treatment requirements would overtop the weir, bypass the treatment system, and discharge to the downstream storm drain system. Flows from DMA-C would discharge to and be treated by the same underground detention system and Modular Wetland System (or equivalent linear treatment device) as DMA-B. A storm drain inlet would be added to maintain the existing drainage pattern of the parking lot.

As shown in the Preliminary Hydrology Study, the 25-year peak flow rate from the Project site would decrease from 15.81 cubic feet per second (cfs) in the existing condition to 12.24 cfs in the proposed condition. The Preliminary Hydrology Study concludes that the Project would reduce peak flow runoff and would not have an adverse effect on the downstream drainage system. Thus, the Project would not substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion or siltation on- or off-site; increase the rate or amount of surface runoff which would result in flooding on- or offsite; create or contribute runoff that would exceed the capacity of the existing drainage system; or impede or redirect flood flows. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. According to the Federal Emergency Management Agency, Flood Insurance Rate Map, the Project site is located within Zone X, which indicates an area of minimal flood hazard.[24]

Tsunamis are sea waves that are generated in response to large-magnitude earthquakes, which can result in coastal flooding. Tsunamis do not pose hazards due to the Project site's elevation and inland location approximately 4.2 miles from the Pacific Ocean.

[24] Federal Emergency Management Agency, *Flood Insurance Rate Map (Map Number 06059C0428J)*, December 2009.

Seiches are the oscillation of large bodies of standing water, such as lakes, that can occur in response to ground shaking. Due to the lack of large bodies of water within the vicinity of the Project site, seiches do not pose a significant risk to the Project.

For reasons listed above, impacts related to release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Refer to Responses 4.10(a) regarding water quality. As discussed above, the MNWD provides water service to the City, including the Project site. MNWD's potable water supply is entirely imported water purchased from the MWDOC. MWDOC obtains groundwater primarily from Orange County Groundwater Basin (OC Basin), as well as smaller groundwater basins such as the Main San Gabriel Basin.[25]

The OC Basin is not adjudicated.[26] Groundwater in the OC Basin is managed by the Orange County Water District (OCWD), which was formed in 1933 by a special legislative act of the State Legislature to protect and manage the County's groundwater supply and defend its water rights to the OC Basin. In 2014, the California Sustainable Groundwater Management Act (SGMA) was passed to help manage groundwater sustainably, and limit adverse effects such as significant groundwater-level declines, land subsidence, and water quality degradation. SGMA requires all high- and medium-priority basins, as designated by DWR, be sustainably managed. DWR designated the non-adjudicated Coastal Plain of OC Basin (Basin 8-1) as a medium-priority basin, primarily due to heavy reliance on the Basin's groundwater as a source of water supply. The agencies within Basin 8-1 collaborated to prepare and submit an Alternative to a Groundwater Sustainability Plan on December 22, 2016.[27] On July 17, 2019, DWR determined that the Alternative satisfied SGMA objectives and was therefore approved. Approved alternatives are required to submit annual reports to DWR on April 1 of each year, and to resubmit the alternative by January 1 every five years. The 2022 Update to the Alternative, prepared to satisfy Water Code Section 10733.8 and submitted in 2020, shows that the OCWD management area continues to be managed sustainably.

As discussed in Section 4.14, *Population and Housing*, the Project involves the development of 343 residential units, which would induce direct population growth in the City, as well as employment-generating uses with the potential to increase the City's population. Residential and employment-generating uses have been anticipated by the General Plan and the Project would be within the population growth projections anticipated and planned for by local and regional planning documents. The Project's anticipated water demand is accounted for in the MNWD's 2020 Urban Water Management Plan (UWMP), and there would be sufficient water supplies available to serve the Project development during normal, dry and multiple dry years; refer to Section 4.19, *Utilities and Service Systems*. Impacts to water

[25] Arcadis U.S., Inc., *MWDOC 2020 Urban Water Management Plan*, June 2021.
[26] Arcadis U.S., Inc., *MWDOC 2020 Urban Water Management Plan*, June 2021.
[27] Orange County Water District, *Basin 8-1 Alternative 2022 Update*, January 2022.

supply would be less than significant. Thus, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				X
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

a) Physically divide an established community?

No Impact. The Project site is currently developed with surface parking, landscaping, and improvements associated with The Commons commercial center. The site is designated High Density Residential/Town Center Commercial and Open Space and is zoned SP-2: The Commons Specific Plan. North of the Project site is a parking lot, commercial structures, and landscaped area within the Commons commercial center, followed by SR-73. The commercial uses to the north are zoned SP-2. East of the Project site is a parking lot and commercial structures within the Commons commercial center, followed by Aliso Creek Road. The commercial uses to the east are zoned SP-2. Immediately south of the Project site is Enterprise, followed by commercial uses within the Aliso Viejo Town Center commercial center. The area to the south of Enterprise is zoned TC (Town Center Commercial). Immediately west of the Project site is Enterprise, followed by open space trails and residential uses associated with the Vantis development. The open space trail area to the west of Enterprise is zoned OS and the residential uses within the Vantis development are zoned SP-1: Vantis Specific Plan.

The Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The Project would provide enhanced pedestrian access to the Project site from a pedestrian walkway along Town Center and from three outdoor staircases providing access from Enterprise. The Project would not involve any other roadways or significant infrastructure systems that would physically divide the site or separate the site from surrounding uses. Development of the site, as proposed, would be consistent with other land uses that occur within the surrounding area. Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation measures are 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.

Aliso Viejo General Plan Land Use and Policies

According to the City of Aliso Viejo General Plan Land Use Policy Map, the Project site is designated High Density Residential/Town Center Commercial and Open Space. The High Density Residential land use designation provides for multiple-family units such as apartments, town homes, condominiums, senior housing, and multi-family clusters at a range of 18.0 to 30.0 dwelling units per acre (du/ac). The Town Center Commercial land use designation provides for a mixture of uses within the Aliso Viejo Town Center including: community retail and commercial services, offices, theaters, art galleries and entertainment facilities, hotels/motels and restaurants, recreation and community facilities. The maximum intensity development for the Town Center Commercial designation is a 1.25:1 floor area ratio (FAR). The Open Space land use designation provides open space for outdoor recreation, buffering of incompatible land uses, preservation of natural resources, managed production of resources, and protection of health and public safety. Areas designated as Open Space include: streams and washes, open space easements, Regional Parks, and other private and public open space. No density or intensity standard is applied to the Open Space designation.

An analysis of the proposed Project's consistency with relevant policies of the Aliso Viejo General Plan adopted for the purpose of avoiding or mitigating an environmental effect is provided in Table 4.11-1, *Project Consistency with Applicable General Plan Policies*. As indicated in Table 4.11-1, the Project is consistent with the Aliso Viejo General Plan.

Table 4.11-1
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 Project proposes to redevelop a portion of the larger Commons at Aliso Viejo Town Center, an established commercial center located west of Aliso Creek Road. The Project would remove a surface parking lot and develop a mixed-use structure that includes 343 residential dwelling units and 17,273 square feet of commercial use in the core of the community, near sources of employment, housing, shopping, and entertainment. The Project would provide higher density development at the core of the community, consistent with this policy.
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 Project proposes a mixed-use infill redevelopment project in an area that is developed and urbanized. Redevelopment of the site would be generally consistent with existing surrounding uses, the General Plan, and The Commons Specific Plan. The Project would require approval of a Site Development Permit and Development Agreement. The Site Development Permit would allow for discretionary review of the Project's appropriateness, scale, architecture, site design, and compatibility with the surrounding area. The Development Agreement allows the City to provide further site-specific regulations, including permitted levels of development, and community benefits. The proposed Development Agreement would ensure the physical design of the development is consistent with the overall vision for the site. Further, as discussed in Section 4.1, Aesthetics, the Project would not have an adverse effect or damage a scenic vista or natural resources. As such, the Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy LU-3.4: Encourage innovative mixed-use, pedestrian-friendly development projects to reduce traffic congestion and improve quality of life.	Consistent. The Project proposes a mixed-use residential and commercial development in an urbanized area that is within close proximity to existing office, commercial, and residential uses, providing opportunities for reduced automobile use within the area. The Project site is located within an area that provides pedestrian circulation opportunities and the Project would provide enhanced pedestrian access to the site from a pedestrian walkway along Town Center and from three outdoor staircases providing access from Enterprise. As such, the 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 mixed-use infill redevelopment in an urbanized area and would not degrade environmentally sensitive areas of the City. The Project proposes retaining walls that would extend into the existing slope adjacent to Enterprise and would be designed to protect against slope instability. On-site drainage and water quality improvements would provide protection from localized flooding. As such, the 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 4.10, *Hydrology and Water Quality*, the Project proposes an on-site stormwater system, including a Modular Wetland System (a linear stormwater bioretention device that treats flow) that would reduce onsite runoff and provide for water quality. The proposed water quality BMPs would adhere to WQMP requirements, including providing operational BMPs, 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 Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
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 4.15, *Public Services* and Section 4.19, *Utilities and Service Systems*, existing public and utility services are generally anticipated to be adequate to serve the Project; improvements to water and wastewater facilities may be necessary to serve the Project. As part of the Project, all necessary utility improvements, as determined by the service provider, would be constructed to serve the proposed development. Required 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 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 4.19, *Utilities and Service Systems*, the Project would be required to comply with applicable federal, State, and local regulations regarding the recycling, composting, source reduction, and education efforts. As such, the 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 4.15, *Public Services*, the Project Applicant would be required to pay all statutory fees in place at the time in compliance with SB 50 and demonstrate proof of payment to the City for approval of a building permit. As such, the 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 multi-use trails that improve the public and private recreation system.	Consistent. As discussed in Section 4.15, *Public Services*, the Project Applicant would be required to pay all public benefits fees in accordance with the Development Agreement, which would satisfy the City's parkland requirement. The Project would also provide onsite amenities to residents that would partially offset impacts to parks facilities. As such, the 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.	Consistent. The Project proposes a mixed-use residential and commercial infill redevelopment project in an area that is developed and urbanized. By increasing housing and employment density at the Project's location near major arterials (i.e., Aliso Creek Road), the Project would help leverage future efforts to expand public transportation service to this location. As such, the Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy C-4.1: Improve City sidewalks and rights-of-way to make them efficient and appealing for walking and bicycling safely. Coordinate with 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 Project proposes a pedestrian walkway along the southeastern and northeastern boundaries of the proposed mixed-use structure. The Project would provide enhanced pedestrian access to the Project site from an existing pedestrian walkway along Town Center and from three outdoor staircases providing access to existing City sidewalks along Enterprise. The Project would also provide improvements such as enhanced landscaping and trees along Town Center and Enterprise. The Project would not modify or conflict with existing or proposed bicycle facilities. Additionally, the Project would provide bicycle parking in the northeastern corner of the site and 50 long-term bicycle parking spaces, which would facilitate bike travel. As such, the Project is consistent with this policy.
Policy C-4.2: Provide safe and convenient pedestrian and bicycle connections to and from Aliso Viejo Town Center, other commercial districts, office complexes, neighborhoods, schools, other major activity centers, and surrounding communities.	Consistent. Refer to response to Circulation Element Policy C-4.1.
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 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. The Project proposes landscaping that includes native and/or low water plants. As such, the Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
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 4.10, *Hydrology and Water Quality*, the Project would reduce urban runoff when compared to existing conditions. Additionally, the Project would implement structural, source control, and site design BMPs to address water quality conditions associated with the proposed Project. The 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. Additionally, structural source control BMPs proposed as part of the Project include the use of efficient irrigation systems and landscape design, water conservation, and smart controllers. As such, the Project is consistent with this policy.
Policy COS-4.2: Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.	Consistent. Refer to response to Land Use Element Policy LU-2.4.
Policy COS-5.1: Integrate air quality planning with City land use, economic development, and transportation planning efforts.	Consistent. As discussed in Section 4.3, *Air Quality*, the Project would not generate pollutant emissions in excess of applicable significance thresholds. As such, the Project is consistent with this policy.
Policy COS-5.2: Support programs that reduce air quality emissions related to vehicular travel.	Consistent. The Project proposes a mixed-use residential and commercial infill redevelopment project in an area that is developed and urbanized. The Project supports multi-modal transportation options by increasing housing and employment density within close proximity to goods and services. The Project provides for enhanced pedestrian access and includes on-site bicycle storage. Additionally, by increasing housing and employment density at the Project's location near major arterials (i.e., Aliso Creek Road), the Project would help leverage future efforts to expand public transportation service to this location. As such, the 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. Refer to response to Conservation/Open Space Element Policy LU-5-2.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy COS-6.1: Encourage green building designs for new construction and renovation projects within the City.	Consistent. The Project would be required to comply with 2022 Title 24 standards and CALGreen Code. As such, the Project is consistent with this policy.
Policy COS-6.4: Encourage expansion of neighborhood-level products and services and public transit opportunities throughout the City to reduce automobile use.	Consistent. Refer to response to Conservation/Open Space Element Policy LU-5-2.
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. As discussed in Section 4.5, *Cultural Resources*, the Project site does not contain known cultural resources; however, there is the potential for unknown or undiscovered resources to be uncovered through ground-disturbing construction activities. The Project would be required to implement mitigation measures, which would reduce potential impacts to cultural resources to a level that is less than significant. As such, the Project is consistent with this policy.
Safety Element	
Policy S-1.1: Avoid development in areas susceptible to erosion and sediment loss.	Consistent. As discussed in Section 4.7, *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 AVMC Chapter 13.08, Article XIII, *Erosion Control*, which requires the implementation of 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 (AVMC Chapter 7.35, Stormwater Management), which include conditions and requirements established by the City related to the reduction or elimination of storm water runoff pollutants during construction and operational phases of the Project. As such, the Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
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 4.7, *Geology and Soils*, the geologic conditions associated with development of the Project site have been investigated in the Preliminary Geotechnical Due Diligence Study and Preliminary Geotechnical Study; refer to Appendix C. The Project site is not susceptible to potential fault rupture or liquefaction. The 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 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. Under Project conditions, an existing fire hydrant within the southeastern portion of the Project site would be removed. A total of three fire hydrants and two DCDAs would be installed along the northern and eastern perimeters of the Project site and would connect to existing water lines. The Project would be required to comply with all City and 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 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.
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 Project would be subject to compliance with the City's lighting requirements. In addition, the Project would be required to comply with the City's crime prevention through environmental design (CPTED) requirements in accordance with AVMC Section 15.50.020, *CPTED Safety Requirements*. Prior to issuance of a building permit, OCSD would review the Project plans to ensure the Project adheres to all applicable security requirements. As such, the Project is consistent with this policy.

