EXHIBIT A TO
ATTACHMENT 1

Bear Street Residential Project

Initial Study/Mitigated Negative Declaration

City of Costa Mesa, Orange County, California

PREPARED FOR:

City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92626
714.754.5000

Contact: Chris Yeager, Associate Planner

PREPARED BY:

FirstCarbon Solutions
250 Commerce, Suite 210
Irvine, CA 92602
714.508.4100

Contact: Mary Bean, Project Director
Cecilia So, Senior Project Manager

January 10, 2025

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ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
ACM	asbestos-containing material
ADT	Average Daily Traffic
AELUP	Airport Environs Land Use Plan
AERMOD	American Meteorological Society/EPA Regulatory Model
ALUC	Airport Land Use Commission
AP	Administrative and Professional
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	aboveground storage tank
BERD	California Built Environment Resource Directory
BMP	Best Management Practice
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Buildings Standard
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CBC	California Building Standards Code
CCR	California Code of Regulations
CCS	carbon capture and storage
CDFW	California Department of Fish and Wildlife
CDR	Carbon Dioxide Removal
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CMFD	Coast Mesa Fire Department
CMPD	Costa Mesa Police Department
CMSD	Costa Mesa Sanitary District
CNDDB	California Natural Diversity Database

CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CONCCP/HCP	County of Orange Natural Communities Conservation Plan/Habitat Conservation Plan
CRHR	California Register of Historical Resources
CVC	California Vehicle Code
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel
DBL	Density Bonus Law
DPM	diesel particulate matter
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substance Control
du/acre	dwelling unit per acre
EMFAC	Emissions Factors
EOP	Emergency Operations Plan
EPA	United States Environmental Protection Agency
EV	electric vehicle
FAA	Federal Aviation Administration
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Safety Zone
FIRM	Floor Insurance Rate Map
FMMP	Farm Mapping and Monitoring Program
FTA	Federal Transit Administration
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GC	General Commercial
GHG	greenhouse gas
GPA	General Plan Amendment
GPCD	gallons per capita per day
GPD	gallons per day
GWP	Global Warming Potential
HARP2	Hotspots Analysis and Reporting Program

HBEA	Historic Built Environment Assessment
HFC	hydrofluorocarbon
HI	Hazard Index
HOA	Homeowner's Association
HRA	Health Risk Assessment
HVAC	heating, ventilation, and air conditioning
In/sec	inches per second
IPaC	Information for Planning and Conservation
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	kilowatt hours
L_{dn}	day/night average noise level
LDV	light-duty vehicle
LEED®	Leadership in Energy and Environmental Design
L_{eq}	equivalent sound level
L_{min}	minimum noise/sound level
LOS	Level of Service
LST	localized significance threshold
MBTA	Migratory Bird Treaty Act
MDV	medium-duty vehicle
MEIR	Maximally Exposed Individual Receptor
MET	Metropolitan Water District of Southern California
MLD	Most Likely Descendant
MM	Mitigation Measure
mph	miles per hour
MS4	Municipal Separate Stormwater Sewer System
MT	metric tons
MWDOC	Municipal Water District of Orange County
MWS	Modular Wetland Systems
NAHC	California Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCRS	Natural Resources Conservation Service
NFHL	National Flood Hazard Layer
NMUSD	Newport-Mesa Unified School District
NO_2	nitrogen dioxide
NO_X	Nitrogen Oxide
NPDES	National Pollutant Discharge Elimination System

NRCS	National Resources Conservation
NRHP	National Register of Historic Places
OC San	Orange County Sanitary District
OCFCD	Orange County Flood Control District
OCTA	Orange County Transportation Authority
OCTAM	Orange County Transportation Analysis Model
OCWD	Orange County Water District
OD	Origin/Destination
OEHHA	California Office of Environmental Health Hazard Assessment
OGV	Ocean-going Vessel
PM_{10}	particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter 2.5 micrometers or less in diameter
ppm	parts per million
PRC	Public Resources Code
PV	photovoltaic
R-3	Multiple-Family Residential
RCRA	Resource Conservation and Recovery Act
RNG	renewable natural gas
RWQCB	Regional Water Quality Control Board
SA GEO	SA Geotechnical, Inc.
SC	Standard Condition
SCAQMD	South Coast Air Quality Management
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SDG	significant data gap
SED	socioeconomic data
SNA	John Wayne Airport
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SoCalGas	Southern California Gas Company
SR	State Route
SRA	State Responsibility Area
SSRE	Source Reduction and Recycling Element
SWIS	Solid Waste Information System
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan

TAC	Toxic Air Contaminants
TAZ	Traffic Analysis Zone
TCR	Tribal Cultural Resources
TSI	thermal systems insulation
TTM	Tentative Tract Map
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WEAP	Worker Environmental Awareness Program
WQMP	Water Quality Management Plan
WSS	Web Soil Survey
ZEV	Zero-Emission Vehicle

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1 - INTRODUCTION

1.1 - Purpose

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

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

1.2 - Project Location

The project site is located at 3150 Bear Street in the City of Costa Mesa (City), in Orange County, California (Exhibit 1). The approximately 6.12-acre project site consists of two parcels, Assessor's Parcel Numbers (APNs) 141-521-48 and -49. As shown in Exhibit 1, the project site is in the northern portion of the City. Regional access to the project site is from Interstate 405 (I-405) via the Bristol Street exit, State Route (SR) 73 via the Bear Street exit, and SR-55 via the Baker Street exit.

1.3 - Environmental Setting

1.3.1 - Land Uses and Zoning

The project site was formerly occupied by the Trinity Broadcasting Network and is now occupied by The Palazzo by Koshbin which is a European-style event venue. The flat project site is mostly paved or covered by structures (Exhibit 2). The proposed project would include demolition of the existing buildings and improvements.

The General Plan currently designates the project site as General Commercial (Exhibit 3).[1] The proposed project would require a General Plan Amendment (GPA) to change the General Plan land use designation from General Commercial to High-Density Residential.

[1] City of Costa Mesa. 2016. City of Costa Mesa General Plan, Land Use Element, Land Use Policy Map, Figure LU-3. Website: http://www.costamesaca.gov/home/showpublisheddocument/34692/637601318822270000. Accessed September 18, 2024.

The project site is currently zoned Administrative and Professional (AP) (Exhibit 4) The proposed project would require a rezone to change the zoning designation from AP to Multiple-family Residential (R-3). The R-3 zoning district is intended to promote the development of multi-family rental as well as ownership dwelling units. The required minimum lot size is 12,000 square feet in the R-3 zone. The maximum density allowed is 2,178 square feet per dwelling unit, which equals 20 dwelling units per gross acre.[2]

1.3.2 - Surrounding Land Uses

North I-405 is located immediately north of the project site. South Coast Plaza shopping mall is located beyond I-405.

South Single-family homes and an office building.

East Olympic Avenue, Canadian Drive, and single-family homes.

West Bear Street is located immediately west of the project site. Shiffer Park and single-family homes are located beyond Bear Street.

1.4 - Project Description

MLC Holdings, LLC (applicant) proposes to develop a new residential infill community consisting of a total of 142 for-sale townhomes within eight separate buildings. The townhomes would range in size from approximately 1,060 to 2,218 square feet with 2-story detached homes and 4-story attached homes (Exhibit 5).

The proposed project would provide private roadways and parking, pedestrian walkways, common space and amenity areas, landscaping, and a recreational amenity area within the project site.

The project applicant proposes to deed restrict 5 percent of the units as very low affordable homes (up to seven homes). Pursuant to the State Density Bonus Law (SDBL), the proposed project would be allowed a 20 percent increase in density. Parking and landscaping associated with the proposed project would be consistent with requirements of the SDBL and applicable local regulations.

1.4.1 - Parking and Circulation

Vehicles would access the project site via the existing driveway on Bear Street. This access point would be signalized, and no gate is proposed. An internal private roadway system would provide two-way access to each unit's parking garage as well as guest parking spaces that would be distributed throughout the site. Pedestrians would circulate within the proposed project via internal pedestrian walkways and sidewalks located throughout the site.

[2] City of Costa Mesa. 2024. City of Costa Mesa Municipal Code. Website: https://ecode360.com/42616637. Accessed September 18, 2024.

An emergency vehicle access exists at the east edge of the property near the terminus of Olympic Avenue. This gated access will remain, providing access for emergency vehicles. It will be redesigned with a new Knox box and a pedestrian gate on a timer to accommodate pedestrian access into the project site during park hours, allowing existing neighbors to the east a more direct walking path to Shiffer Park. This new pedestrian connection would be accompanied by a new signalized crosswalk at the community's Bear Street entrance.

Pursuant to the parking requirements set forth in the SDBL, the proposed project has been designed to meet the Reduced Parking Ratios set forth in Costa Mesa Municipal Code Section 13.85.[3] The proposed project would have 321 on-site parking spaces, consisting of 284 spaces within garages (2 per unit) and 37 guest spaces (0.26 per unit). The proposed parking spaces would meet the parking ratio code requirement of 238 parking spaces.

1.4.2 - Open Space and Landscaping

The proposed project incorporates amenities including a tot lot, barbecues, seating, open lawn areas, and landscaping (Exhibit 5 and 6).

The proposed project would provide 22,735 square feet of common open space; 35,502 square feet of Homeowner's Association (HOA) maintained landscaped areas; 18,293 square feet of fenced yards; and 3,637 square feet of other decorative planting areas, for a total of 80,167 square feet of open space area. As noted above, pursuant to the SDBL, the applicant seeks a waiver for a reduction in open space requirements.

1.4.3 - Off-site Improvements

Off-site improvements associated with the proposed project include a new pedestrian connection would be accompanied by a new signalized crosswalk at the community's Bear Street entrance, as described above, as well as 13,278 square feet of off-site common open space recreation areas. For purposes of this analysis, "project site" refers to both the proposed development and off-site improvements.