Table 4.11-1 (continued)
Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
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 4.13, *Noise*, the Project would result in less than significant impacts related to noise. As such, the Project is consistent with this policy.
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.	Consistent. As discussed in Section 4.13, Noise, the Project would result in less than significant impacts related to noise and vibration. The Project would be required to comply with AVMC Section 8.12.060, *Interior Noise Standards*, which establishes interior noise standards for residential property within the City. As such, the Project is consistent with this policy.

Aliso Viejo Zoning

The Project Site is designated as one of the five Community Benefit Overlay ("CBO") areas of the City. The General Plan Land Use Element outlines the permitted level of development on each of these CBO areas, which is referred to as the Land Plan. Alternative development consistent with or less intensive than the Land Plan may also be permitted with a new or amended development agreement ("DA"). In 1998, a DA was executed for the Project Site for an alternative development, with site specific regulations reflected in the adopted The Commons Specific Plan. The Commons Specific Plan envisions a mixed-use development project within the Commons portion of the Aliso Viejo Town Center. The Specific Plan Zoning Districts Map identifies the Project site as being located within the SP2-RH Zoning District (Residential – High Density District) and SP2-CTC Zoning District (Commercial – Town Center District).

The Project proposes an alternative plan that is consistent with or less intensive than the Land Plan and amends the site-specific regulations in The Commons Specific Plan. The Project proposes to remove the existing on-site surface parking, landscaping, and improvements to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space.

The Project requests approval of a Site Development Permit pursuant to AVMC Section 15.74.020, *Site Development Permits*, to allow for a new project that involves building construction; a Vesting Tentative Map pursuant to AVMC Section 14.08.030, *Review of Tentative Maps*, to re-subdivide the property into two lots; and a Development Agreement pursuant to AVMC Section 15.82.010, *Development Agreements*, to provide further site-specific regulations and community benefits in connection with the proposed Project.

The Project would be reviewed and only approved after finding the proposed development is consistent with the General Plan and Zoning Code; is compliant with the requirements of CEQA; that the architectural and site design of the Project is compatible with surrounding development; and that landscaping has been designed so as to provide visual relief, complement buildings, visually emphasize prominent design elements and vistas, screen undesirable views, provide a harmonious transition between adjacent land uses and between development and open space, and provide an overall unifying influence to enhance the visual continuity. The City may place conditions of approval on the Site Development Permit to ensure that the intent of the approval is achieved and/or to mitigate or eliminate adverse impacts on surrounding properties, residents, businesses or the general public. The Project is also subject to the Development Agreement, which allows the City to provide further site-specific regulations, including permitted levels of development, and community benefits. These processes would provide an opportunity for public review and evaluation of site-specific requirements and characteristics, to minimize adverse effects on surrounding properties and the environment, and to ensure that all site development regulations and performance standards are provided in accordance with the City's General Plan and Municipal Code. Therefore, the Project would not cause a significant environmental impact due to a conflict with the Aliso Viejo General Plan, The Commons Specific Plan, or any other land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures: No mitigation measures are required.

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4.12 Mineral Resources

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

a) 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?

No Impact. The State Mining and Geology Board (SMGB) establishes Mineral Resources Zones (MRZs) to designate lands that contain mineral deposits. The following classifications are used by the State to define MRZs:

- *MRZ-1:* Areas where the available geologic information indicates no significant likelihood of significant mineral deposits.
- *MRZ-2a:* Areas where the available geologic information indicates that there are significant mineral deposits.
- *MRZ-2b:* Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.
- *MRZ-3a:* Areas where the available geologic information indicates that mineral deposits exist. However, the significance of the deposit is undetermined.
- *MRZ-3b:* Areas where the available geologic information indicates that mineral deposits are likely to exist. However, the significance of the deposit is undetermined.
- *MRZ-4:* Areas where there is not enough information available to determine the presence or absence of mineral deposits.

According to the 1994 Generalized Mineral Land Classification Map by the California Department of Conservation, the Planning Area has two classifications: MRZ-1 and MRZ-3.[28] The Aliso Viejo General Plan does not designate any lands within the City as mineral resources deposit areas. There are no existing

[28] RV Miller, *Generalized Mineral Land Classification of Orange County, California*, 1994.

mineral resource recovery operations on the Project site or surrounding area.[29] Therefore, the 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: No mitigation measures are required.

[29] California Department of Conservation, *Mines Online*, https://maps.conservation.ca.gov/mol/index.html, accessed March 14, 2024.

4.13 Noise

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

This section is based in part on the *Noise and Vibration Modeling Results* (Noise Data), prepared by Noah Tanski Environmental Consulting, dated November 2022 and included as Appendix G, Noise Data.

FUNDAMENTALS OF NOISE

Sound can be described in terms of its frequency (pitch) and loudness (amplitude). Frequency relates to the number of pressure oscillations per second. The loudness of sound increases or decreases as the amplitude increases or decreases. The standard unit of measurement for sound is the decibel (dB). Although the terms "sound" and "noise" are often used synonymously, noise is commonly defined as sound that is either loud, unpleasant, unexpected, or undesired. Because decibels are on a logarithmic scale, sound pressure levels cannot be simply added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA. Instead, sound energy must be doubled to produce a 3 dB increase.

Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range of the human ear. Typically, the human ear can barely perceive the change in noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, CNEL is obtained after the addition of five (5) decibels to sound levels in the evening from 7:00 PM to 10:00 PM and after addition of ten (10) decibels to sound levels in the night between 7:00 PM and 7:00 AM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

Equivalent Sound Level (Leq): The equivalent steady-state noise level for a stated period of time that would contain the same acoustic energy as the fluctuating, time-varying noise level of that same period. For example, the Leq for one hour is the energy average noise level for that hour. Leq can be thought of as a continuous noise level for a certain period that is equivalent in acoustic energy content to a fluctuating noise level of that same period. In this analysis, Leq is expressed in units of dBA.

L(x): Lx is used to represent the noise level exceeded X percent of a specified time period. For example, L90 represents the noise level that is exceeded 90 percent of a specified time period. L90 is commonly used to represent ambient or background steady-state noise levels.

Noise Attenuation

Generally speaking, noise levels decrease, or "attenuate," as distances from noise sources to receivers increases. For each doubling of distance, noise from stationary or small, localized sources, commonly referred to as "point sources," may attenuate at a rate of 6 dBA for each doubling of distance. This attenuation is referred to as the inverse square law. For example, if a point source emits a noise level of 80 dBA at a reference distance of 50 feet its noise level would be approximately 74 dBA at a distance of 100 feet, 68 dBA at a distance of 200 feet, etc. Noise emitted by "line" sources, such as highways, attenuates at the rate of 3 dBA for each doubling of distance.[30]

[30] California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, April 2020.

Factors such as ground absorption and atmospheric effects may also affect the propagation of noise. In particular, ground attenuation by non-reflective surfaces such as soft dirt or grass may contribute to increased attenuation rates of up to an additional 8 to 10 dBA per doubling of distance.

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between a noise source and a receiver. Barriers that break the line of sight between noise sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. Barriers can reduce source noise levels by up to 20 dBA, though it is generally infeasible for temporary barriers to reduce source noise levels by more than 15 dBA. In cases where the noise path from source to receiver is direct but grazes the top of a barrier, noise attenuation of up to 5 dBA may still occur.

GROUNDBORNE VIBRATION FUNDAMENTALS

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, and acceleration.[31] Unlike noise, vibration is not a common environmental issue, as it is unusual for vibration from vehicle sources to be perceptible. Common sources of vibration may include trains, construction activities, and certain industrial operations.

Peak Particle Velocity

Peak Particle Velocity (PPV) is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are generally measured in inches per second (in/sec).

Effects of Vibration

High levels of vibration may cause damage to buildings or even physical personal injury. However, vibration levels rarely affect human health outside the personal operation of certain construction equipment or industrial tools. Instead, most people consider environmental vibration to be an annoyance that may affect concentration or disturb sleep. Background vibration in residential areas is usually not perceptible, and perceptible indoor vibrations are generally caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Vibration from traffic on smooth roadways is rarely perceptible, even from larger vehicles such as buses or trucks.[32] The threshold of human perception of vibration is approximately 0.01-0.02 in/sec PPV.

EXISTING NOISE ENVIRONMENT

Noise Measurements

Noise measurements were obtained at multiple locations near the Project site to aid in the characterization of noise conditions surrounding the Project and nearby sensitive receptors. The

[31] Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, September 2018.
[32] California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, April 2020.

measured noise levels are shown in Table 4.13-1, *Short-Term Noise Measurement Data*. As indicated in Table 4.13-1, ambient noise levels range between 51.6 and 64.6 dBA Leq. At all locations, the primary source of noise was vehicular traffic along Enterprise and Aliso Creek Road. Based on the three long-term noise measurements taken at the intersection of Enterprise and Town Center (noise measurements No. 6-8), it is estimated that 24-hour noise levels near the Project Site are approximately 58.4 dBA Ldn.[33]

Table 4.13-1
Short-Term Noise Measurement Data

Noise Measurement Location	Duration	Sound Level (dBA Leq)
1. Near intersection of Aliso Creek Rd. and Enterprise	2:26 p.m. – 2:41 p.m.	64.6
2. Enterprise, near Vantis Drive	3:06 p.m. – 3:21 p.m.	64.3
3. Vantis Residences, facing Project Site	3:00 – 3:15 p.m.	51.6
4. Near 101 Summit Office Park	3:30 p.m. – 3:45 p.m.	57.8
5. Near Commons at Aliso Viejo – Outdoor Restaurant Seating	4:04 p.m. – 4:19 p.m.	61.6
6. Intersection of Enterprise and Town Center	1:47 p.m. – 2:47 p.m.	59.3
7. Intersection of Enterprise and Town Center	4:21 p.m. – 5:21 p.m.	59.2
8. Intersection of Enterprise and Town Center	12:15 a.m. – 12:45 a.m.	51.7
Source: Noah Tanski Environmental Consulting, *Noise and Vibration Modeling Results*, 2022, 2024.		

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. Noise-sensitive receptors in the vicinity of the Project site include the Vantis Residences, a collection of multi-family residential properties located approximately 350 feet west of the Project site, across Enterprise; and the St. Moritz Resort Apartments, a multi-family residential complex located over 500 feet east of the Project site, across Aliso Creek Road.

REGULATORY FRAMEWORK

Aliso Viejo General Plan

Applicable policies and standards governing noise in the City are set forth in the Aliso Viejo General Plan Noise Element. General Plan Noise Element Table N-1 contains residential noise standards that summarize maximum acceptable noise levels as measured from any residential property in the City. General Plan Noise Element Table N-2 contains a "Noise/Land Use Compatibility Matrix" that defines the City's noise

[33] 24-hour Ldn was estimated based on guidelines contained in Appendix E of the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual* (September 2018).

standards for land use compatibility in the planning process. The Noise Element instructs that land uses should be evaluated using the standards shown in Table N-2 to ensure that proposed land uses do not adversely impact existing noise environments. In addition to these noise standards, the Noise Element outlines goals and policies to address potential noise impacts. It should be noted that the Noise Element summarizes the City's residential noise ordinance standards that were in place at the time of its adoption, but the City's residential and other noise ordinance standards have since been updated in the City's Municipal Code.

The Noise Element identifies "noise sensitive land uses" and "sensitive receptors" as sites that include, but not limited to, residences, schools, hospitals, religious meetings, and recreational areas.

City of Aliso Viejo Municipal Code

AVMC Chapter 8.12, *Noise Control*, establishes noise standards to protect the health, safety, welfare, and living/working environments in the City. AVMC Section 8.12.050, *Exterior Noise Standards*, establishes exterior noise standards for residential and nonresidential land uses. These standards are shown in Table 4.13-2, *City of Aliso Viejo Exterior Noise Standards*.

Table 4.13-2
City of Aliso Viejo Exterior Noise Standards

Land Use	Noise Level	Time Period
Residential Exterior Noise Standards		
Density of less than 10 DU/acre	50 dBA	7:00 AM – 10:00 PM
	45 dBA	10:00 PM – 7:00 AM
Density of more than 10 DU/acre	55 dBA	7:00 AM – 10:00 PM
	50 dBA	10:00 PM – 7:00 AM
Nonresidential Exterior Noise Standards		
Commercial	65 dBA	7:00 AM – 10:00 PM
	60 dBA	10:00 PM – 7:00 AM
Manufacturing/Industrial	70 dBA	24 hours per day
Source: AVMC Section 8.12.050, *Exterior Noise Standards*. Note: DU = dwelling unit		

Section 8.12.050(C) establishes how these noise standards are to be applied by stating that noise levels shall not exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour.
- The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour.
- The noise standard plus 10 dB(A) for a cumulative period of more than five minutes in any hour.
- The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour.
- The noise standard plus 20 dB(A) for any period of time.
- In the event the ambient noise level exceeds any of the applicable standards when the source of the noise is not operating, the ambient noise level shall become the standard.

AVMC 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 AM to 10:00 PM; and 45 dBA between the hours of 10:00 PM and 7:00 AM. AVMC Section 8.12.060(B) establishes that noise levels shall not exceed:

- The interior noise standard for a cumulative period of more than five minutes in any hour.
- The interior noise standard plus five dBA for a cumulative period of more than one minute in any hour.
- The interior noise standard plus 10 dBA for any period of time.

AVMC Section 8.12.060(C) further states that in the event the ambient noise level exceeds either of the first two noise level categories above, the cumulative period applicable to the category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under that category shall be increased to reflect the maximum ambient noise level.

AVMC Section 8.12.070, *Exemptions*, establishes a list of activities that the AVMC considers exempt from the provisions of the City's noise ordinance. Exempt activities 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 PM and 7:00 AM on weekdays, 8:00 PM and 8:00 AM 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 AM and 8:00 PM on any day except Sunday or a federal holiday, or between the hours of 9:00 AM and 8:00 PM 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 AM and 6:00 PM Monday through Friday where audible in residential areas; or between 7:00 AM and 6:00 PM on Saturdays where audible in residential areas; or between 5:00 AM and 9:00 PM 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.

THRESHOLDS OF SIGNIFICANCE

Construction Noise Threshold

For the purposes of this analysis, a significant impact would occur if construction activities would generate a substantial temporary 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. The City has not adopted construction-related noise thresholds of significance for CEQA consideration. The Project's construction noise impact would be considered significant if any of the following were to occur:

- Construction activities occurring between 7:00 AM and 8:00 PM on weekdays, or between the hours of 8:00 AM and 8:00 PM on Saturday (excluding federal holidays), would cause existing ambient exterior noise levels at a noise-sensitive use to increase by greater than 5 dBA Leq. The averaging period shall be equivalent to the duration of a single workday, from start to finish of that day's construction activities.

- Construction activities occurring outside the hours of 7:00 AM and 8:00 AM on weekdays, outside the hours of 8:00 AM and 8:00 PM on Saturday, or on any federal holiday would exceed the City's exterior noise standards (AVMC Section 8.12.050) and interior noise standards (AVMC Section 8.12.060).

Operational Noise Threshold

For purposes of this analysis, a significant impact would occur if on- or off-site noise sources associated with the Project would generate a substantial permanent increase in ambient noise levels surrounding the proposed Project and any nearby land uses. The City has not adopted operations-related thresholds of significance for CEQA consideration. The Aliso Viejo General Plan instructs that noise impacts from proposed land uses should be assessed utilizing the Noise/Land Use Compatibility Matrix (Noise Element Table N-2), but it does not contain instructions on how these standards may be applied to analysis under CEQA.

The exterior and interior noise standards set forth by AVMC Section 8.12.050 and Section 8.12.060 would apply to the Project's operational noise sources that have not been exempted by Section 8.12.070. From a CEQA standpoint, this regulatory framework does not adequately meet the requirements of a threshold by which a determination of significance may be evaluated. As such, the following criteria to determine significance have been adopted in consideration of the City's General Plan and AVMC noise standards. The Project's operational noise impact would be considered significant if any of the following were to occur:

- Project operations would cause ambient noise levels at sensitive receptors to increase by 3 dBA CNEL or more to or within "normally unacceptable" or "clearly unacceptable" noise and land use compatibility categories, as defined by the City's Noise/Land Use Compatibility Matrix (Noise Element Table N-2).
- Project operations would cause any 5 dBA CNEL or greater noise increase to a noise-sensitive receptor.
- Project operations would exceed the City's noise ordinance standards as set forth by AVMC Section 8.12.050 and Section 8.12.060.

As a 3 dBA increase represents a barely noticeable change in noise level, this threshold considers any increase in ambient noise levels to or within a land use's "normally unacceptable" or "clearly unacceptable" noise/land use compatibility categories to be significant so long as the noise level increase can be considered barely perceptible when averaged over a daily period. For instance, when the noise level increase would not necessarily result in "normally unacceptable" or "clearly unacceptable" noise/land use compatibility, a readily noticeable 5 dBA CNEL increase would still be considered significant. Increases less than 3 dBA CNEL are unlikely to result in noticeably louder ambient noise conditions and would therefore be considered less than significant. The third criterion also considers any exceedance of the City's noise ordinance standards to constitute a significant impact.

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

Less Than Significant Impact.

Construction Noise

On-site Construction Activities

The Project's construction phase would generate noise during the approximately 29 months of grading, building construction, and other related construction activities. During all construction phases, noise-generating activities would be limited to hours between 7:00 AM and 8:00 PM on weekdays. The Project is anticipated to utilize a five-day work week, and work on the weekends and federal holidays would not occur. As a result, noise from the Project's construction activities would be exempt from the AVMC Section 8.12.050 and Section 8.12.060 noise standards.

The degree of construction noise may vary for different areas of the Project site and also vary depending on the construction activities. Noise levels associated with the construction would vary with the different phases of construction. Project-related construction activities would include demolition, grading, building construction, paving, architectural coating, and landscaping. Noise from grading activities is typically the foremost concern when evaluating a project's construction noise impact, as grading activities often require extensive use of heavy-duty, diesel-powered earthmoving equipment. Given this consideration, the following analysis assesses noise impacts that may result from the Project's grading phase.

Grading for the Project is estimated to last approximately three to four months. The majority of the Project's grading would be characterized by vehicles such as an excavator and loader working to level the site's foundation pad and excavate for any utility trenches or footings. As these vehicles perform work across the approximately 4.4-acre Project site, their construction noise levels at sensitive receptors would fluctuate depending on these vehicles' distances. Noise levels would be greater when vehicles are in proximity of sensitive receptors and lower when these vehicles are positioned farther away. Given this fact, the noise impact associated with the Project's grading activities has been evaluated by modeling the noise levels that would be associated with an excavator and a loader grading a half-acre parcel of land in proximity to sensitive land uses.

Table 4.13-3, *Average Construction Noise Level By Phase (dBA)*, shows the estimated noise increases that would result from the Project's grading activities at nearby sensitive receptors. As shown, noise increases at St. Moritz Resort Apartments and Vantis Residences would not exceed the 5 dBA Leq threshold of significance adopted by this analysis. As discussed, this analysis assesses the Project's "worst-case" construction phase. Other construction phases would not require the types of heavy-duty earthmoving equipment assumed by this grading phase scenario or would utilize heavy equipment on a more intermittent basis, and therefore would generate lesser noise impacts. Additionally, this is a conservative analysis as it assumes that two grading vehicles would spend an entire day operating within a small half-acre parcel in nearest proximity to receptors, despite the Project's 4.4-acre area. Therefore, over the course of the Project's grading phase, construction noise impacts are likely to be substantially lower than

what is estimated by this analysis. Based on the results shown in Table 4.13-3 and these additional considerations, the Project's construction noise impact would be less than significant.

Table 4.13-3
Average Construction Noise Level by Phase (dBA)

Receptor	Construction Noise Level (dBA Leq)	Existing Ambient Noise Level (dBA Leq)	New Noise Level (dBA Leq)	Increase
St. Moritz Resort Apartments	51.8	64.6	64.8	0.2
Vantis Residences	54.3	51.6	56.2	4.6
Source: Noah Tanski Environmental Consulting, *Noise and Vibration Modeling Results*, November 2022.				

Off-site Construction Activities

Trucks and other construction-related vehicles would access the Project site from roadways in the vicinity over the course of all construction phases. Based on construction activities, the Project's maximum construction truck trip generation is estimated to be no more than 40 vendor-related truck trips per hour.[34] This would have a marginal effect on roadside noise levels along Aliso Creek Road and other major thoroughfares that heavy-duty construction trucks would utilize to access the Project site. Based on the Project's proximity to SR-73, it is reasonably expected that the majority of construction trucks would utilize this highway to access the Project site, meaning that the majority of surface street travel by these trucks would be limited to Aliso Creek Road and a small segment of Enterprise to access the Project site.

According to the Federal Highway Administration (FHWA) Traffic Noise Model 2.5 modeling, a maximum of 40 truck trips per hour (20 inbound trips and 20 outbound trips) would generate roadside noise levels of 59.9 dBA Leq, as measured 75 feet from the roadway centerline. This approximates the distance of St. Moritz Resort Apartments from the segment of Aliso Creek Road that vendor trucks would utilize when accessing the Project site and SR-73. As shown in Table 4.13-3, field noise measurements indicate that existing daytime ambient noise levels at St. Moritz Resort Apartments are 64.6 dBA Leq. Thus, the increase in noise levels from Project construction trucks would not have a substantial effect on ambient noise levels at this receptor (no more than an approximate 1 dBA Leq increase during worst-case hours). Vantis Residences are located over 600 feet from the truck route and are unlikely to experience measurable noise increases from vendor or other construction truck trips.

On average, the Project's construction truck trip generation is anticipated to be significantly less than the 40 truck trips per hour worst-case scenario evaluated by this analysis, meaning that noise impacts would be significantly reduced. As a result, the Project's noise impact from off-site construction sources would be less than significant.

[34] Construction of the Project is estimated to generate a maximum 84 one-way vendor trips per day. Therefore, this analysis conservatively assumes a worst-case scenario in which approximately half of these trips occur during a single work hour.

Operational Noise

On-site Operational Noise

On-site operational noise associated with the proposed use would include residential and commercial activities, mechanical equipment (e.g., HVAC units), and auto-related activities (e.g., loading and unloading, parking). As described further below, the Project would not generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Therefore, the Project's on-site operational noise impacts would be less than significant.

Mechanical Equipment. Given the relatively quiet operation of modern HVAC systems and existing ambient noise levels within the proximity of the Project site, the Project's HVAC systems are not anticipated to increase off-site ambient noise levels by a discernable degree. Most modern split-system residential HVAC systems generate noise levels below 60 dBA at 10 feet (exterior noise level). Thus, even when assuming the continuous 24-hour operation of many HVAC units at once, noise levels at Vantis Residences would be below 38 dBA Leq and 45 dBA CNEL; and noise levels at St. Moritz Resort Apartments would be below 34 dBA Leq and 41 dBA CNEL.[35] These noise levels are below the AVMC's minimum 45 dBA Leq exterior and interior noise standards for residential uses. As such, mechanical equipment noise from the Project's HVAC systems would not result in audible noise increases at nearby sensitive receptor locations, including Vantis Residences and St. Moritz Resort Apartments.