1.4.4 - Infrastructure and Utilities

Water service is currently provided by Mesa Water District. The proposed project would connect to an existing 6-inch domestic water line within Olympic Avenue and an existing 12-inch water line within Bear Street. Existing hydrants to remain are located adjacent to the project site on Olympic Avenue as well as diagonally across Bear Street near the existing entrance of Shiffer Park.

Sewer service is provided by Costa Mesa Sanitary District (CMSD). The proposed project would reroute existing sewer mains within the site and connect to the existing 8-inch sewer in Olympic Avenue. An existing Orange County Sanitation District sewer trunk line main crosses the northern portion of the property and will be protected in place.

[3] City of Costa Mesa. 2024. Code of Ordinances. Website: https:// ecode360.com/CO4918. Accessed September 23, 2024.

The proposed project would connect to an existing storm drain to the northwest of the project site.

1.4.5 - Construction

The applicant anticipates that construction of the proposed project would begin approximately 8 months to 1 year following entitlement approval. Construction activities would consist of three consecutive phases: (1) demolition of the existing paved surfaces and structures, clearing, and site preparation (2 months); (2) site development, including grading, utility installation, and roadway construction (7 months); (3) vertical construction and landscaping installation (18 months). Considering the site is relatively flat, the design grading is anticipated to consist of cuts and fills on the order of 1 to 5 feet to reach pad grades and provide proper site drainage.

1.5 - Required Discretionary Approvals

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

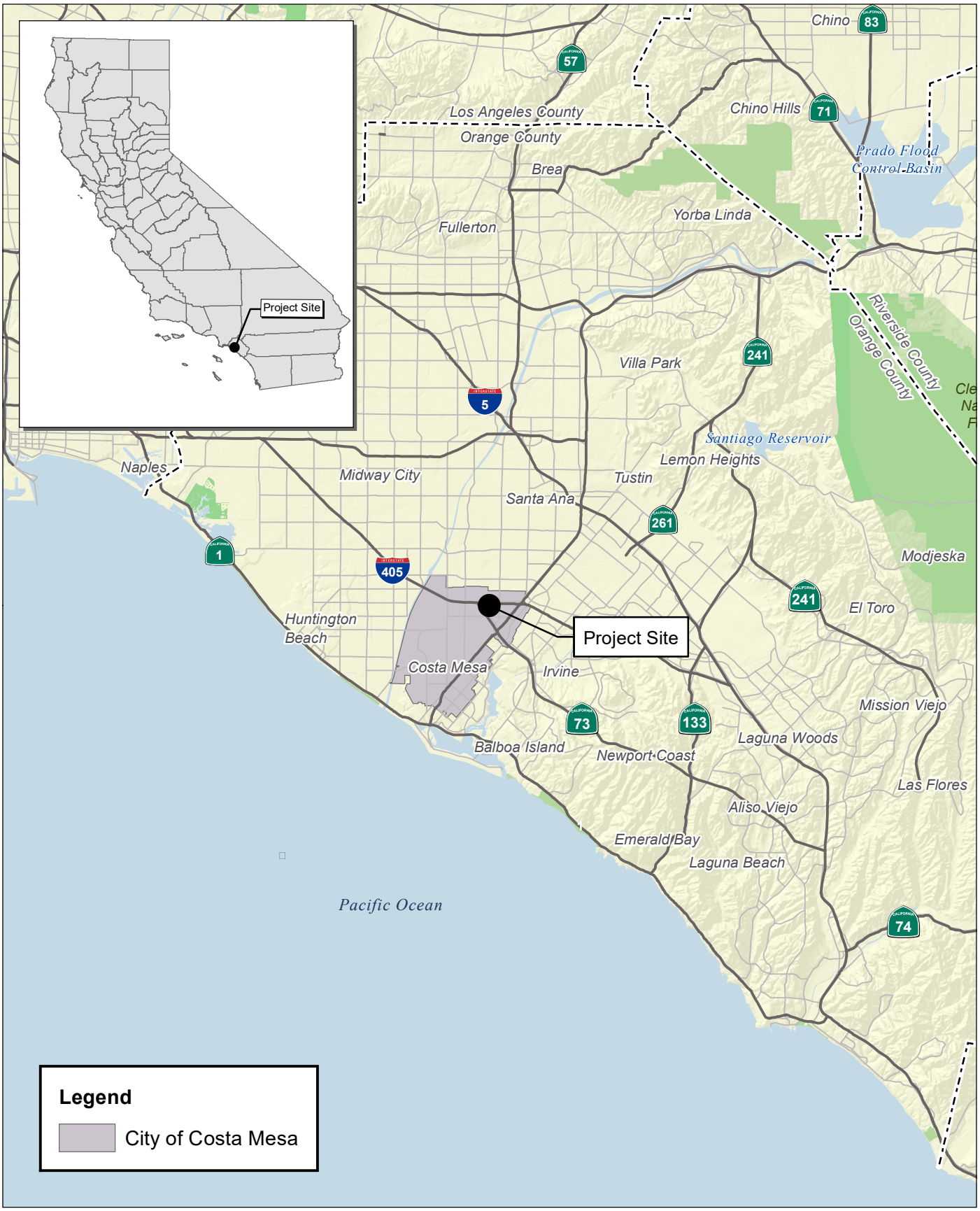
- **General Plan Amendment** to change the land use designation from General Commercial to High-Density Residential.
- **Rezone** to change the zoning from AP to R-3 zone.
- **Tentative Tract Map (TTM)** for construction of 142 for-sale residential homes.

1.6 - Intended Uses of This Document

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

The Draft IS/MND will be circulated for a minimum of 30 days, during which comments concerning the analysis contained in the Draft IS/MND should be sent to:

Chris Yeager, Associate Planner
City of Costa Mesa Development Services Department
77 Fair Drive
Costa Mesa, CA 92626
Phone: 714.754.4883
Email: christopher.yeager@costamesaca.gov



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

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

49400060 • 10/2024 | 1_regional.mxd

CITY OF COSTA MESA
BEAR STREET RESIDENTIAL PROJECT
INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

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Source: Bing Aerial Imagery. X Engineering & Consulting, Inc., September 2024.

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1,000 500 0 1,000 Feet

Exhibit 2
Local Vicinity Map

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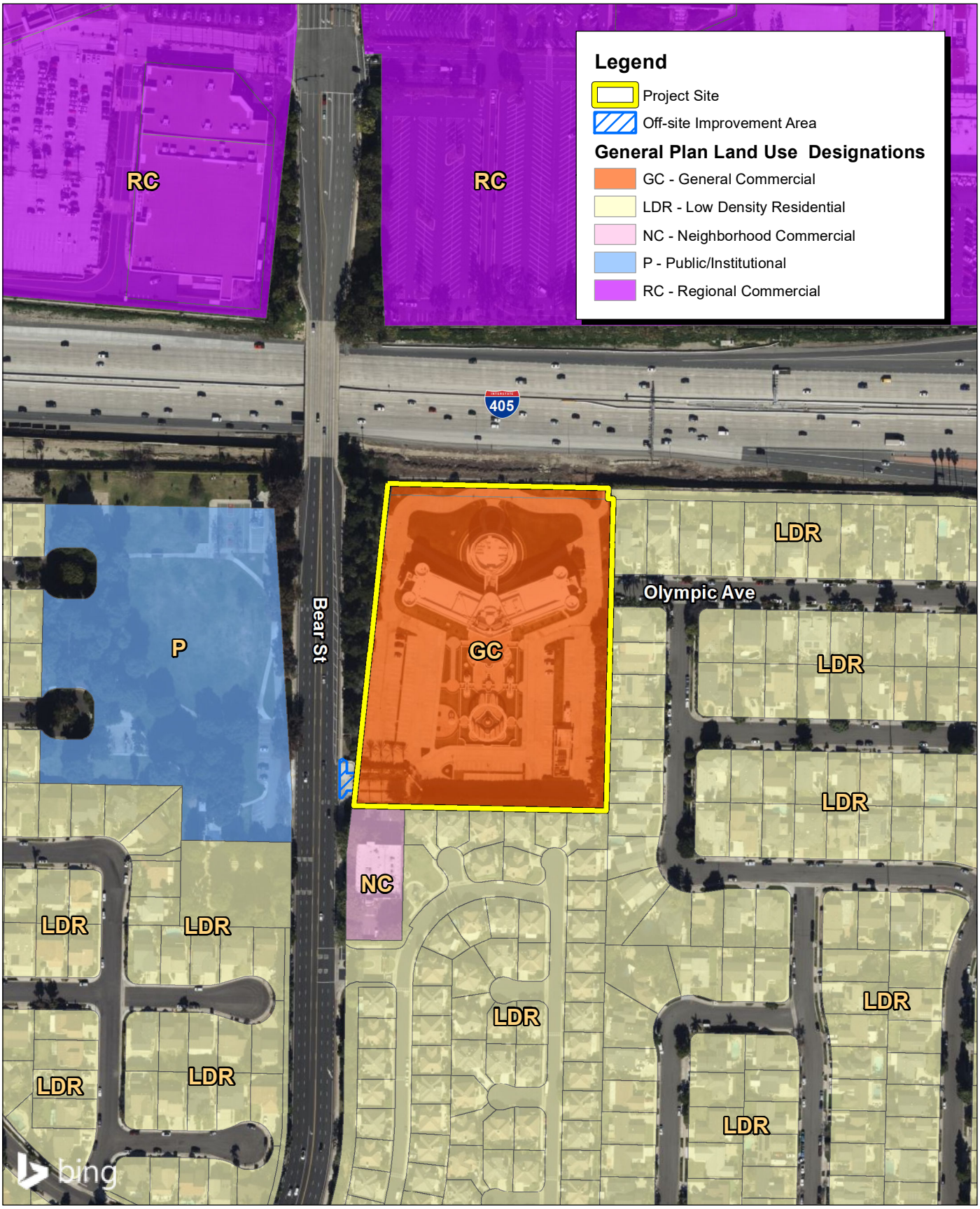

Source: Bing Aerial Imagery. X Engineering & Consulting, Inc., September 2024.