At the nearest surrounding commercial uses, that are over 80 feet from the Project site, noise from the Project's HVAC systems would be below 52 dBA Leq, which is below the AVMC's minimum 60 dBA Leq exterior noise standard for commercial uses.

An additional consideration is the fact that many surrounding land uses (both commercial and residential uses) also contain rooftop-mounted HVAC equipment. For example, Vantis Residences is a similar multi-family development that contains over 400 dwelling units. Noise from Vantis Residences' HVAC equipment was not audible at the time of the field noise measurement studies, most likely due to the presence of elevated ambient noise levels in the area surrounding the Project and receptors.

Other mechanical equipment associated with the proposed Project includes filtering and pumping equipment for the Project's proposed pool. This equipment would be enclosed in mechanical rooms located within the Project building and would not be audible off-site or at any surrounding receptors.

Auto-Related Activities. The Project would include automobile parking spaces located in an eight-story parking structure with a subterranean parking garage. The parking structure would feature a wrap-around design (i.e., the mixed-use building would wrap around the majority of the parking structure) and help contain parking-related noises within the parking structure. This suggests that the Project's parking facilities and the intermittent noises associated with them (e.g., doors slamming, engine starting) would have a nominal effect on surrounding ambient noise levels. According to the Federal Transit Administration (FTA), a hypothetical facility with an hourly activity of 174 vehicles, equal to the Project's

[35] The calculations assume that 10 HVAC systems are operating continuously for 24-hours and are 400 feet from Vantis Residences and 600 feet from St. Moritz Resort Apartments.

maximum gross peak hour trip generation, would be expected to result in a noise level of 49 dBA Leq within a distance of 50 feet. At Vantis Residences, noise levels would be no greater than approximately 31 dBA Leq (hourly) and 32 dBA CNEL; at St. Moritz Resort Apartments, noise levels would be no greater than approximately 28 dBA Leq (hourly) and 30 dBA CNEL.[36] These noise levels are below the AVMC's minimum 45 dBA Leq exterior and interior noise standards for residential uses, though the AVMC does not apply to noise from vehicles, which is a matter pre-empted by State regulations. As such, auto-related activity noise from the Project's parking garage would not result in audible noise increases at nearby sensitive receptors, including Vantis Residences or St. Moritz Resort Apartments.

At the nearest surrounding commercial uses, that are over 80 feet from the Project's footprint, noise levels would be below 45 dBA Leq, which is below the AVMC's minimum 60 dBA Leq exterior noise standard for commercial uses (though as discussed above, the AVMC does not regulate noise from vehicles).

Amenity Space/Open Space. The primary source of noise associated with the Project's balconies and shared amenity areas would be speech/conversation from the residential uses. Vocal noise from speech and conversation averages between 55 and 67 dBA at a reference distance of one meter, in proportion to background noise levels.[37] Given the rapid attenuation of speech/conversation and the existing ambient noise levels in the Project vicinity, it is not anticipated that vocal noises from outdoor uses would be audible at sensitive receptors that are hundreds of feet from the Project site, let alone capable of causing or contributing to significant noise increases. Overall, reasonable use of the Project's exterior amenity spaces and other open spaces would not be expected to result in discernible noise increases at nearby sensitive receptors.

Commercial Uses. The Project's proposed ground-floor retail and dining services space would be oriented toward the center of the Project site's existing shopping center location and hundreds of feet from the nearest sensitive receptors. Reasonable use of the Project's retail and dining services space are not anticipated to result in substantial increases in surrounding exterior noise levels, and the Project's inclusion of these uses within the site of an existing commercial shopping center would not represent a substantial change to the environment. Additionally, no exterior amplified noise systems are proposed by the Project.

The noise levels detailed above demonstrate that the Project's on-site operational noise sources would have a nominal effect on surrounding noise levels. Worst-case noise levels at Vantis Residences would be no greater than approximately 45.2 dBA CNEL based on the combined influence of the Project's HVAC (45 dBA CNEL) and parking garage (32 dBA CNEL) noise levels. Worst-case noise levels at St. Moritz Resort Apartments would be no greater than approximately 41.3 dBA CNEL based on the combined influence of the Project's HVAC (41 dBA CNEL) and parking garage (30 dBA CNEL) noise levels. These noise levels are within the City's "Normally Acceptable" and "Conditionally Acceptable" criteria for residential noise levels,

[36] The calculations assume the same receptors distances as the previous HVAC-related analysis. CNEL calculations conservatively assume that the Project's garage would generate worst-case noise levels between 7:00 AM and 10:00 PM.
[37] United States Environmental Protection Agency, *Speech Levels in Various Noise Environments*, May 1977.

which range up to 70 dBA CNEL. Accordingly, the applicable threshold is whether the Project's on-site operational noise sources would increase 24-hour noise levels at Vantis Residences and St. Moritz Resort Apartments by greater than 5 dBA CNEL. Determining this impact first requires the estimation of CNEL noise levels at Vantis Residences and St. Moritz Resort Apartments. One helpful correlation is that CNEL noise levels are typically a few decibels below daytime noise levels in urbanized environments where traffic is the predominant source of ambient noise. At Vantis Residences, daytime ambient noise levels measured during off-peak traffic hours were 51.6 dBA Leq, suggesting that CNEL noise levels are approximately 48 dBA CNEL. When added to this figure, the Project's worst-case 45.2 dBA CNEL impact for this receptor demonstrates that the Project's on-site operational noise sources would not have the potential to increase ambient noise conditions at Vantis Residences by greater than approximately 1.8 dBA CNEL (48 dBA CNEL + 45.2 dBA CNEL = 49.8 dBA CNEL). At St. Moritz Resort Apartments, daytime ambient noise levels measured during off-peak traffic hours were 64.6 dBA Leq, suggesting that CNEL noise levels are approximately 61 dBA CNEL. When added to this figure, the Project's worst-case 41.3 dBA CNEL impact for this receptor demonstrates that the Project's on-site operational noise sources would not have the potential to increase ambient noise conditions at St. Moritz Resort Apartments by a measurable degree (the estimated increase would be less than a tenth of a decibel) (61 dBA CNEL + 41.3 dBA CNEL = approximately 61.0 dBA CNEL). These impacts are below the 5 dBA CNEL increase threshold of significance.

Overall, the Project would be located in an area with similar multi-family land uses, as well as other retail and dining services uses. The Project's consistency with surrounding land use types and patterns further supports the conclusion that it would not alter the noise environment of surrounding sensitive receptors by a substantial degree or the 5 dBA CNEL increase that would represent a significant impact. Given these considerations, the impact of on-site operational noise sources would be considered less than significant.

Off-Site Operational Noise

Typically, a 3 dBA CNEL increase in roadway noise levels (which is equivalent to the threshold of significance) requires an approximate doubling of traffic volume. Thus, if a project would not double the traffic volume of a roadway, then it would not result in 3 dBA CNEL or greater increases in that roadway's noise levels. On a typical weekday, the Project is estimated to result in a maximum of 166 new AM peak hour trips and 174 new PM peak hour trips. According to vehicle count data in the Project's traffic study, AM and PM peak-hour volumes along Aliso Creek Road are in excess of 2,000 trips per hour. The Project would result in no more than approximately 120 trips per hour along any segment of Aliso Creek Road. As such, the Project would not double the traffic volume of Aliso Creek Road, Enterprise, or any other roadway. Therefore, the increase in vehicle trips associated with the Project would have minimal noise impacts along Aliso Creek Road. Based on the traffic study, AM and PM peak-hour volumes along Enterprise are estimated to be in excess of 350 trips per hour. The Project is anticipated to result in no more than approximately 25 trips per hour along any segment of Enterprise and thus, the Project's impacts along this roadway would also be minimal. A similar scenario exists for all other roadways in the vicinity of the Project. The Project's traffic along these roadways would be below levels correlated with 3 dBA CNEL noise increases, and actual impacts would be fractions of a decibel. Therefore, the impact of the Project's off-site operational noise sources would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact.

Construction activities can produce vibration that may be felt by adjacent land uses. Construction of the Project would require a variety of large, steel-tracked earthmoving vehicles. According to the FTA, large bulldozers and similar heavy-equipment can generate groundborne vibration levels up to 0.089 in/sec PPV at a reference distance of 25 feet, which is perceptible, but below any risk to architectural damage. There are no buildings within 25 feet of the proposed Project, meaning that construction of the Project would not expose surrounding buildings to perceptible groundborne vibration levels. Thus, construction of the Project would not expose any surrounding buildings to perceptible or potentially damaging levels of groundborne vibration. The nearest retail/commercial buildings would be located nearly 100 feet south of the Project's construction footprint. At this distance, the Project's groundborne vibration levels from construction would be far-below levels associated with building damage for even the most sensitive and fragile historic structures, much less levels associated with building damage for the types of modern structures surrounding the project. At more distant structures, the Project's groundborne vibration levels would be even further reduced.

Project operational activities would not contain any significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. The Project's related vehicle travel would not be considered a significant source of vibration, as vehicle travel rarely generates perceptible groundborne vibration. Therefore, potential groundborne vibration impacts related to construction and operation of the proposed Project would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The Project site is not located within an airport land use plan; is not located within the vicinity of a private airstrip; and is not located within two miles of a public airport or public use airport. The closest airport to the Project site is John Wayne Airport, located approximately 10 miles northwest of the Project site. Thus, the Project would not expose people residing or working in the Project site area to excessive noise levels and no impact would occur.

Mitigation Measures: No mitigation measures are required.

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4.14 Population and Housing

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

a) 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 Project site is currently developed and located within an urbanized area. The Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The 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.

As of January 2023, the City of Aliso Viejo had a population of 50,766 persons.[38] The Aliso Viejo General Plan FEIR anticipates a population of 48,071 persons at buildout. The buildout population identified in the General Plan FEIR has already been exceeded. The Project involves the development of 343 residential units, which would induce direct population growth in the City. Based on the 2023 California Department of Finance estimated household size of 2.58 persons per household, [39] the Project's forecast population growth is approximately 885 persons. The Project's forecast population growth would increase the City's existing population by approximately 1.7 percent to 51,651 persons.

SCAG is the designated Metropolitan Planning Organization (MPO) for six counties (Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial) and 191 cities, including the City of Aliso Viejo. As the

[38] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023*, May 2023.
[39] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023*, May 2023.

federally-designated MPO, SCAG is responsible for developing and adopting regional housing, population, and employment growth forecasts for local Orange County governments, among other counties. The 2020 RTP/SCS provides population, household, and employment projection estimates in five-year increments through 2045. Based on the 2020 RTP/SCS, SCAG's growth forecasts for Aliso Viejo estimates population of 52,700, 19,700 households, and 24,200 employees for the year 2045.[40] Since initiation of the analysis presented in this Initial Study, SCAG adopted Connect SoCal 2024 (2024–2050 RTP/SCS). The 2024 RTP/SCS provides household and employment projection estimates in five-year increments through 2050. For the 2024 RTP/SCS, SCAG's growth forecasts for Aliso Viejo estimates 20,400 households and 24,600 employees for the year 2050.[41] Additionally, while the 2024 RTP/SCS does not provide population projections below the county-level, the 2024 RTP/SCS states that a rough estimate of the future jurisdiction-level population based on Connect SoCal's household forecast can be derived using county-level population to housing ratio.[42] Using the 2050 Orange County population to housing ratio of 2.745, Aliso Viejo is projected to have a population of approximately 56,000 for the year 2050. As such, the Project would not exceed SCAG's growth projections for the City.

SCAG's socio-economic estimates and projections are used by federal and State mandated long-range planning efforts such as the Regional Housing Needs Assessment (RHNA), which quantifies the need for housing within each jurisdiction during specified planning periods. In 2021, SCAG adopted the 6th Cycle Final RHNA Allocation Plan, which assigns a share of the region's future housing need to each jurisdiction in the SCAG region. Aliso Viejo's share of the region's new housing need for the 6th cycle (2021-2029) Housing Element is 1,195 units.[43]

The Project site is designated High Density Residential/Town Center Commercial and Open Space. In addition, the General Plan Land Use Element identifies the Project site as being located within the Enterprise/Aliso Creek Community Benefit Overlay (CBO) Area. Within these areas, alternative land uses may be permitted pursuant to execution of a development agreement. Residential and employment-generating uses have been anticipated at the site by the General Plan, including the Land Use Element and Land Use Policy Map. In addition, the General Plan 6th Cycle (2021-2029) Housing Element identifies The Commons Specific Plan Area as accommodating 362 housing units.[44] As such, the population growth resulting from residential uses associated with the Project would be within the anticipated growth for the City.