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250 125 0 250
Feet

Exhibit 3
General Plan Land Use Map

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Source: Bing Aerial Imagery. X Engineering & Consulting, Inc., September 2024.

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250 125 0 250
Feet

Exhibit 4
Zoning Map

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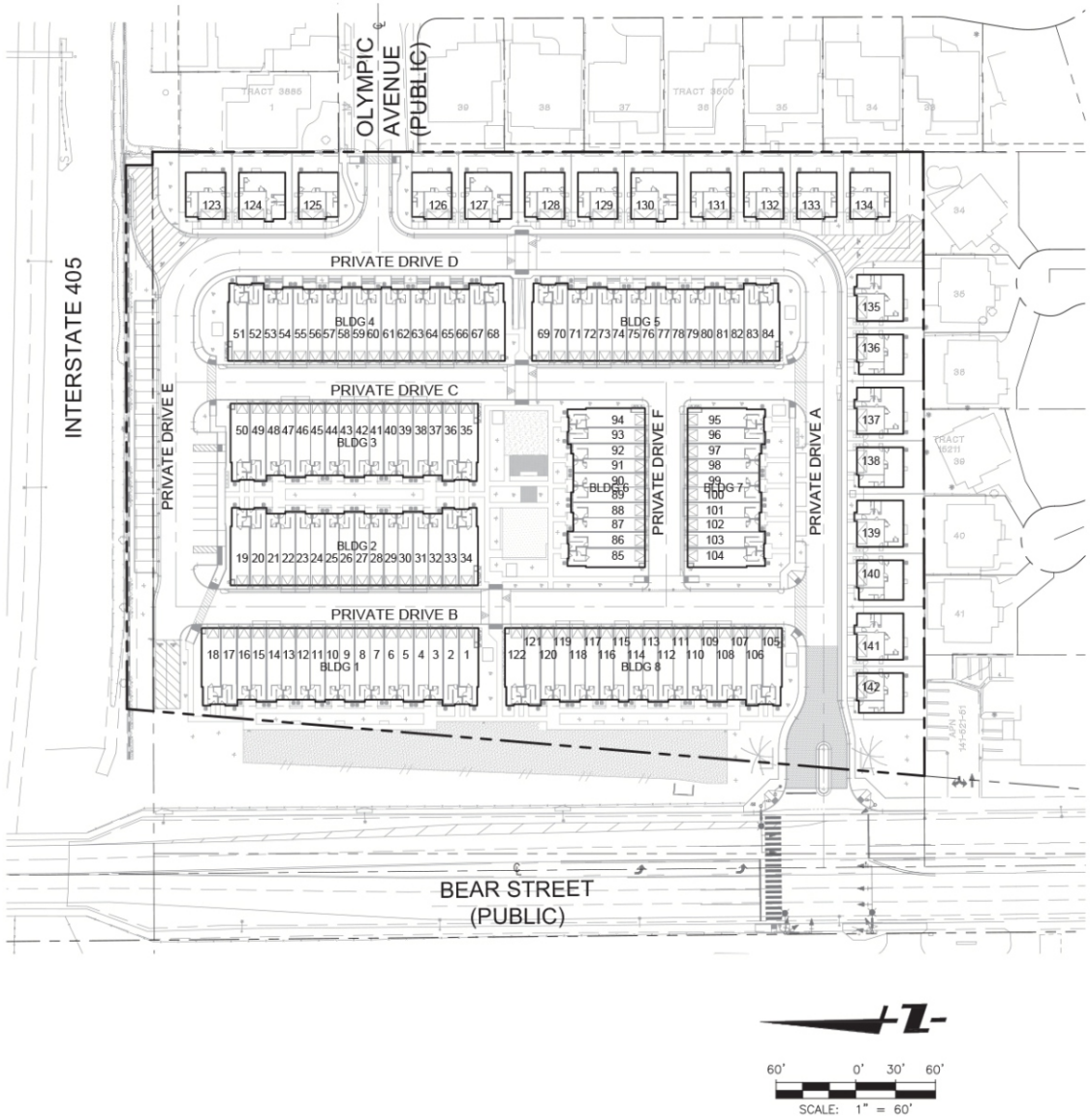

LEGEND

- TRACT BOUNDARY
- LOT LINE
- EXISTING RIGHT–OF–WAY
- PROPOSED RIGHT–OF–WAY
- EXISTING EASEMENT
- EXISTING WATER
- PROPOSED WATER
- PROPOSED FIRE WATER
- EXISTING SEWER
- PROPOSED SEWER
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN

Source: X Engineering & Consulting, Inc. 12/11/24.

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Exhibit 5
Site Plan

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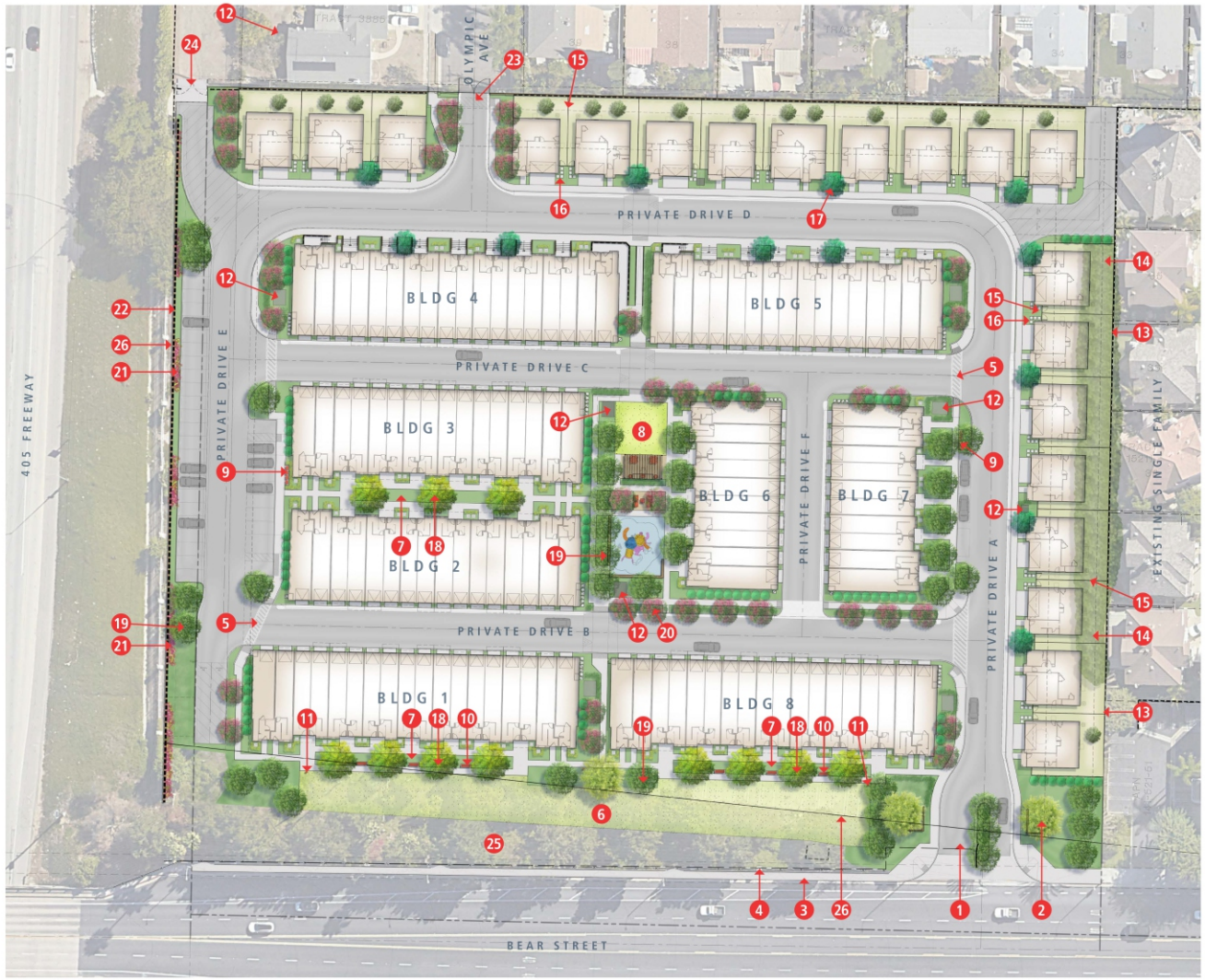

LEGEND

1. Project Entry
2. Monument Signage and Specimen Tree
3. Public Sidewalk
4. Existing Perimeter Pilaster and Fence (Refer to Sheet L-4)
5. Crosswalk Striping
6. Lawn Area
7. Central Paseo
8. Central Open Space:
   - Lawn
   - Overhead Structure
   - BBQ and Picnic
   - Play Equipment
   - Casual Seating
9. Mailboxes
10. Bench
11. Pet Waste Station (Total 3 Installs)
12. Transformer with Screening Hedge
13. Existing Wall to Remain
14. Existing Ficus Trees to Remain
15. Backyard Fence and Gate
16. Stepping Stones
17. Street Tree
18. Paseo Tree
19. Shade Tree
20. Flower Tree
21. Screening Vine
22. Sound Wall - 12' ht. (Refer to Sheet L-4)
23. EVA Gate
24. Existing Maintenance Corridor Gate to Remain
25. Existing Slope to Remain
26. Property Line

0 15' 30' 60'
Scale: 1" = 30'-0"

Source: MLC Holdings, Inc. 12/06/2024.