In addition to residential uses, the Project proposes employment-generating uses. Construction activities associated with the Project would create temporary construction-related jobs. However, these jobs are anticipated to be filled by construction workers already living in the community and surrounding areas

[40] Southern California Association of Governments, *Connect SoCal 2020: Demographics and Growth Forecast Technical Report*, September 3, 2020.
[41] Southern California Association of Governments, *Connect SoCal 2024: Demographics and Growth Forecast Technical Report*, April 4, 2024.
[42] Southern California Association of Governments, *Connect SoCal 2024: Demographics and Growth Forecast Technical Report*, April 4, 2024. Page 37.
[43] Southern California Association of Governments, *SCAG 6th Cycle Final RHNA Allocation Plan*, July 1, 2021.
[44] City of Aliso Viejo, *Housing Plan*, adopted June 7, 2023. Table CP-34.

and would not require workers to permanently relocate to the City. Further, operational activities associated with the proposed use (retail and service use) typically do not provide employment opportunities that involve substantial numbers of people needing to permanently locate to fill the positions, but would rather provide employment opportunities to people within the local community and surrounding areas. It should also be noted that estimating the number of future employees who would choose to relocate to the City would be highly speculative since many factors influence personal housing location decisions (i.e., family income levels and the cost and availability of suitable housing in the local area). Using Orange County Transportation Analysis Model's employment estimation of 2.5 employees per 1,000 square feet of retail, the Project would employ approximately 43 people.[45] Assuming 43 new employees (and their families) relocate to the City, employment-generating uses associated with Project implementation could result in a potential population increase of approximately 111 persons (based on the 2023 California Department of Finance estimated household size of 2.58 persons per household). This is a conservative assumption, as it assumes all employees would relocate to the City along with their families, instead of the more likely scenario of existing Aliso Viejo or other nearby residents filling some of the new employment opportunities.

The Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan, and would not induce substantial unplanned population growth in the area; therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. As described above, the Project site is currently developed with surface parking, landscaping, and improvements. The Project site does not contain housing. Therefore, the proposed Project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. Thus, no impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

[45] Orange County Transportation Authority, *Orange County Subarea Modeling Guidelines Manual*, October 2020.

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4.15 Public Services

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

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

1) Fire protection?

Less Than Significant Impact. The Orange County Fire Authority (OCFA) provides fire protection and emergency services throughout the City, including the Project site.[46] The nearest OCFA fire station to the Project site is Station 57, located at 57 Journey, approximately 0.5-mile south of the Project site.

The Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The Project site would be accessible to emergency vehicles from two existing driveways, which would provide access from Town Center via Enterprise to the southeast of the site and from Aliso Creek Road to the east. An existing fire hydrant within the southeastern portion of the Project site would

[46] City of Aliso Viejo, *Fire Authority,* https://avcity.org/198/Fire-Authority, accessed March 22, 2024.

be removed. A total of three new fire hydrants and two DCDAs would be installed along the northern and eastern perimeters of the Project site and would connect to existing water lines.

As discussed in Section 4.14, the Project's 343 residential units would induce direct population growth in the City. Based on the 2023 California Department of Finance estimated household size of 2.58 persons per household,[47] the Project's forecast population growth is approximately 885 persons. In addition, the Project proposes employment-generating uses. As discussed in Section 4.14, the Project is anticipated to employ approximately 43 people. Conservatively assuming 43 new employees (and their families) relocate to the City, employment-generating uses associated with Project implementation could result in a potential population increase of approximately 111 persons (based on the 2023 California Department of Finance estimated household size of 2.58 persons per household).

Fire protection and emergency service by the OCFA is currently provided to The Commons at Aliso Viejo Town Center under existing conditions. The proposed residential and employment-generating uses at the Project site would be expected to incrementally increase the demand for fire protection and emergency medical services to the site relative to existing conditions. However, as discussed in Section 4.14, residential and employment-generating uses have been anticipated at the Project site by the General Plan and the Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan. Therefore, as the Project would not induce substantial unplanned population growth in the area, it is expected that the population and employment growth associated with the Project would be adequately served by the OCFA and the Project would not create a need for new or physically altered fire facilities to maintain acceptable service ratios, response times, or other performance objectives.

Furthermore, the Project would be required to comply with the California Fire Code, as amended, in accordance with AVMC Chapter 13.04, *2022 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 site. Implementation of City requirements, including compliance with the California Fire Code, and approval of site plans by OCFA would further reduce potential impacts concerning fire protection services. As such, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

2) Police protection?

Less Than Significant Impact. The Orange County Sheriff Department (OCSD) provides police protection throughout the City, including the Project site.[48] The nearest OCSD station is located at 12 Journey, approximately 0.7-mile southwest of the Project site.

[47] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023*, May 2023.
[48] City of Aliso Viejo, *Police Services,* https://avcity.org/212/Police-Services, accessed March 22, 2024.

As described above, the Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial uses. Police protection service to the Project site by OCSD occurs under existing conditions. While the Project would introduce approximately 885 residents and 43 employees to the Project site, residential and employment-generating uses have been anticipated at the Project site by the General Plan and the Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan. Therefore, as the Project would not induce substantial unplanned population growth in the area, it is expected that the population and employment growth associated with the Project would be adequately served by OCSD and the Project would not create a need for new or physically altered police facilities to maintain acceptable service ratios, response times, or other performance objectives.

Further, the Project would be required to comply with the City's crime prevention through environmental design (CPTED) requirements in accordance with AVMC Section 15.50.020, *CPTED Safety Requirements*. Prior to issuance of a building permit, OCSD would review the Project plans to ensure the Project adheres to all applicable security requirements. Implementation of City requirements and approval of site plans by OCSD would further reduce potential impacts concerning police protection services. As such, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

3) Schools?

Less than Significant Impact. According to The Commons Specific Plan, the Project site is located within the boundaries of the Capistrano Unified School District (CUSD). The closest elementary school to the Project site is Oak Grove Elementary School, which is located approximately 0.5-mile southwest of the Project site. The closest middle school to the Project site is Don Juan Avila Middle School, which is located approximately 0.3-mile northwest of the Project site. The closest high school to the Project site is Aliso Niguel High School, which is located approximately 1.1 miles south of the Project site.

The Project proposes to construct a mixed-use development that consists of 343 residential units, which may result in new school-aged children attending schools within CUSD. The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. Table 4.15-1, *Estimated Students Generated by Proposed Project*, provides the estimated number of students generated by the proposed Project.

Table 4.15-1
Estimated Students Generated by Proposed Project

Grade Level	Student Generation Rate	Number of Housing Units/Employees	Number of Students[1]
Multi-Family Housing Units			
TK-5[2]	--	--	--
6-12	0.039	343	14
Employees			
All	0.00255	43	1
Total			**15**

Source: King Consulting, *Developer Fee Justification Study, Capistrano Unified School District*, May 2022.
Note:
1. Number of students is rounded up to the nearest whole number.
2. CUSD's student generation rates are calculated for 6th through 12th grade students per unit. Student generation rates for transitional kindergarten (TK) through 5th grade students are not calculated since the CUSD has capacity to house these students in its existing facilities.

As shown, the Project is anticipated to generate approximately 15 students. The 2022 Developer Fee Justification Study conducted by CUSD concluded that while there is capacity for students in grades transitional kindergarten (TK) through grade five, student capacity at the CUSD is currently exceeded for grades six through 12.[49] However, the Project would be subject to payment of school impact fees in accordance with Senate Bill 50 (SB 50). Pursuant to Government Code 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…" Developer fees collected by CUSD pursuant to SB 50 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 fees, potential impacts to schools would be less than significant.

Mitigation Measures: No mitigation measures are required.

4) Parks?

Less Than Significant Impact. As previously stated, the Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use, which would generate approximately 885 residents and 43 employees to the Project site. Conservatively assuming the 43 new employees (and their families) relocate to the City, employment-generating uses associated with Project implementation could result in a potential population increase of approximately 111 persons (based on the 2023 California Department of Finance estimated household size of 2.58 persons per household); refer to Section 4.14, *Population and Housing*. Based on the City's requirement of 5.0 acres of park area per 1,000 persons, the Project would result in the need for approximately 4.98-acres of usable park area.

[49] King Consulting, *Developer Fee Justification Study, Capistrano Unified School District*, May 2022.

Although Project residents would potentially use public parks, implementation of the Project would not require new or physically altered park facilities, the construction of which could cause significant environmental impacts. The Project would provide amenities to residents that would partially offset impacts to parks facilities. These amenities include three outdoor courtyards, two outdoor roof decks located on the sixth floor with residential amenities that include seating areas, fire pits, and barbeques, and access to a 28,437-square-foot rooftop deck on the eighth level consisting of residential amenities, including an approximately 5,271-square-foot clubhouse and corresponding patio with seating and fire pit tables, an outdoor fitness patio, a covered outdoor bar and seating areas, and an outdoor recreation area with pool and spa. The potential environmental effects associated with construction of the proposed Project, including the proposed amenities have been analyzed throughout this Initial Study, and impacts have been determined to be less than significant with compliance with regulatory requirements and implementation of mitigation measures.

In addition to the provision of on-site residential amenities, the Project Applicant would be required to pay all public benefits fees in accordance with the Development Agreement. Specifically, the Project Applicant would provide an upfront cash payment to fund City services, including parks and recreation facilities, payable prior to the issuance of building permits, with the remainder due prior to the receipt of the Certificate of Occupancy for the Project, as specified in the Development Agreement. With the provision of on-site amenities and the payment of public benefits fees in accordance with the Development Agreement impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

5) Other public facilities?

Less Than Significant Impact. Orange County provides a range of library, cultural facilities, and recreation services to County residents, including residents of Aliso Viejo. The nearest Orange County Public Library branch to the Project site is located at 1 Journey, approximately 0.6-mile south of the site.

The forecast population growth associated with the Project would incrementally increase the demand for County library services. As part of its Strategic Plan, the County supports the library system by identifying funding opportunities to extend programs and services at all County libraries, including the Aliso Viejo branch. Although the Project would increase demand for library services, the Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan. Therefore, as the Project would not induce substantial unplanned population growth in the area, it is expected that the population growth associated with the Project would not create a need for new or physically altered public facilities, such as the County library, to maintain acceptable service ratios, response times, or other performance objectives. Impacts to library services and other public facilities would be less than significant.

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4.16 Recreation

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

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

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. Refer to Response to 4.15(a)(4). The proposed residential and employment-generating uses at the Project site would be expected to incrementally increase the use of neighborhood and regional parks and recreational facilities relative to existing conditions. The additional use would further contribute to the need for maintenance and improvements. However, as discussed in Section 4.14, residential and employment-generating uses have been anticipated at the Project site by the General Plan and the Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan. Therefore, as the Project would not induce substantial unplanned population growth in the area, it is expected that the population growth associated with the Project would not increase the use of exiting neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

The Project includes on-site recreational amenities as part of the proposed development. These amenities include three outdoor courtyards, two outdoor roof decks located on the sixth floor with residential amenities that include seating areas, fire pits, and barbeques, and access to a 28,437-square-foot rooftop deck on the eighth level consisting of residential amenities, including an approximately 5,271-square-foot clubhouse and corresponding patio with seating and fire pit tables, an outdoor fitness patio, a covered outdoor bar and seating areas, and an outdoor recreation area with pool and spa. The potential environmental effects associated with construction of the proposed Project, including the proposed amenities have been analyzed throughout this Initial Study, and impacts have been determined to be less than significant with compliance with regulatory requirements and implementation of mitigation

measures. It is expected that these on-site recreational amenities would reduce the demand on neighborhood and regional parks and recreation facilities, reducing the Project's contribution to the deterioration of existing parks and recreational facilities. In addition, the Project Applicant would be required to pay all public benefits fees in accordance with the Development Agreement, which would offset impacts to parks and recreation facilities. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

4.17 Transportation

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

This section is based in part on the *Revised Vehicle Miles Traveled (VMT) Analysis for the proposed 26501 Aliso Creek Road Project, Aliso Viejo* (VMT Memo), prepared by Linscott, Law & Greenspan, Engineers, dated December 4, 2023 and included in its entirety as Appendix H, VMT Memo.

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 87 provides service from Rancho Santa Margarita to Laguna Niguel via Alicia Parkway; a bus stop is located at the intersection of Alicia Parkway and Pacific Park Drive, approximately 0.8-mile east of the Project site.[50] Bus Route 90 provides service from Tustin to Dana Point via Moulton Parkway; a bus stop is located at the intersection of Moulton Parkway and Oso Parkway, approximately 1.4 miles east of the Project site. The Project site is also within the service area of OC Flex, OCTA's pilot program offering on-demand, curb-to-curb shuttle service seven days a week.[51] The Project would introduce residential and employment-generating uses to the Project site, further supporting the use of transit within the area. As there are no existing or planned transit facilities adjacent to the Project

[50] Orange County Transportation Authority, *Bus Book*, February 11, 2024.
[51] Orange County Transportation Authority, OC Flex Service Area, https://www.octa.net/getting-around/bus/oc-flex/service-area/, accessed April 23, 2024.

site, Project implementation would not conflict with a program plan, ordinance, or policy addressing transit.

Roadway Facilities

Two driveways provide access to the larger commercial center, including the Project site. One driveway provides access from Town Center via Enterprise to the southeast of the site; a second driveway provides access via Aliso Creek Road to the east. The Project does not propose any modifications to Town Center, Enterprise, or Aliso Creek Road. Similar to existing conditions, the Project site would continue to be accessed from the two existing driveways. Roadway facilities would continue to serve the Project site and surrounding development. Thus, the Project would not conflict with a program plan, ordinance, or policy addressing roadway facilities.

Bicycle Facilities

There are no existing bicycle facilities located within the segments of Town Center, Enterprise, or Aliso Creek Road adjacent to the Project site. The Aliso Viejo General Plan Circulation Element (Figure C-2) identifies existing bicycle facilities within Aliso Viejo as indicated on the OCTA 2001 Commuter Bikeways Strategic Plan. According to the more recently updated OCTA 2009 Commuter Bikeways Strategic Plan (Map 1.1), the segment of Aliso Creek Road that is adjacent to the Project site is a Class II Proposed bicycle facility.[52] The Project does not involve modifications to Aliso Creek Road and thus, would not conflict with a program plan, ordinance, or policy addressing bicycle facilities.

Pedestrian Facilities

Pedestrian facilities are currently provided along Town Center, Enterprise, and Aliso Creek Road, adjacent to the Project site. As discussed above, the Project would provide enhanced pedestrian access to the Project site from a pedestrian walkway along Town Center and from three outdoor staircases providing access from Enterprise. The Project would also provide enhanced landscaping and trees along Town Center and Enterprise. Thus, the Project would not conflict with a program, plan, ordinance or policy addressing pedestrian facilities and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact.

Background

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-

[52] Orange County Transportation Authority, *2009 OCTA Commuter Bikeways Strategic Plan*, May 2009.

trip) travel and is often estimated for a typical weekday for the purposes of measuring transportation impacts.

In September 2013, Senate Bill (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.

Project Screening Criteria

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 Project would be "screened" from requiring a detailed VMT analysis, either in its entirety or partially based on individual land uses.

Criterion 1: Transit Priority Area (TPA) Screening. The AVTIG states that projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. A TPA is defined as a half-mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. A "Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. "A high-quality transit corridor" means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

Based on a review of transit and bus routes in the City, there are no TPAs within the City and thus, the Project cannot be screened from needing to prepare a detailed VMT analysis based on the TPA Screening criteria.

Criterion 2: Low VMT Area Screening. The AVTIG states that residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.

To identify if the project is in a low VMT-generating area, Appendix A of the AVTIG provides a map of low VMT-generating zones in Aliso Viejo as compared to the County. Additionally, the project must be consistent with the existing land use within that Transportation Analysis Zone, and through the use professional judgment, determined that there is nothing unique about the project that would otherwise be misrepresented by using the data from the travel demand model.

Based on a review of Appendix A of the AVTIG, the Project is not located within a low VMT-generating area and hence, the Project cannot be screened from needing to prepare a detailed VMT analysis based on this screening criteria.

Criterion 3: Project Type Screening. The AVTIG states that local serving retail projects less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving K-12 schools;
- Local parks;
- Daycare centers;
- Local-serving retail uses less than 50,000 square feet, including:
    - Gas stations;
    - Banks;
    - Restaurants;
    - Shopping Center;
- Local-serving hotels (e.g., non-destination hotels);
- Student housing projects on or adjacent to college campuses;
- Local-serving assembly uses (places of worship, community organizations);
- Community institutions (public libraries, fire stations, local government);
- Local-serving community colleges that are consistent with the assumptions noted in RTP/SCS;
- Affordable or supportive housing;
- Assisted living facilities;
- Senior housing (as defined by the US. Department of Housing and Urban Development);
- Projects generating less than 110 daily vehicle trips;[53]
    - This generally corresponds to the following "typical" development potentials:
        - 11 single family housing units;
        - 16 multi-family, condominiums, or townhouse housing units;
        - 10,000 square feet (sf) of office;
        - 15,000 sf of light industrial;[54]
        - 63,000 sf of warehousing;

[53] The threshold ties directly to the Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018) and notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which trip generation increases relatively linearly with building footprint (e.g., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-240 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 110 or fewer trips could be considered not to lead to a significant impact.

[54] Threshold may be higher depending on the tenant and the use of the site. This number was estimated using rates from ITE's Trip Generation Manual.

    - 79,000 sf of high cube transload and short-term storage warehouse; and
- Other local-serving projects as approved by the Planning Manager and Director of Community Development.

Based on the above, the commercial component of the Project can be screened from needing to prepare a detailed VMT analysis since the commercial use is local-serving and is less than 50,000 square feet. However, the residential component of the Project cannot be screened since the residential component is not listed in any of the above categories and thus, has been further evaluated by applying the City's required methodology for VMT impact analysis, as discussed below.

VMT Analysis Methodology

As required by the AVTIG, projects that are not screened through the methods described above shall complete a full VMT analysis and forecasting using the *Orange County Transportation Analysis Model* (OCTAM) to determine if the project would have a significant VMT impact. This analysis shall include both "project-generated VMT" and "project's effect on VMT" estimates under the four scenarios listed below:

- Baseline Conditions;
- Baseline-Plus-Project Conditions;
- Cumulative-No-Project Conditions; and
- Cumulative-Plus-Project Conditions.

VMT Impact Thresholds

As previously discussed, a project that does not meet the screening criteria requires the preparation of a detailed VMT analysis. A project's VMT is evaluated in order to determine if the project is expected to cause a significant VMT impact. The VMT significance criteria as stated in the AVTIG are detailed below:

- A project would result in a significant project-generated VMT impact if either of the following conditions exists:
    - The baseline or cumulative project-generated VMT-per-service population exceeds the City's General Plan Buildout VMT-per-service population.

- A project's effect on VMT would be considered significant if the project resulted in either of the following:
    - The baseline or cumulative link-level boundary Citywide VMT-per-service population increases under the plus project condition compared to the Baseline Conditions.

Based on the above, a VMT impact analysis for the residential component of the Project was conducted utilizing OCTAM to determine the Project's residential VMT, the City's VMT, and the following:

- Project-generated residential VMT-per-service population; and
- Link-level boundary Citywide VMT-per-service population.

It should be noted that the AVTIG further states:

Baseline plus project - …If this scenario results in a less-than-significant impact, then additional cumulative scenario analysis may not be required…

Please note that the cumulative no project shall reflect the adopted RTP/SCS; as such, if a project is consistent with the RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

The 2020-2045 RTP/SCS was adopted by SCAG in September 2020. The 2020-2045 RTP/SCS prioritizes growth near destinations and mobility options that facilitate multimodal access to work, education, and other destinations. The Project Site is within close proximity to SR-73 and within one mile of OCTA Bus Route 87, which provides bus service at around 70-minute intervals. Further, the Project site is adjacent to a shopping center, which provides more job opportunities and life convenience for Project residents. The Project site is located near parks and open space opportunities, including Woodfield Park and Aliso Viejo Community Park, which are an estimated five-minute drive from the Project site. As such, the Project is consistent with the region's mobility goals.

VMT Analysis

Summarized below are the average VMT-per-service population values utilizing OCTAM for the City and the Project; refer to Appendix H for additional information regarding calculations.

Project-Generated VMT Impacts

Based on the application of VMT significance criteria described above, the Project would have a significant Project-generated VMT impact for both the Baseline and Cumulative scenarios (i.e., baseline or cumulative project-generated VMT exceeds the City's VMT), as outlined below:

- *Baseline Project-Generated VMT*. The Project's residential VMT will need to be reduced by 8.23 percent to meet the City's VMT significance threshold, based on the following:
    - Baseline Project-Generated VMT/SP (residential only) = 29.51
    - City's VMT Significance Threshold = 27.08
    - (29.51 – 27.08) / 29.51 = 8.23 percent VMT reduction needed to mitigate the Project's significant residential VMT impact
- *Cumulative Project-Generated VMT*. The Project's residential VMT would need to be reduced by 6.10 percent to meet the City's VMT significance threshold, based on the following:
    - Cumulative Project-Generated VMT/SP (residential only) = 28.84
    - City's VMT Significance Threshold = 27.08
    - (28.84 – 27.08) / 28.84 = 6.10 percent VMT reduction needed to mitigate the Project's significant residential VMT impact

Project's Effect on VMT Impacts

Based on the application of VMT significance criteria described above, the Project would not have a significant effect on VMT for both the Baseline and Cumulative scenarios (i.e., baseline or cumulative link-level boundary Citywide VMT does not increase under the plus project condition compared to the no project condition), as outlined below:

- *Baseline Project's Effect on VMT*. As shown below, the Baseline-Plus-Project link-level boundary Citywide VMT-per-service population does not represent any increase to, and is 0.06 less than, the Baseline link-level boundary Citywide VMT-per-service population threshold:
    - Baseline-Plus-Project link-level Citywide VMT/SP (residential) = 6.27
    - Baseline link-level Citywide VMT/SP (baseline) = 6.33
    - 6.27 – 6.33 = -0.06 (No Project increase and as such, the Project's effect on VMT would not be significant)
- *Cumulative-Plus-Project's Effect on VMT*. As shown below, the Plus-Project link-level boundary Citywide VMT-per-service population is 0.17 less than the no Project link-level boundary Citywide VMT-per-service population threshold:
    - Plus-Project link-level Citywide VMT/SP (residential) = 6.26
    - No Project link-level boundary Citywide VMT/SP (cumulative) = 6.43
    - 6.26 – 6.43 = -0.17 (No Project increase and as such, the Project's effect on VMT would not be significant.)

As the Project would have a significant Project-generated VMT impact for both the Baseline and Cumulative scenarios, VMT reduction strategies would be required to reduce Project VMT.

As referenced in the *OPR Technical Advisory*, Chapter 3 of the California Air Pollution Control Officers Association's (CAPCOA's) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Government, Communities, and Project Developers*[55] (CAPCOA Report) quantifies the reduction in VMT associated with a particular VMT reduction strategy. The CAPCOA Report's VMT reduction strategies include built environment changes and Transportation Demand Management (TDM) actions.

The following VMT reduction strategies focus on the "Project/Site" scale categories in CAPCOA, and have been identified as applicable to the Project:

- Reduction Strategy T-1 (Increase Residential Density): up to 30 percent maximum VMT reduction
- Reduction Strategy T-4 (Integrate Affordable and Below-Market Housing): up to 28.6 percent maximum VMT reduction
- Reduction Strategy T-10 (Provide End-of-Trip Bicycle Facilities): up to 4.4 percent maximum VMT reduction
- Reduction Strategy SDT-7 (Providing Bike Parking)[56]: potential reduction not quantified

Reduction Strategy T-1. Increase Residential Density. This measure accounts for the potential VMT reduction that could be achieved by a development project that is designed with a higher density of dwelling units (DU) compared to the average residential density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing

[55] California Air Pollution Control Officers Association, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, Designed for Local Government, Communities, and Project Developers*, December 2021.
[56] As referenced in older versions of the CAPCOA Report.

residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions. This measure is best quantified when applied to larger developments and developments where the density is somewhat similar to the surrounding area due to the underlying research being found in data from the neighborhood level.

The Project site is located within Traffic Analysis Zone (TAZ) 1478, which is comprised of 244 acres. Project implementation would support and contribute to a greater residential density in TAZ 1478 when compared to no Project (existing allowed development) conditions. Applying CAPCOA's T-1 formula, the Project's VMT could reasonably be reduced by 7.3 percent (less than CAPCOA's maximum VMT reduction of 30 percent).