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Exhibit 6
Landscape Plan

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2 - ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

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

Environmental Determination

On the basis of this initial evaluation:

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

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

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

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

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

Date: _____ Signed: _____

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

Environmental Evaluation

Setting

The General Plan Conservation Element specifies that the Santa Ana River, Fairview Park, and Talbert Regional Park are considered the City's primary natural resources.[4] Additional scenic amenities, such as golf courses, also provide visual relief from the built environment and are important visual amenities and landmarks. According to the General Plan EIR, scenic locations near the City include the Pacific Ocean, Santa Ana River, and Santa Ana Mountains.[5]

[4] City of Costa Mesa. 2015. 2015-2035 General Plan, Conservation Element. Website: http://www.costamesaca.gov/home/showpublisheddocument/34698/636740022567130000. Accessed October 2, 2024.

[5] City of Costa Mesa. 2016. Final Environmental Impact Report for the 2015-2035 General Plan. Website: http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/Final-EIR.pdf. Accessed November 18, 2024.

Would the project:

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

No impact. The City does not designate any specific scenic vistas; however, it identifies the Santa Ana River, Fairview Park, and Talbert Regional Park as primary natural resources in the City. The project site is in the northeastern portion of the City, approximately 2.8 miles east of the Santa Ana River, 2.93 miles northeast of Fairview Park, and 4.12 miles northeast of Talbert Regional Park. Additionally, the project site is located over 5 miles from the Pacific Ocean.

Because of the distance and the intervening development and topography, the project site cannot be seen from the Santa Ana River, Fairview Park, or the Pacific Ocean. Nor would the development of the proposed project impede or change views of the City's identified natural resources from publicly accessible areas. General Plan Conservation Element Goal CON-1 aims to preserve natural resources in the City, including land, water, wildlife, and vegetation, and to protect areas of unique natural beauty. The project site is flat and is developed with commercial uses. Surrounding uses include commercial and residential development. Because of intervening development, there are no scenic views of the Santa Ana River, Fairview Park, Talbert Regional Park or the surrounding areas. Therefore, the proposed project would not affect public views of these scenic resources. No impact would occur.

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

No impact. The nearest eligible scenic highway is SR-1, approximately 5.63 miles southwest of the project site, and the nearest designated Scenic Highway is SR-91, approximately 11.58 miles northeast of the project site.[6]

Because of the distance and intervening development, the project site is not visible from SR-1 or SR-91. The project site is developed with commercial uses, and there are no scenic resources such as trees of significance, rock outcroppings, or historic buildings on-site. Additionally, unique visual resources or historic structures do not characterize the project site and surrounding area; therefore, no impact would occur to scenic or historic resources.

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. The project site is located in an urbanized area. As such, this discussion focuses on zoning and other regulations governing scenic quality. The General Plan and

[6] California Department of Transportation (Caltrans). 2024. State Scenic Highway Map. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 2, 2024.

Zoning Ordinance define the permitted land uses and the corresponding development standards within the City. The General Plan currently designates the project site as General Commercial. The proposed project would require a GPA to change the General Plan land use designation from General Commercial to High-Density Residential. The High-Density Residential land use designation is intended to provide residential development with a density of up to 20 du/acre.

The project site is currently zoned AP. The proposed project would require a rezone to change the zoning designation from AP to R-3. The R-3 zoning district is intended to promote the development of multi-family rental as well as ownership dwelling units. In conjunction with the proposed GPA to High-Density Residential, the proposed project would be subject to R-2 zoning development standards.

The proposed project would comply with all applicable Costa Mesa Code of Ordinances requirements related to scenic quality as part of the development review process to ensure the project design is consistent with adopted design guidelines. As such, the proposed project would not conflict with applicable zoning and other regulations pertaining to scenic quality, and no impacts would occur.

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

Less than significant impact. The project site is located in an urbanized area with existing light sources, which include streetlights, lighting on the interiors and exteriors of existing and surrounding buildings, as well as vehicle headlights and traffic signals. No nighttime construction is proposed, and construction activities would be subject to Costa Mesa Municipal Code Section 13-279, which restricts construction activities to between the hours of 7:00 a.m. and 7:00 p.m.[7] Therefore, the proposed project would not require construction lighting, except security and safety lighting.

The proposed project would generate lighting from two primary sources: lighting from the building interiors that would pass through windows and lighting from exterior sources (e.g., street lighting, parking area lighting, building illumination, security lighting, vehicle headlights, and landscape lighting). This proposed lighting is typical of residential developments. The proposed development would replace current existing sources of light and glare with new high-quality development and lighting.

The City's Planning and Building Department would review any proposed lighting to ensure conformance with the California Building Standards Code (CBC), Title 24, as well as the California Green Building Standard Code (CALGreen) (California Code of Regulations [CCR] Title 24, Part 11), such that only the minimum amount of lighting is used, and no light spillage occurs. Although the proposed project would replace existing structures with new buildings that would introduce new light sources, the surrounding area is urban and already illuminated, and the proposed lighting conditions would be similar to existing uses on-site and surrounding the project site. Furthermore, lighting would

[7] City of Costa Mesa. 2024. Municipal Code, Chapter XIII Noise Control. Website: https://ecode360.com/42619140?highlight=construction,construction%20hours,hours&searchId=8627775032158158. Accessed October 2, 2024.

be required to adhere to the Costa Mesa Municipal Code, CBC, and CALGreen. Therefore, the proposed project would not cause adverse effects. A less than significant impact would occur, and no mitigation is required.

Sunlight or artificial light reflecting from finished surfaces such as window glass or other reflective materials can cause reflected light (glare). Buildings constructed of highly reflective materials from which the sun reflects at a low angle commonly cause adverse glare. All proposed glass materials to be used would be required to be approved by the City prior to project construction to ensure that the proposed project would not result in glare for adjacent residents or passersby. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

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

Setting

The project site is currently zoned AP (Exhibit 4). The proposed project would require a rezone to change the zoning designation from AP to R-3. The R-3 zoning district is intended to promote the development of multi-family rental as well as ownership dwelling units.

The project site is located in a developed and urbanized area. The California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) designates the project site as Urban and Built-Up Land, which is defined as land occupied with a building density of at least one dwelling unit per 1.5 acres, or approximately six structures to a 10-acre parcel.[8]

Would the project:

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

No impact. As described above, the site is located on land designated as Urban and Built-Up Land. There is no Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance on the project site or in its vicinity. In addition, the proposed project would not convert any farmland to nonagricultural use. Therefore, no impact would occur.

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

No impact. The project site is not under a Williamson Act Contract and is not zoned for agricultural uses.[9] As noted in the General Plan EIR, no Willamson Act contract lands exist within the City.[10] As

[8] California Department of Conservation. 2022. California Important Farmland Finder. Website: https://maps.conservation.ca.gov/DLRP/CIFF/#:~:text=State%20of%20California.%20Search%20this%20site. Accessed November 12, 2024.

[9] California Department of Conservation. 2024. California Williamson Act Enrollment Finder. Website: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/App/index.html#:~:text=ArcGIS%20Web%20Application%20-%20California. Accessed November 12, 2024.

[10] City of Costa Mesa. 2016. Final Environmental Impact Report for the 2015–2035 General Plan. Website: http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/Final-EIR.pdf. Accessed November 12, 2024.

previously discussed, the project site is currently zoned AP and would be rezoned to R-3. Therefore, no impact would occur.

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

No impact. The City of Costa Mesa does not contain any land that is zoned for forest land or timberland. The project site is within the AP Zone and is currently occupied with commercial uses. The proposed project would require a rezone of the site to R-3. Therefore, there would be no impact to land zoned for forest or timberland**.**

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

No impact. As discussed above, the project site consists primarily of paved and developed surfaces and does not contain forest land, timberland, or timberland zoned for production. The proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Therefore, there would be no impact.

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

No impact. The project site and surrounding area do not contain Farmland or forest land. Therefore, project implementation would not result in the conversion of Farmland or forest land from agricultural or timberland uses to nonagricultural or non-forest land uses. No impact would occur, and no mitigation is required.

Mitigation Measures

None required.

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

Environmental Evaluation

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

Setting

The proposed project site is located in the City of Costa Mesa, in Orange County, which is within the South Coast Air Basin (SoCAB). The SoCAB includes all of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the SoCAB on the north and east while the Pacific Ocean lies to the west of the SoCAB. The southern limit of the SoCAB is the San Diego County line. The SoCAB is under the jurisdiction of South Coast Air Quality Management District (SCAQMD).[11]

[11] South Coast Air Quality Management District (SCAQMD). 2022. Air Quality Management Plan. Website: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan. Accessed November 19, 2024.

The air pollutants for which national and State standards have been promulgated and that are most relevant to air quality planning and regulation in the SoCAB include ozone, nitrogen oxide (NO_X), carbon monoxide (CO), particulate matter, including dust, 10 micrometers or less in diameter (PM_{10}), and particulate matter, including dust, 2.5 micrometers or less in diameter ($PM_{2.5}$). In addition, toxic air contaminants (TACs) are of concern in the SoCAB. Each of these pollutants is briefly described below. Other pollutants that are regulated but not considered an issue in the project area are sulfur dioxide (SO_2), vinyl chloride, sulfates, hydrogen sulfide, and lead; the proposed project would not emit substantial quantities of those pollutants, so they are not discussed further in this section.

Construction and operation of the proposed project would be subject to applicable SCAQMD rules and requirements. The SCAQMD CEQA Air Quality Handbook was developed to assist local jurisdictions and lead agencies in complying with the requirements of CEQA regarding potentially adverse impacts to air quality.[12]

Would the project:

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

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

- **Indicator:** Whether the proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- **Indicator:** According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a proposed project is inconsistent with the growth assumptions incorporated into the air quality plan and, thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

[12] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Air Quality Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

[13] South Coast Air Quality Management District (SCAQMD). Air Quality Management Plan. Website: http://www.aqmd.gov/home/air-quality/air-quality-management-plans/air-quality-mgt-plan. Accessed November 19, 2024.

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

The General Plan and Zoning Ordinance defines the permitted land uses and the corresponding development standards within the City. The General Plan currently designates the project site as General Commercial. The proposed project would require a GPA to amend the General Plan land use designation from General Commercial to High-Density Residential. The High-Density Residential land use designation is intended to provide residential development with a density of up to 20 du/acre.

The project site is currently zoned AP. The proposed project would require a rezone to change the zoning designation from AP to R-3. The R-3 zoning district is intended to promote the development of multi-family rental as well as ownership dwelling units. In conjunction with the proposed GPA to High-Density Residential, the proposed project would be subject to R-3 zoning development standards.

Therefore, the proposed project's VMT and sources of air pollutants would have been analyzed in the 2022 AQMP under a lower density than the proposed project. As such, further analysis is required to determine whether the proposed project would conflict with or obstruct implementation of the applicable air quality plan.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address this potential impact:

- **Criterion 1:** Proposed project's contribution to air quality violations; and
- **Criterion 2:** Compliance with applicable emission control measures in the AQMPs.

Criterion 1: Project's Contribution to Air Quality Violations

According to the SCAQMD, the proposed project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.[14]

If a project's emissions do not exceed the SCAQMD regional thresholds for volatile organic compounds (VOC), NO_X, CO, sulfur oxides (SO_X), PM_{10}, or $PM_{2.5}$, it follows that the project's emissions would not exceed the allowable limit for each project in order for the region to attain and maintain ambient air quality standards, which is the primary goal of air quality plans. As shown in Impact 2.3(b), the proposed project would not exceed the SCAQMD's regional thresholds of

[14] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

significance during either construction or operation. Therefore, the proposed project would be consistent with the AQMP under this criterion.

Criterion 2: Control Measures

The AQMP contains several control measures which are enforceable requirements through the adoption of rules and regulations. The proposed project would comply with all applicable SCAQMD rules and regulations. Because of the nature of the proposed project, which includes earthmoving activity during construction, SCAQMD Rule 403 applies. Rule 403 requires that fugitive dust be controlled with Best Available Control Measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Compliance with this rule is achieved through the application of standard Best Management Practices (BMPs). These BMPs include application of water or chemical stabilizers to disturbed soils; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 miles per hour (mph); sweeping loose dirt from paved site access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. Because the proposed project does not otherwise include dust control BMPs incorporated, Standard Condition (SC) AIR-1 is required. SC AIR-1 requires the implementation of best available dust control measures during activities capable of generating fugitive dust, consistent with the requirements of SCAQMD Rule 403. The proposed project would comply with SCAQMD Rule 1113, which serves to limit the VOC content of architectural coatings used on projects in the SCAQMD. As outlined in SC AIR-2, all coatings used by the proposed project must meet or exceed the VOC content limits established by SCAQMD Rule 1113. The proposed project's compliance with all applicable SCAQMD rules and regulations would result in consistency with the applicable AQMP control measures.

Summary

In summary, the proposed project would not result in a regional exceedance of criteria air pollutants and would comply with all applicable SCAQMD rules and regulations with incorporation of SC AIR-1 and SC AIR-2. As such, the proposed project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP. Furthermore, the proposed project would not interfere with the region's ability to comply with federal and California air quality standards. Therefore, this impact would be less than significant.

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

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

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

Potential regional impacts could result in exceedances of State or federal standards for NO_X, particulate matter (PM_{10} and $PM_{2.5}$), or CO. NO_X emissions are of concern because of potential health impacts from exposure to NO_X emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM_{10} and $PM_{2.5}$ are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and resulting health effects.

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

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions.

The proposed project's regional construction and operational emissions are evaluated separately below. Construction and operational emissions from the proposed project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1. The complete CalEEMod output files are included as part of Appendix A.

Construction Emissions

Construction emissions are described as "short-term" or temporary in duration; however, they have the potential to represent a significant impact with respect to air quality. Construction of the proposed project would result in the temporary generation of VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions from construction activities such as site preparation, grading, building construction (home construction), architectural coating, and paving. Fugitive dust emissions are primarily associated with

earth disturbance and grading activities and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on-site and off-site. Construction-related NO_X emissions are primarily generated by exhaust emissions from heavy-duty construction equipment, material and haul trucks, and construction worker vehicles. VOC emissions are mainly generated by exhaust emissions from construction vehicles, off-gas emissions associated with architectural coatings, and asphalt paving.

For the purpose of this analysis, construction of the proposed project was estimated to begin in December 2025 and conclude in September 2028 and was modeled based on an applicant-provided preliminary schedule; see Appendix A. Note that construction emissions would likely decrease if the construction schedule were deferred to later years because of improvements in technology and more stringent regulatory requirements. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as the State CEQA Guidelines require.

The calculations of pollutant emissions from the construction equipment account for the type of equipment, horsepower and load factors of the equipment, and the duration of equipment use. Table 1 presents the proposed project's maximum daily construction emissions during the entire construction duration using the worst-case summer or winter daily construction-related criteria pollutant emissions for each phase of construction. The PM_{10} and $PM_{2.5}$ emissions reflect the combined exhaust and fugitive dust emissions after incorporation of SC AIR-1, which requires the implementation of best available dust control measures outlined in SCAQMD Rule 403. Complete CalEEMod output files are included as part of Appendix A.

Table 1: Unmitigated Construction—Maximum Daily Regional Emissions by Year

Construction Year	Regional Pollutant Emissions (pounds per day)					
	VOCs	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily from Project Construction (2025)	1.64	19.75	15.68	0.05	5.68	1.52
Maximum Daily from Project Construction (2026)	3.20	29.39	29.68	0.05	9.20	5.15
Maximum Daily from Project Construction (2027)	0.89	5.70	14.29	0.02	2.71	0.76
Maximum Daily from Project Construction (2028)	24.43	5.42	13.81	0.02	2.70	0.74
Maximum Daily Construction Emissions						
Maximum Daily Emissions[1]	**24.43**	**29.39**	**29.68**	**0.05**	**9.20**	**5.15**
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**

Construction Year	Regional Pollutant Emissions (pounds per day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compound
[1] Assumes overlap of construction activities based on schedule presented in Appendix A.
The PM_{10} and $PM_{2.5}$ emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403 and incorporated into the proposed project assumptions through SC AIR-1.
Source of Emissions: Appendix A.

As shown above in Table 1, the proposed project's construction emissions (with the incorporation of SC AIR-1) would not exceed the applicable significance threshold for any of the pollutants. Therefore, the proposed project would have a less than significant impact related to regional air quality during project construction.

Operational Emissions

Long-term operational emissions would be generated, resulting from daily operations at the proposed townhomes. Operational emissions for residential land use development projects are typically distinguished as mobile-, area-, and energy-source emissions. Mobile source emissions are those associated with automobiles that would travel to and from the project site. Assumptions used to estimate mobile source emissions that would be generated by the proposed project were consistent with those presented in the project-specific Trip Generation Memorandum. The existing site generates 530 daily trips. The proposed project would generate 1,024 daily trips (under the 146-unit scenario), resulting in a net increase of 494 daily trips compared to the existing use.[15] Under the 142-unit scenario, the proposed project would generate 997 daily trips, resulting in a net increase of 467 daily trips compared to the existing use. Area-source emissions are those associated with natural gas combustion for space and water heating, landscape maintenance activities, and periodic architectural coatings. Energy-source emissions are those associated with electricity consumption and are more pertinent for greenhouse gas (GHG) emissions than air quality pollutants. Because the proposed project would demolish and replace existing structures, the proposed project's incremental increase in air pollutant emissions would be lower than those estimated and presented below. Table 2 presents the proposed project's estimated maximum daily operational emissions.

[15] Urban Crossroads. August 8. 3150 Bear Street Due Diligence Trip Generation Assessment. 2024.

Table 2: Maximum Daily Operational Regional Pollutants

Operational Activity	Regional Pollutant Emissions (pounds per day)[1]					
	VOC	NO_X	CO	SO_X	PM_{10} (Total)	$PM_{2.5}$ (Total)
Area	7.09	0.00	15.32	0.00	0.02	0.01
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile (Automobiles)	2.94	2.13	22.70	0.06	5.67	1.46
Overall Maximum Daily[1]	**10.03**	**2.13**	**38.02**	**0.06**	**5.69**	**1.47**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds
[1] Emissions shown represent the maximum daily emissions from summer and winter seasons for each operational emission source and pollutant. Therefore, total daily operational emissions represent the maximum daily emissions that could occur throughout the year.
Source of Table: Appendix A.

As shown in Table 2, the proposed project's regional daily operational emissions would not exceed any of the SCAQMD thresholds of significance. Therefore, the proposed project would have a less than significant impact related to regional air quality during project operation. Furthermore, as previously noted, the proposed project would replace existing structures with new residential buildings. The existing uses are currently generating air pollutant emissions that would no longer occur once the existing structures are demolished. Thus, the proposed project's net increase in air pollutant emissions from project operations would be even lower than what are shown in Table 2.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact after incorporation of mitigation. This impact evaluates the potential for the proposed project's construction and operational emissions to expose sensitive receptors to substantial pollutant concentration. Sensitive receptors are defined as those individuals who are sensitive to air pollution, including children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or

convalescent facilities.[16] Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide [NO_2] and CO), commercial and/or industrial facilities would be considered sensitive receptors.

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** Localized significance threshold (LST) assessment: emissions and air quality impacts during project construction or operation must be below the applicable LSTs to screen out of needing to provide a more detailed air quality analysis. If the proposed project exceeds any applicable LST when the mass rate lookup tables are used as a screening analysis, then project-specific air quality modeling may be performed to determine significance.
- **Criterion 2:** A CO hotspot assessment must demonstrate that the proposed project would not result in the development of a CO hotspot that would result in an exceedance of the CO ambient air quality standards.
- **Criterion 3:** TAC analysis must demonstrate that TAC emissions from construction and operations of the proposed project would not result in significant health risk impacts to nearby sensitive receptors.

Criterion 1: Localized Significance Threshold Analysis—Criteria Pollutants

The localized construction and operational analyses use thresholds (i.e., LSTs) that represent maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard.[17] If the proposed project's construction or operational emissions are under those thresholds, it follows that the proposed project would not cause or contribute to an exceedance of the standard and would not expose sensitive receptors to substantial pollutant concentrations.