Reduction Strategy T-4. Integrate Affordable and Below-Market Housing. This VMT reduction strategy involves provision of affordable and below-market housing in location-efficient residential projects because these types of units are considered to typically have lower vehicle ownership and a greater propensity for using Active Transportation (i.e., bicycles, walking) compared to market-rate housing.

The Project proposes to designate approximately 10 percent of its total number of units as affordable housing (34 units). In addition, the Project is in a location-efficient setting given its close proximity and high levels of accessibility to jobs and services in the local area (i.e., Aliso Viejo Town Center), which would result in both lower-income and higher-income households to drive less and take shorter trips (i.e., making more efficient use of land space). Based on these aspects of the Project, the provision of affordable housing units is likely to shift trips to bicycling and walking, reduce and/or shorten driving trips, and could potentially reduce the Project's VMT by approximately 2.86 percent (less than CAPCOA's maximum VMT reduction of 28.6 percent).

Reduction Strategy T-10. Provide End-of-Trip Bicycle Facilities and SDT-7. Providing Bike Parking. These two VMT reduction strategies relate to the provision of bicycle facilities and bike parking to enhance active transportation for a development.

The Project proposes to provide bicycle amenities and parking. Older versions of the CAPCOA Report refer to SDT-7 (Providing Bike Parking), but the potential VMT reduction was not quantified. Based on this, CAPCOA's maximum VMT reduction for T-10 (Provide End-of-Trip Bicycle Facilities) was applied, and the Project's VMT could be reduced by approximately 0.7 percent (less than CAPCOA's maximum VMT reduction of 4.4 percent).

Conclusion

Based on the combined implementation of the VMT reduction strategies from the CAPCOA Report, as described above, the Project's VMT could be reduced by 10.6 percent (8.23 percent and 6.10 percent VMT reduction required under Baseline and Cumulative conditions, respectively), which would reduce the VMT impact for both the Baseline and Cumulative scenarios to less than significant. As demonstrated above, the Project, as proposed, would incorporate the above VMT reduction strategies as Project features, including providing increased residential density, integrated affordable and below-market housing, and the end-of-trip bicycle facilities and bicycle parking. Therefore, the Project would result in a less than significant VMT impact.

Mitigation Measures: No mitigation measures are required.

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 With Mitigation Incorporated. The Project proposes to redevelop a portion of the larger Commons at Aliso Viejo Town Center, an established commercial center located west of Aliso Creek Road. More specifically, the Project proposes to remove the existing surface parking, landscaping, and improvements and construct a mixed-use development consisting of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The mixed-use building would wrap around a centrally located eight-level parking structure with a subterranean parking garage and rooftop residential amenity space. The residential and commercial uses are consistent with the General Plan land use designation for the site, and with existing development within the surrounding area. Thus, the Project would not introduce an incompatible use to the site. Further, the Project would not provide any off-site roadway improvements that could substantially increase hazards due to a design feature.

The Project site would continue to be accessed by the two driveways that provide access to the larger commercial center, including the Project site. One driveway provides access from Town Center via Enterprise to the southeast of the site; a second driveway provides access via Aliso Creek Road to the east. The Project does not propose any modifications to Town Center, Enterprise, or Aliso Creek Road. As part of the City's Site Development Permit process required under AVMC Section 15.74.020, *Site Development Permits* the Project would be reviewed and only approved after finding the proposed development conforms with applicable requirements and standards set forth in the AVMC and General Plan, including the Circulation Element.

As part of the Traffic Analysis prepared by Linscott, Law, & Greenspan Engineers (November 28, 2023), a driveway queuing analysis was prepared for the Project driveways for year 2028 for Cumulative Plus Project conditions. The analysis indicates that the spillover queue on Town Center at Enterprise can be accommodated within the transition area of the turn pocket or on-site (not affecting public roadways). In order to ensure that adequate storage is provided at Enterprise and Town Center, as determined by the City of Aliso Viejo Public Works Department, the Project Applicant would be required to implement Mitigation Measures T-1 and T-2. Mitigation Measure T-1 requires the Project Applicant to restripe the eastbound left turn pocket at Town Center and Enterprise to provide additional storage space to accommodate the queue. The length of the turn pocket would be determined in consultation with and require the approval of the City's Public Works Department. Mitigation Measure T-2 would require the Project Applicant to either provide the required upgrades to the traffic signal to provide a westbound right turn overlap at Town Center and Enterprise or provide payment to the City to install the improvements. With implementation of Mitigation Measures T-1 and T-2, the Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) and impacts would be reduced to a less than significant level.

Mitigation Measures:

T-1: Prior to the issuance of a certificate of occupancy, the Project Applicant shall restripe the eastbound left-turn pocket at Town Center and Enterprise to provide additional storage space to adequately accommodate the queue. The length of the turn pocket shall be determined in consultation with and approved by the City's Public Works Department.

T-2: Prior to the issuance of a certificate of occupancy, the Project Applicant shall either provide the required upgrades to the traffic signal at Town Center and Enterprise, including upgraded traffic signal controllers and equipment to support setup with the Centracs system and also connect to the fiber system existing on Aliso Creek Road, in order to provide a westbound right turn overlap, as determined by the City's Public Works Department, or provide payment to the City of Aliso Viejo to install the improvements and upgrades.

d) Result in inadequate emergency access?

Less Than Significant Impact. Local access to the Project site is provided directly from two driveways. One driveway provides access from Town Center via Enterprise to the southeast of the site; a second driveway provides access via Aliso Creek Road to the east. The construction and operation of the proposed Project would not place any permanent physical barriers on Town Center, Enterprise, Aliso Creek Road, or other roadways within the area. There is the potential that one or more traffic lanes located immediately adjacent to the Project site may be temporarily closed or controlled by construction personnel during construction activities. However, this would be temporary and emergency access to the Project site and surrounding area would be required to be maintained at all times. Construction staging would occur within the boundaries of the Project site and would not interfere with circulation along Enterprise or any other nearby roadways. The Project would be required to comply with all applicable requirements of the AVMC and would be subject to approval by the OCFA. As such, the Project would not result in inadequate emergency access and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a 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:				
1) 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		X		
2) 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.		X		

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

1) 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)?

2) 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. As discussed in Section 4.5, *Cultural Resources*, a Sacred Lands File (SLF) search was requested from the Native American Heritage Commission (NAHC) on December 18, 2023. On January 18, 2024, the NAHC responded with a positive search result, indicating that a tribal cultural resource is located within the same township, range, and section as the Project site. The NAHC recommended that Juaneño Band of Mission Indians Acjachemen Nation – Belardes be contacted for more information and provided a list of 19 groups and individuals that may have knowledge of cultural resources in the Project area. Cogstone contacted the Juaneño Band of Mission Indians Acjachemen nation – Belardes was contacted on February 26, 2024 via electronic mail and United States Postal Service certified mail; no response was received.

As part of the Cultural Resources Assessment, a records search and intensive pedestrian survey was conducted. The Cultural Resources Assessment concluded that, based on the results of the records search and review of additional sources, the Project site is assessed to have a low sensitivity for buried prehistoric archaeological resources. However, the positive SLF search result may indicate that there are tribal cultural resources present that are unknown to the SCCIC that elevate the cultural sensitivity of the Project site.

The City conducted Native American consultations under the provisions of CEQA (Public Resources Code section 21080.3.1 subdivisions (b), (d) and (e)), also known as Assembly Bill (AB) 52, which requires consulting for projects within the City's jurisdiction and within the traditional territory of the Tribal Organizations who have previously requested AB 52 consultations with the City. Two tribes have requested to be notified of projects within the City pursuant to AB 52.[57]

On February 27, 2024, the City sent letters via certified mail to Native American individuals and/or Tribal Organizations in compliance with AB 52; refer to Appendix I, Tribal Consultation Communications. The consultation letters provided information regarding the proposed Project and contact information for the Project Planner. Under AB 52, Native American tribes have 30 days to respond and request further project information and formal consultation. The Gabrieleño Band of Mission Indians – Kizh Nation contacted the City on February 27, 2024 requesting consultation. In response to the request for consultation, the City engaged with the Tribe and a consultation meeting was held on March 27, 2024. Following the meeting, additional information was provided to the Tribe regarding geology and soil conditions at the site.

At the time this Initial Study was made available for public review, no additional requests for consultation or correspondence from any tribes have been received.

Although no Native American tribal cultural resources are known to occur within the Project site, based on the Gabrieleño Band of Mission Indians – Kizh Nation's cultural affiliation with the area, the parties agreed to impose measures to mitigate potential impacts in the event previously unidentified Native American tribal cultural resources are discovered during ground disturbing activities.

Mitigation measure TCR-1 would require the retention of a qualified Native American Monitor who would be present during all construction-related ground disturbance activities. In the event tribal cultural resources are unearthed, TCR-2 would ensure they would be evaluated by the Native American Monitor

[57] Although the Project is not subject to Senate Bill (SB) 18, the City also provided notification to the Tribal Organizations listed on the SB 18 Native American Contact List on February 23 and 27, 2024.

and if determined to be Native American in origin, appropriate treatment and curation of the resources would occur. Additionally, Mitigation Measure TCR-3 would address the potential discovery of human remains and associated funerary objects. With implementation of Mitigation Measures TCR-1, TCR-2, and TCR-3, the proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource and impacts would be reduced to a less than significant level.

Mitigation Measures:

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

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

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

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

TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial). Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.

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

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

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

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

4.19 Utilities and Service Systems

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

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

Less Than Significant Impact.

Water

The Project site is located within the boundaries of the MNWD. As previously stated, the Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use within a six-story building, and associated parking and improvements. The Project proposes to remove and relocate an existing public water line within the Project site to the east of the proposed mixed-use

building. An existing fire hydrant within the southeastern portion of the Project site would be removed. A total of three fire hydrants and two DCDAs would be installed along the northern and eastern perimeters of the Project site and would connect to existing water lines. A proposed domestic water lateral would connect to the existing water line.

MNWD has completed a preliminary review of the proposed Project and indicates that a water main extension of approximately 525 feet and looping may be required. Additional information, including a OCFA Water Availability Form, would be necessary to assess whether water system upgrades/upsizing would be required by MNWD as part of the Project.[58] As a condition of approval, the Project Applicant would be required to comply with MNWD permitting requirements and, if necessary, provide improvements to the existing distribution system necessary to serve the proposed development in compliance with MNWD's standards. The potential improvements would occur on-site and/or within the area of the existing water main that has previously been disturbed.

The potential environmental effects associated with construction and operation of the Project, including the proposed water lines to serve the mixed-use development are analyzed within this Initial Study and impacts have been determined to be less than significant with compliance with regulatory requirements. Thus, the proposed Project would not require or result in relocation or construction of water facilities, the construction or relocation of which could cause significant environmental effects.

Refer to Response 4.19(b) regarding water supply.

Wastewater and Wastewater Treatment

Wastewater within the Project site is treated by MNWD's wastewater collection system and sent to the Regional Treatment Plant operated by the South Orange County Wastewater Authority (SOCWA). As part of the Project, a sewer lateral would be constructed and connect to the existing sewer lateral in the southeastern portion of the Project site.

MNWD has completed a preliminary review of the proposed Project and indicates that sewer main upsizing may be required; however, additional information is required in order to assess whether the existing MNWD gravity sewer pipelines can convey the ultimate flows and whether pipeline upsizing would be required.[59] As a condition of approval, the Project Applicant would be required to comply with MNWD permitting requirements and, if necessary, provide improvements to the existing sewer conveyance system necessary to serve the proposed development in compliance with MNWD's standards. The potential improvements would occur on-site and/or within the area of the existing sewer main that has previously been disturbed.

The potential environmental effects associated with construction and operation of the Project, including the proposed sewer lines to serve the mixed-use development are analyzed within this Initial Study and impacts have been determined to be less than significant with compliance with regulatory requirements and implementation of mitigation measures. Thus, the proposed Project would not require or result in

[58] Moulton Niguel Water District, Mark H. Mountford, P.E., Engineering Manager, letter dated May 23, 2024.
[59] Moulton Niguel Water District, Mark H. Mountford, P.E., Engineering Manager, letter dated May 23, 2024.

relocation or construction of wastewater facilities, the construction or relocation of which could cause significant environmental effects.

Refer to Response 4.19(c) below, regarding wastewater treatment.

Stormwater Drainage

The Orange County Flood Control District (OCFD) is responsible for regional flood control facilities. The City maintains publicly owned local facilities within its jurisdiction that tie into OCFD's regional system. The City's local drainage facilities collect and convey storm water to OCFD's regional facilities.