Localized Construction Analysis

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

Utilizing the construction equipment list and associated acreages per 8-hour day provided in the SCAQMD "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds," the appropriate thresholds were selected based on the maximum number of acres disturbed in a day. To ensure a conservative analysis, the proposed project emissions have been compared to the 2 acre per day

[16] South Coast Air Quality Management District (SCAQMD). 2003. Revised 2008. Final Localized Significance Threshold Methodology. Revised July 2008. Website: https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed November 19, 2024.

[17] South Coast Air Quality Management District (SCAQMD). 2003. Revised 2008. Final Localized Significance Threshold Methodology. Revised July 2008. Website: https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed November 19, 2024.

LST. A complete list of construction equipment, as well as the calculation sheet to determine the maximum area disturbed are included in Appendix A.

Table 3 presents the proposed project's maximum daily on-site emissions compared with the applicable LSTs. The closest sensitive receptor is within approximately 20 feet from the project site, which is approximately 6.1 meters.[18] Receptors 25 meters or less use the 25-meter LSTs. The LSTs for the project site were obtained from the LST Methodology for a 2-acre project site located in Source Receptor Area 18–North Coastal Orange County, with sensitive receptors within 25 meters. As noted in Table 3, emission estimates account for implementation of SCAQMD Rule 403 (incorporated into the proposed project through SC AIR-1), and the construction vehicle trip lengths were adjusted to 0.5 mile to represent localized emissions.

Table 3: Construction Localized Significance Screening Analysis

Activity	On-site Emissions (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily from Project Construction (2025)	14.95	13.33	4.27	1.09
Maximum Daily from Project Construction (2026)	29.21	28.99	8.94	5.09
Maximum Daily from Project Construction (2027)	4.26	7.16	0.22	0.15
Maximum Daily from Project Construction (2027)	4.03	7.08	0.20	0.13
Maximum Daily On-site Construction Emissions[1]	**29.21**	**28.99**	**8.94**	**5.09**
Construction Localized Significance Threshold (Source Receptor Area 18, 2 acres disturbed, 25 meters)	**131**	**962**	**7**	**5**
Exceed Screening Threshold?	**No**	**No**	**Yes**	**Yes**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter with an aerodynamic resistance diameter of 10 micrometers or less
$PM_{2.5}$ = particulate matter with an aerodynamic resistance diameter of 2.5 micrometers
SCAQMD = South Coast Air Quality Management District
[1] Assumes overlap of construction activities based on construction schedule shown in Appendix A.
The PM_{10} and $PM_{2.5}$ emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403 and incorporated into the proposed project assumptions through SC AIR-1.
Source of emissions: Appendix A.
Source of thresholds: South Coast Air Quality Management District (SCAQMD) Mass Rate Localized Significance Threshold (LST) Lookup Table for Source Receptor Area 18, 2 acres disturbed, within nearest sensitive receptor within 25 meters from the project site.

[18] South Coast Air Quality Management District (SCAQMD). 2003. Revised 2008. Final Localized Significance Threshold Methodology. Revised July 2008. Website: https://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf. Accessed November 19, 2024.

As shown in Table 3, the proposed project's maximum daily on-site emissions would not exceed the applicable SCAQMD LSTs for NO_X or CO; therefore, localized construction impacts related to these air pollutants would be less than significant. However, the proposed project's maximum daily on-site emissions would exceed the applicable SCAQMD LSTs for PM_{10} or $PM_{2.5}$. As previously discussed, the LSTs are screening criteria developed by the SCAQMD to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in a potentially significant air quality impact. If a project exceeds an applicable LST, then the SCAQMD recommends that project-specific air quality modeling be performed to determine localized impacts. To determine localized impacts related to construction-generated PM (including both PM_{10} and $PM_{2.5}$), a project-specific construction Health Risk Assessment (HRA) was performed. As detailed within the HRA addressed in Criterion 3 below, localized impacts from the proposed project's generation of particulate matter during construction would be less than significant after incorporation of mitigation. The proposed project would be required to comply with SC AIR-1 (consistent with SCAQMD Rule 403) and would be required to implement Mitigation Measure (MM) AIR-1. Incorporation of SC AIR-1 and MM AIR-1 would ensure that the project-generated emissions of PM_{10} and $PM_{2.5}$ would be controlled during the construction period. In addition, SC AIR-2 would ensure that all architectural coatings used on-site would meet the VOC content requirements of SCAQMD Rule 1113. Accordingly, with adherence to standard conditions and incorporation of mitigation, the proposed project's on-site construction-related criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

Localized Operational Analysis

Similar to the construction LST analysis above, the applicable operational LSTs were obtained for a project located in Source Receptor Area 18 with the nearest sensitive receptor being within 25 meters. Long-term operations would occur for the proposed project on the approximately 6.12-acre project site, and LSTs were obtained for a 5-acre site (the largest option).

As described above, the LST Methodology recommends that only on-site emissions are evaluated using LSTs. Because most of the proposed project's mobile source emissions would occur on the local and regional roadway network away from the project site, a trip length of 0.5 mile was used in the modeling input assumptions to account for on-site emissions and from mobile sources. The 0.5-mile on-site trip length is a conservative estimate that takes into account the maximum project site distance a vehicle could travel, not the most likely or fastest route, to ensure all potential impacts are considered. On-site area-, energy-, and mobile source emissions were included in this analysis. Table 4 presents the proposed project's maximum daily on-site emissions compared with the appropriate LSTs.

Table 4: Operational Localized Screening Significance Analysis

Emissions Source	Pounds per Day			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	0.14	15.32	0.02	0.01
Energy	0.00	0.00	0.00	0.00

Emissions Source	Pounds per Day			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Mobile (Automobiles)	0.70	6.17	0.36	0.10
Maximum Daily On-site Operational Emissions	**0.84**	**21.49**	**0.38**	**0.11**
Localized Significance Thresholds (Source Receptor Area 18, 5-acre site, 25 meters)	**200**	**2,349**	**13**	**5**
Exceeds Screening Threshold?	**No**	**No**	**No**	**No**

Notes:
CO = carbon monoxide
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
The highest daily emissions of NO_X, CO, PM_{10}, and $PM_{2.5}$ were in the summer season.
Source of Emissions: Appendix A.
Source of thresholds: SCAQMD Mass Rate Lookup Tables for a 5-acre site in Source Receptor Area 18 for sensitive receptors located within 25 meters of the project site.

As shown in Table 4, the proposed project's maximum daily on-site operational emissions would not exceed any applicable SCAQMD LSTs. Therefore, the proposed project's operational activities would not cause or contribute substantially to an existing or future ambient air quality standard violation. Accordingly, the proposed project's operational criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

Criterion 2: Carbon Monoxide Hotspot Analysis

A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent to help remedy this impact.

The CO hotspot analysis contained in the SCAQMD 1992 CO Plan is used to determine potential CO hotspot impacts from the proposed project, because by using the 1992 CO Plan as a worst-case scenario, the proposed project can measure CO impacts against intersections that experienced significantly more vehicle traffic than adjacent to the proposed project. The 1992 CO Plan is used as a worst-case scenario because it included a CO hot spot analysis for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood); and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day.

Subsequently, the CO Plan determined that no CO hotspot would occur even with 100,000 vehicles per day at this one intersection.

According to the transportation analysis prepared by Urban Crossroads,[19] the existing peak-hour trips for the current land use operations are 97 AM peak-hour trips and 87 PM peak-hour trips along the segment of Bear Street adjacent to the project site. However, the proposed project would only generate 64 AM peak-hour trips and 83 PM peak-hour trips under the 146-unit scenario (which would be slightly lower under the 142-unit scenario). Thus, the proposed project is expected to generate a net reduction of 33 AM trips and 4 fewer PM peak-hour trips as compared to the trips generated by the existing land use. Furthermore, based on the project-specific Trip Generation Memorandum, the proposed project was estimated to generate 1,024 daily vehicle trips under the 146-unit scenario and 997 trips under the 142-unit scenario and would not result in traffic volumes exceeding 100,000 vehicles per day at any of the intersections evaluated near the project site.[20] Additionally, project-generated trips would be distributed throughout the day and would not impact all local roadways at one time, further reducing the potential impacts to CO. As a result, none of the intersections near the proposed project site would have peak-hour traffic volumes exceeding those at the intersections analyzed in the 1992 CO Plan. Additionally, the adjacent roadways are not located in an area where vertical or horizontal atmospheric mixing is substantially limited, such as a tunnel or overpass. Furthermore, there are no factors unique to the local meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. Therefore, the operational CO impact would be less than significant.

Criterion 3: Project-Specific Operational Toxic Air Pollutants

An assessment was made of the potential health impacts on surrounding sensitive receptors resulting from TAC emissions during construction.

The SCAQMD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was diesel particulate matter (DPM) from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. The California Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project. To assess impacts to off-site sensitive receptors, the American Meteorological Society/EPA Regulatory Model (AERMOD) air dispersion model was used to estimate the concentrations from PM_{10} and $PM_{2.5}$ exhaust at nearby sensitive receptors within 1,000 feet of the project site. The

[19] Urban Crossroads. August 8. 3150 Bear Street Due Diligence Trip Generation Assessment. 2024.

[20] Ibid.

Hotspots Analysis and Reporting Program (HARP2) software was used to identify the cancer risks associated with DPM generated during construction activities.

Toxic Air Contaminant Construction Analysis

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

The estimated health and hazard impacts at the Maximally Exposed Individual Receptor (MEIR) from the proposed project's construction emissions, prior to incorporation of mitigation, are provided in Table 5.

Table 5: Estimated Health Risks and Hazards During Project Construction (Unmitigated)

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Maximally Exposed Individual Receptor[1]	24.49	0.014
Significance Threshold	**10**	**1**
Exceeds Individual Source Threshold?	**Yes**	**No**

Notes:
HI = hazard index
[1] The location of the construction MEIR was determined to be an existing single-family residence within approximately 20 feet east of the project boundary, at 33°41'12.1"N 117°53'25.1"W.
Source: Appendix A.

As noted in Table 5, above, the proposed project's construction emissions would exceed the cancer risk significance threshold without the use of cleaner than average construction equipment. Accordingly, MM AIR-1 is recommended, which would require the use of Tier 3 engines with Level 3 Verified Diesel Emission Control Strategy (VDEC) filters for all construction equipment equal to or greater than 50 horsepower. Equipment meeting Tier 4 standards achieves the required reductions and specifications in MM AIR-1 without VDECs.[21]

As noted in Table 6, below, the proposed project's construction emissions would not exceed any applicable SCAQMD significance threshold for health risk impacts after incorporation of MM AIR-1. Therefore, project construction would not result in significant health impacts to nearby sensitive receptors after incorporation of mitigation.

[21] The Tier 4 scenario is modeled as Tier 4 Interim equipment and is included as part of Appendix A.

Table 6: Estimated Health Risks and Hazards During Project Construction (Mitigated)

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI
Mitigated Construction–Tier 3 with Level 3 Filters Scenario		
Maximally Exposed Individual Receptor[1]	5.03	0.003
Significance Threshold	**10**	**1**
Exceeds Individual Source Threshold?	**No**	**No**

Notes:
HI = hazard index
[1] The location of the construction MEIR was determined to be an existing single-family residence within approximately 20 feet east of the project boundary, at 33°41'12.1"N 117°53'25.1"W.
Source: Appendix A.

Criterion 3: Project-Specific Operational Toxic Air Pollutants

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

Cumulative Toxic Air Contaminant Analysis

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

The Proposed Project as a Receptor

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

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

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

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

Table 7: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile

Source: San Joaquin Valley Air Pollution Control District (Valley Air District). 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). March 19. Website: https://valleyair.org/transportation/GAMAQI.pdf. Accessed April 22, 2024.

Construction-Related Odors

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, the intermittent nature of construction activities, and the highly diffusive properties of DPM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed

project site. The proposed project would utilize typical construction techniques and the odors would be typical of most construction sites for a typical residential subdivision. As such, the proposed project would not cause odors that adversely affect a substantial number of people during the construction period; potential impacts during construction would be less than significant.

Operational-Related Odors

The proposed project includes the construction and development of a new residential infill community consisting of a total of up to 142 for-sale townhomes and associated amenities, landscaping, paving, and off-site improvements. Operations of the proposed project could lead to odors from associated vehicle exhaust and outdoor cooking. However, such odors generated by project operation would be small in quantity and duration and would not pose an objectionable odor impact to nearby receptors. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, composting facilities, feedlots, coffee roasters, asphalt batch plants, and rendering plants. The proposed residential project would not produce any offensive odor emitting end uses such as coffee roasting, composting, feed lots, refining, sewage treatment, or solid waste management and would not be considered an odor generator as identified in Table 7.

Summary

The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people from construction or operations. Therefore, approval of the proposed project would not result in any significant effects relating to other emissions (such as odors), and impacts would be less than significant.

Standard Conditions

SC AIR-1 SCAQMD Rule 403 requires the implementation of best available dust control measures during activities capable of generating fugitive dust. The proposed project must follow the standard SCAQMD rules and requirements with regard to fugitive dust control, which include, but are not limited to the following:

1. All active construction areas shall be watered two times daily.
2. Speed on unpaved roads shall be reduced to less than 15 miles per hour (mph).
3. Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
4. Any on-site stockpiles of debris, dirt, or other dusty material shall be covered or watered twice daily.
5. All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
6. Access points shall be washed or swept daily.
7. Construction sites shall be sandbagged for erosion control.
8. Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).

9. Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
10. Pave or gravel construction access roads at least 100 feet onto the site from the main road and use gravel aprons at truck exits.
11. Replace the ground cover of disturbed areas as quickly possible.

SC AIR-2 All interior and exterior architectural coatings used on-site during project construction must meet or exceed the VOC content limits established by SCAQMD Rule 1113.The project sponsor shall include in any construction contracts and/or subcontracts a requirement that all interior and exterior architectural coatings used in project construction meet the VOC content limits established by SCAQMD Rule 1113.

Mitigation Measures

MM AIR-1 **Use of Clean Construction Equipment to Minimize DPM**

All off-road equipment equal to or greater than 50 horsepower shall meet either United States Environmental Protection Agency (EPA) or California Air Resources Board (ARB) Tier 3 standards with Level 3 Verified Diesel Emission Control Strategy (VDEC) filters.22 The project applicant shall submit a construction management plan to the Costa Mesa's Planning Division, for review and approval prior to issuance of any grading and building permits. The construction management plan shall demonstrate that the off-road equipment used on-site to construct the proposed project would comply with these specified off-road emission standards. Off-road equipment descriptions and information included in the construction management plan may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

[22] Equipment meeting Tier 4 standards achieves the required reductions and specifications in MM AIR-1 without VDECs.

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

Environmental Evaluation

The analysis in this section is based, in part, on a field survey and desktop survey conducted by FirstCarbon Solution (FCS). Desktop survey results are included in Appendix B.

Setting

Methods

The biological resources evaluation included a review of existing environmental documentation for the project site and vicinity, including literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity; and federal register listings, protocols, and species data provided by the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW). FirstCarbon Solutions also reviewed topographic maps, aerial photographs and published soil surveys, and queried special-status species databases, including the USFWS Information for Planning and Consultation database,[23] the California Natural Diversity Database,[24] and the California Native Plant Society Electronic Inventory of Rare and Endangered Vascular Plants of California.[25]

The biological resources evaluation included a visit to the project site on September 26, 2024, to ascertain general site conditions and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species.

Results

An FCS Biologist conducted a general biological survey of the project site on September 26, 2024, between approximately 11:00 a.m. and 12:20 p.m. Weather conditions during the field surveys were sunny, with an average temperature around 69–72°F (degrees Fahrenheit) and wind speeds between 0 and 2 miles per hour (mph). The literature and database reviews were conducted on September 13, 2024.

Environmental Setting

The project site is developed and is surrounded by Bear Street to the west, I-405 to the north, and residential development to the east and south. The project site is mostly paved or covered by structures and is generally flat. Ornamental trees are located along the boundaries and adjacent to the site on all sides, including a hedgerow of Indian laurel fig (*Ficus nitida*) along the southern boundary and camphor (*Cinnamomum camphora*) and pine (*Pinus* spp.) trees to the west.

[23] United States Fish and Wildlife Service (USFWS). 2024. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed November 12, 2024.

[24] California Department of Fish and Wildlife (CDFW). 2024. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed September 13, 2024.

[25] California Native Plant Society (CNPS). 2024. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed November 12, 2024.

Would the project:

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

Less than significant impact with mitigation incorporated. The project site is developed and is mostly paved or covered by structures and contains ornamental trees located along the site boundaries and near the buildings. There are no natural vegetation communities on-site and the site is completely surrounded by development and urbanization. According to the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California, 57 special-status plant species have been recorded within 10 miles of the project site or within the area encompassed by the *Newport Beach, California* USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix B). The potential for occurrence of a species was based on presence of suitable habitat (natural vegetation communities, soil types) and the recency, proximity, and number of occurrences recorded in the CNPSEI and CNDDB. Based on the lack of suitable habitat due to the developed nature of the project site and its history of surface disturbances, as well as its situation in an urbanized area, all special-status plants that occur in the region were assessed as having no potential for occurrence on-site (Appendix B, Table 1). Thus, special-status plants are not expected to occur on the project site and are not discussed or analyzed further. The proposed project is not expected to impact special-status plant species.

Fifty-three special-status wildlife species have been recorded within 10 miles of the project site in the CNDDB for or as identified in the USFWS Information for Planning and Conservation (IPaC) database. Because of the urbanized/developed nature of the project site and vicinity, all special-status wildlife species identified in the database reviews were determined to have no or low potential for occurrence on the project site. However, the project site contains trees and vegetation that could provide suitable nesting habitat for Cooper's hawk, a California Species of Special Concern. With the implementation of MM BIO-1a and MM BIO-1b, which requires a pre-construction survey and avoidance of active nests, potential impacts to nesting Cooper's hawks would be reduced to a less than significant level.

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

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

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

No impact. There were no waters or wetland features detected on the project site that would be considered potentially jurisdictional by the United States Army Corps of Engineers (USACE), nor any features that would be considered potentially jurisdictional by State regulatory agencies including the RWQCB and CDFW. Additionally, the project site does not contain vernal pools or features indicative of the historic presence of vernal pools. According to the National Resources Conservation Service (NRCS) Web Soil Survey (WSS) (2024),[26] one soil type is mapped on the project site, Omni clay. These soils are not known to support vernal pools. Therefore, implementation of the proposed project would not result in impacts to State or federally protected wetlands, including vernal pools. No impacts would occur.

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

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

The project site contains vegetation that could provide suitable nesting habitat for bird species protected under the Migratory Bird Treaty Act (MBTA) and the Fish and Game Code. These species include Cooper's hawk and other native avian species. If ground-disturbing or vegetation-removing construction activities are initiated during the nesting season, they could disturb nesting and breeding birds on the ground surface, in trees and shrubs, and on structures on and adjacent to the project site, which would be considered significant. Potential construction-related project impacts on special-status and migratory birds include destruction of eggs or occupied nests, mortality of young, and causing parental abandonment of nests with eggs or pre-fledged young birds. With the implementation of MM BIO-1a and MM BIO-1b, potential project impacts to nesting Cooper's hawks and other native and migratory birds would be reduced to a less than significant level.