The Project site is currently developed with surface parking, landscaping, and improvements, including storm drainage infrastructure that connects to the City's local facilities. As previously stated, the Project proposes to remove the existing surface parking, landscaping, and improvements to construct a mixed-use development. Existing underground storm drain lines and inlets within the Project site would be removed. The Project would install a new underground storm drainage system that would convey flows into an underground detention system consisting of two detention basins. Low flows equivalent to the required treatment volume or treatment flow rate from the underground detention system would be conveyed into a Modular Wetland System BMP, which would discharge into the existing storm drain system.

The potential environmental effects associated with construction and operation of the Project, including the proposed storm drain improvements to serve the mixed-use development are analyzed within this Initial Study and impacts have been determined to be less than significant with compliance with regulatory requirements. Thus, the proposed Project would not require or result in relocation or construction of stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.

Refer to Section 4.10, *Hydrology and Water Quality*, regarding drainage patterns and the Project's proposed hydrology and drainage.

Electricity, Natural Gas, and Telecommunications

Southern California Edison (SCE) provides electricity to the Project site. Southern California Gas Company (SoCal Gas) provides natural gas to the Project site. Telecommunication services are provided by a variety of companies and are typically selected by the individual customer. Transmission lines/infrastructure for these services are provided within the Project area.

As part of the Project, the existing electrical equipment box in the southwestern corner of the Project site would be removed. The Project would connect to existing electrical, natural gas, and telecommunications lines infrastructure adjacent to the Project site. The Project's anticipated electricity demand would be approximately 2,201,311 kWh per year. The Project's anticipated natural gas demand would be approximately 1,941,585 kBTU per year; refer to Section 4.6, *Energy*, regarding an analysis of the Project's energy use. The potential environmental effects associated with the Project's energy demand are analyzed within this Initial Study and impacts have been determined to be less than significant. The proposed Project would not require or result in relocation or construction of electric power, natural gas,

or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Mitigation Measures: No mitigation measures are required.

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. MNWD supplies water to the Project site. In order to determine MNWD's full buildout demands, MNWD coordinates with the cities within its service area on the respective cities' general planning, which takes into consideration future growth of undeveloped areas. In compliance with the Urban Water Management Planning Act, MNWD's 2020 Urban Water Management Plan (UWMP) demonstrates water supply reliability in a normal, single-dry, and multiple-dry years over a 25-year planning period. According to MNWD's 2020 UWMP (Tables 7-1, 7-2, 7-3 and 7-4), water supplies would meet the service area's water demands for normal, single-dry, and multiple dry-year conditions through 2045.[60]

As previously stated, the Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use. As discussed in Section 4.14, the Project's 343 residential units could induce direct population growth in the City. Based on the 2023 California Department of Finance estimated household size of 2.58 persons per household,[61] the Project's forecast population growth is approximately 885 persons. In addition, the Project proposes employment-generating uses. As discussed in Section 4.14, the Project is anticipated to employ approximately 43 people. Conservatively assuming 43 new employees (and their families) relocate to the City, employment-generating uses associated with Project implementation could result in a potential population increase of approximately 111 persons (based on the 2023 California Department of Finance estimated household size of 2.58 persons per household). As previously stated, residential and employment-generating uses have been anticipated at the Project site by the General Plan and the Project would be within the population growth projections anticipated and planned for by local and regional planning documents, including the Aliso Viejo General Plan, SCAG 2024 RTP/SCS, and the SCAG 6th Cycle Final RHNA Allocation Plan. MNWD's 2020 UWMP water demand forecasts are based on a number of variables, including projected new developments in the water service area based on General Plan Land Use Elements; and the Center for Demographic Research at California State University, Fullerton, which is developed in coordination with local and regional agencies.

MNWD's 2020 UWMP indoor water generation rate is 55 GPCD; as such the Project's water demand (including growth of 885 persons associated with proposed residential uses and 111 persons associated with employment-generating uses) would total approximately 54,780 GPCD. This amount does not take into account MNWD's water conservation programs and incentives that are projected to occur and would likely reduce the Project's water consumption. MNWD's 2020 UWMP indicates that adequate water

[60] Moulton Niguel Water District, *2020 Urban Water Management Plan*, 2021. Tables 7-1, 7-2, 7-3, and 7-4.
[61] California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2020-2023*, May 2023.

supplies would be available to serve future water demands during normal, dry and multiple dry years. In addition, MNWD has indicated that their preliminary review of the proposed Project suggests available water supply to support the Project.[62] Thus, impacts to water supplies would be less than significant.

Mitigation Measures: Less Than Significant Impact.

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.

Wastewater treatment services for the majority of the City, including the Project site, are provided by MNWD. Wastewater within the Project site would be conveyed to the Regional Treatment Plant operated by the SOCWA. According to the SOCWA, the Regional Treatment Plant typically experiences liquid waste flows of 7.3 million gallons per day (mgd) and has the current capacity to treat 12 mgd of liquid waste, with an ultimate capacity (both liquid and solid waste) of 32 mgd.[63]

The Project proposes to construct a mixed-use development that consists of 343 residential units and 17,273 square feet of ground floor commercial use. A proposed sewer lateral would connect to the existing sewer lateral in the southeastern portion of the Project site.

According to CalEEMod calculations (Appendix A), total unmitigated annual wastewater use associated with the operation of the Project would be approximately 18,291,970 gallons per year (approximately 0.05 mgd).[64] This is a conservative assumption and would account for less than one percent (approximately 0.68 percent) of the current total daily wastewater flows (7.3 mgd) and would be within the Regional Treatment Plant's remaining capacity (4.7 mgd). MNWD has indicated that their preliminary review of the proposed Project suggests available sewer capacity to support the Project.[65] However, sewer main upsizing may be required. As a condition of approval, the Project Applicant would be required to comply with MNWD permitting requirements and, if necessary, provide improvements to the existing sewer conveyance system necessary to serve the proposed development in compliance with MNWD's standards. Further, the Project Applicant would be required to pay sewer connection fees to MNWD when acquiring new sewer services. As such, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

[62] Moulton Niguel Water District, Mark H. Mountford, P.E., Engineering Manager, letter dated May 23, 2024.
[63] South Orange County Wastewater Authority (SOCWA), *Regional Treatment Plant,* https://www.socwa.com/infrastructure/regional-treatment-plant/, accessed March 25, 2024.
[64] NT Environmental Consulting, *Technical Air Quality and GHG Emissions Calculations*, December 2023 (included as Appendix A). Page 47.
[65] Moulton Niguel Water District, Mark H. Mountford, P.E., Engineering Manager, letter dated May 23, 2024.

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?

Less Than Significant Impact. CR&R Incorporated provides the solid waste collection services to the City, including the Project site.[66] 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.[67]

Construction and operational activities associated with the Project would generate solid waste requiring disposal. In accordance with State law and AVMC Section 13.02, *Building Regulations*, which adopts the California Green Building Standards Code (CALGreen), the Project would be required to divert at least 65 percent of the nonhazardous construction and demolition debris from the Project site by recycling, reuse, and/or salvage. In addition, AVMC 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.

Project implementation would increase solid waste disposal demands over existing conditions. As stated, solid waste within the City is primarily disposed of at the Prima Deshecha Sanitary Landfill. In 2023, approximately 11,903.23 tons (76 percent) of solid waste from Aliso Viejo was disposed of at the Prima Deshecha Sanitary Landfill.[68] Other sanitary landfills, including the Chiquita Canyon, El Sobrante, Frank R. Bowerman, and Olinda Alpha received relatively small amounts of solid waste from the City. Prima Deshecha Sanitary Landfill has a maximum permitted throughput of 4,000 tons per day.[69] The facility's maximum permitted capacity is 172,100,000 cubic yards and has a remaining capacity of 128,800,000 cubic yards as of 2023. According to CalEEMod calculations (Appendix A), total unmitigated solid waste generation associated with the operation of the Project would be approximately 460.93 tons per year (1.27 tons per day).[70] This would account for less than one percent (approximately 0.032 percent) of maximum permitted throughput for the Prima Deshecha Sanitary Landfill (4,000 tons per day). Further, this is a conservative assumption and does not account for Project-specific source reduction. Solid waste

[66] City of Aliso Viejo, *Services,* https://avcity.org/101/Services,accessed Mach 25, 2024.
[67] California Department of Resources Recycling and Recovery (CalRecycle), *RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination*, https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial, accessed March 26, 2024.
[68] California Department of Resources Recycling and Recovery (CalRecycle), *RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination*, https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial, accessed March 26, 2024.
[69] California Department of Resources Recycling and Recovery (CalRecycle), *SWIS Facility/Site Activity Details,* https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085, accessed March 26, 2024.
[70] NT Environmental Consulting, *Technical Air Quality and GHG Emissions Calculations*, December 2023 (included as Appendix A). Page 47.

generated from the Project could be accommodated at the Prima Deshecha Sanitary Landfill or a combination of the disposal facilities that currently receive solid waste for disposal from the City.

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.[71] The most recent population disposal rate (2022) was 2.9 pounds per day per capita population and 7.2 pounds per day per capita employment. The City would continue to implement its diversion programs and require 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. Thus, the proposed Project would result in less than significant impacts concerning solid waste.

Mitigation Measures: No mitigation measures are required.

[71] California Department of Resources Recycling and Recovery (CalRecycle), *Jurisdiction Per Capita Disposal Rate Trends (Post 2006)*, https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports, accessed March 26, 2024.

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4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

a) 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?

No Impact. The Project site is developed and located within an urbanized area. According to the CALFIRE Fire Hazard Severity Zone Map, the Project site is not located within a VHFHSZ, nor is the site within or

near a State Responsibility Area.[72] The Project site and surrounding area are not identified as having a significant risk associated with wildfire. The Project would be required to comply with all City and OCFA requirements for fire prevention and safety measures, including site access. No impacts concerning wildfire would occur.

[72] California Department of Forestry and Fire Protection, *FHSZ Viewer*, https://egis.fire.ca.gov/FHSZ/, accessed March 15, 2024.

4.21 Mandatory Findings of Significance

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

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 Initial Study, the Project does not have the potential to substantially degrade the quality of the environmental or result in significant environmental impacts that cannot be mitigated or reduced to a less than significant level with compliance with the established regulatory framework and implementation of mitigation measures.

As demonstrated in Section 4.4, *Biological Resources*, the Project would not substantially reduce the habitat of 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 Project would be required to comply with the MBTA

and other applicable regulations, including, but not limited to, Sections 3503, 3503.5, 3513 of the California Fish and Game Code, and implement Mitigation Measure BIO-1, which would reduce potential impacts to a less than significant level.

As demonstrated in Section 4.5, *Cultural Resources*, the Project would not eliminate important examples of the major periods of California history or prehistory. As concluded in Section 4.5 and Section 4.18, *Tribal Cultural Resources*, the Project would not result in significant adverse impacts to archaeological resources, tribal cultural resources, or human remains. In the unlikely event that buried archaeological resources are encountered during ground disturbance activities, Mitigation Measure CUL-1 would require all work within 50 feet of the find to be suspended until the resource is evaluated by a qualified archaeologist. Construction would not resume in the area until appropriate protection and preservation measures are in place and have been approved by the Director of Community Development, or designee, and the qualified archaeologist states in writing that the proposed construction activities would not significantly damage any archaeological resources. Mitigation Measure TCR-1 would ensure a Native American Monitor is present during site disturbance activities having the potential to unearth tribal cultural resources and, if discovered, Mitigation Measures TCR-2 and TCR-3 would ensure activities in the vicinity of the find are halted and appropriate evaluation and treatment of any potential resources occurs.

Therefore, the 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.

Mitigation Measures: No additional mitigation measures are required.

Mitigation Measures: No mitigation measures are required.

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. Based on the analysis contained in this Initial Study, the proposed Project would not have cumulatively considerable impacts that cannot be mitigated or reduced to a less than significant level with compliance with the established regulatory framework and implementation of mitigation measures. Compliance with the regulatory requirements and implementation of mitigation measures at the Project-level would reduce the potential for the incremental effects that would occur with construction and operation of the proposed Project relevant to the environmental topical areas discussed within this Initial Study.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Previous sections of this Initial Study reviewed the proposed Project's potential impacts to human beings related to several environmental topical areas. As determined throughout this Initial Study, the proposed Project would not result in any potentially significant impacts that cannot be mitigated or reduced with compliance with the established regulatory requirements and implementation of mitigation measures. The Project would not cause a substantial adverse effect on human beings, either directly or indirectly and impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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