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

Less than significant impact. City of Costa Mesa Municipal Code Chapter 15-V provides for the preservation of landmark trees, defined as a tree or stand of trees which is of historical significance, is of a rare species and is unusual because of size, color, and blossoms, has unique characteristics of form or shape that contribute to the community skyline, or are intended to become of future visual, cultural and/or historical significance. There are no trees on-site that meet the definition of a landmark

[26] Natural Resources Conservation Service (NRCS). 2024. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed November 12, 2024.

tree. Additionally, this chapter states that no person shall begin any construction or excavation without first providing sufficient protection for trees on public property, such as a fence, guard or frame within a five foot minimum distance of the tree trunk. The proposed project will be required to comply with this ordinance if there are any trees on public property that would be impacted.

The City's Municipal Code Chapter 13-VII states that trees shall not be destroyed or removed by the property owner without prior City approval. As part of complying with this ordinance, the applicant shall submit site plans to the Planning Division that identify existing and replacement trees with a written request and justification for their removal. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources. Impacts would be less than significant.

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

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

The project site does not contain Covered Habitats or suitable habitat for Identified Species covered under the CONCCP/HCP and does not have any conservation requirements under the plan. Therefore, the proposed project would not conflict with a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. No impact would occur.

Mitigation Measures

MM BIO-1a Nesting Bird Pre-construction Surveys

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

MM BIO-1b Avoidance of Active Avian Nests

If an active nest is located during pre-construction surveys or at any point during the construction phase of the proposed project, a qualified Biologist shall establish a buffer around the nest using flagging tape or other barrier. The buffer shall be

established a minimum radius of 300 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest. Furthermore, construction activities and personnel shall be restricted from entering the buffer area to avoid disturbance of the nest until it is abandoned, or a qualified Biologist deems disturbance potential to be minimal. Additional restrictions may include alteration of the construction schedule to avoid the active nesting season.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
2.5 Cultural Resources and Tribal Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐
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:				
d) 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	☐	☒	☐	☐
e) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☐	☐	☐

Environmental Evaluation

Setting

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

South Central Coastal Information Center

A records search and literature review were conducted on October 2, 2024, at the SCCIC, located at California State University, Fullerton, for the project site and a 0.50-mile radius surrounding it. The purpose of this review was to access existing cultural resource survey reports, archaeological site records, historic aerial photographs, and historic maps to evaluate whether any previously documented pre-contact or historic archaeological sites, architectural resources, cultural landscapes, or other resources exist within or near the project site.

The results from the SCCIC indicate that there are no recorded archaeological or historic resources located within the project site. There are 13 recorded historic built environment resources located within the 0.5-mile radius of the proposed project boundaries. In addition, there are 13 area-specific survey reports on file with the SCCIC for the 0.5-mile search radius, one of which (OR-04172) addresses the project site entirely, indicating that the project site has been previously surveyed for archaeological or historical resources. A records search map identifying the proposed project boundaries and a 0.5-mile search radius along with relevant non-confidential records search results are included in Appendix C.

Native American Heritage Commission

On September 24, 2024, FCS contacted the NAHC to determine whether any sacred sites were located within the site or proposed project vicinity. A response was received on October 9, 2024, indicating that the Sacred Lands File search was positive for the presence of Native American cultural resources within the project site. The NAHC included a list of 20 Tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential Tribal Cultural Resources (TCRs) that may be affected by the implementation of the proposed project are addressed, a letter containing proposed project information was sent to each Tribal representative on November 8, 2024. Three responses were received on November 12, 2024. A response from the Santa Rosa Band of Cahuilla Indians deferred comments to Soboba Band of Luiseno Indians cultural resource department. Another response was received from the Gabrieleño Band of Mission Indians-Kizh Nation requesting Lead Agency contact information. The final response was received from the

Cahuilla Band of Indians stating that the Tribe is unaware of any cultural resources at/or near the project area. The Tribe deferred to the Kizh Nation for further information regarding the proposed project. No additional responses have been received to date. NAHC correspondence can be found in Appendix C.

Pedestrian Survey and Buried Site Potential

On October 30, 2024, an FCS Archaeologist conducted a pedestrian survey for unrecorded cultural resources within the project site. At the center of the property is a 3-story commercial property (The Palazzo), a courtyard that extends to the south of the building and a detached maintenance building. The property is surrounded by landscape features and is bordered by parking lots on the southern, western and eastern perimeters, with auto access road to the north. Overview shots of the project area were taken from the northeast, northwest, southeast and southwest corners, which showcase the property, the courtyard, and the surrounding landscape and hardscape features. Visibility of the exposed soil was non-existent since the entirety of the project site is landscaped and/or hardscaped; thus, inspection of the soil for cultural resources was not possible. Survey conditions were documented using digital photographs and field notes. No pre-contact or historic resources were found over the course of the pedestrian survey.

In addition to the pedestrian survey, the potential for unidentified cultural resources in the project vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria originally identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9.[27] This study mapped the “archaeological sensitivity,” or potential to support the presence of buried prehistoric archaeological deposits throughout the Bay Area based on geology and environmental parameters, including distance to water and landform slope. The methodology used in the study is applicable to other parts of California and generally concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

The project site is situated on flat terrain. According to the geological map of Jennings et al.,[28] the surface of the project site consists entirely of early Holocene alluvium lake, playa, and terrace deposits (Q). Applying the criteria set forth above, all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to water resources. Although the NAHC TCR search yielded a positive result, the project site is situated 2.80 miles east of the Santa Ana River and the SCCIC records search results did not yield any known

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

[28] Jennings, C.W., C. Guitierrez, W. Bryant, G. Saucedo and C. Willis. 2010. Geologic Map of California. California Geologic Society.

archaeological resources recorded within the project boundaries, would suggest a low potential for unanticipated buried cultural resources to be impacted by project construction.

Historic Built Environment Assessment

On October 3, 2024, South Environmental Architectural Historian Marlena Krcelich, BA, and Principal Architectural Historian Sarah Corder, MFA, prepared a Historic Built Environment Assessment (HBEA) report of the project site, which consist of one main building that serves as offices and one maintenance building that was constructed in 1978. South Environmental determined, through archival research and literature review of the BERD, Costa Mesa Historical Society, City of Costa Mesa City Clerk, historical newspapers, Sanborn fire insurance maps, and historical aerial photographs, that the buildings have not been formally assessed for historical significance. An intensive built environment survey was completed to document the exterior of the existing buildings and structures with notes and photographs.

In compliance with CEQA Guidelines § 15064.5 for historical resources, the property was recorded and evaluated for historical significance on the appropriate set of State of California Department of Parks and Recreation (DPR) Series 523 Forms in consideration of CRHR and City designation criteria and integrity requirements. The buildings were found not eligible under all State and local designation criteria due to a lack of significant historical associations and architectural merit. Thus, no historical resources were identified within the project site as a result of this study. The HBEA and DPR Forms can be found in Appendix C.

Cultural Resources

Would the project:

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

Less than significant impact. The record search conducted at the SCCIC for the proposed project determined that 13 historic built environment resources are recorded within the 0.5-mile search radius of the project boundary, none of which are within the project site. Additionally, an HBEA for the project site was conducted by South Environmental on October 3, 2024, which evaluated the buildings within the subject property for historical significance and integrity. The HBEA determined that the buildings are not eligible under all State and local designation criteria due to a lack of significant historical associations and architectural merit. No additional historic built environment resources were encountered during the pedestrian field survey. Therefore, the proposed project would not have an adverse impact on historic built environment resources and no mitigation measures are required. Impacts to historical resources would be less than significant.

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

Less than significant with mitigation incorporated. Results from the SCCIC indicate that no pre-contact or historic archaeological resources are recorded within the project site. However, there are

13 historic built environment resources recorded within the 0.5-mile radius search radius. No archaeological resources were observed over the course of the pedestrian field survey; however, soil visibility was non-existent due to the entirety of the project site being landscaped and/or hardscaped.

As described above, the project site is situated on flat terrain and consists entirely of early Holocene alluvium lake, playa, and terrace deposits. The soil composition, proximity to the Santa Ana River, SCCIC record search results, and the disturbed condition of the site indicates that the potential impact to unidentified archaeological resource is considered low. However, it is possible that earthmoving activities associated with project construction could encounter previously undiscovered archaeological resources. Archaeological resources can include but are not limited to stone, bone, wood, or shell artifacts or features, including hearths and structural elements. Damage or destruction of these resources would be a potentially significant impact. Implementation of MM CUL-1 and MM CUL-2 would ensure that this potential impact is reduced to a less than significant level.

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

Less than significant with mitigation incorporated. While no formal cemeteries or areas containing human remains are known to be within the project vicinity, the potential for the disturbance of any human remains is considered low. However, there is always the possibility that subsurface construction activities associated with the proposed project, such as grading or trenching, could potentially damage or destroy previously undiscovered human remains. In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and 5097.98 must be followed. MM CUL-3 further specifies the procedures to follow in the event human remains are uncovered. Along with compliance with these guidelines and statutes, implementation of this mitigation would reduce potential impacts related to human remains to a less than significant level.

Tribal Cultural Resources

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:

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

Less than significant with mitigation incorporated. A review of the CRHR, local registers of historic resources, and a records search conducted at the SCCIC failed to identify any listed TCRs that may be adversely affected by the proposed project. The NAHC Sacred Lands File search results were positive for the presence of TCRs within the project area, and Tribal outreach to obtain additional information pertaining to TCRs within the project produced negative results. Should any undiscovered TCRs be encountered during project construction, implementation of MM CUL-1, MM CUL-2, and MM CUL-3 would reduce potential impacts to a less than significant level.

e) 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.

TBD. Tribal consultation efforts conducted by the City of Costa Mesa pursuant to AB52 to identify additional significant TCRs meeting the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 have yet to be determined.

Mitigation Measures

MM CUL-1 Prior to the initiation of construction activities, all construction personnel conducting ground disturbance at the site shall be provided a Worker Environmental Awareness Program (WEAP) cultural resources "tailgate" training. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may be found within the proposed project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. A qualified Archaeological Monitor, reporting to an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards, be present to conduct "spot-checks" monitoring during the clearing, grubbing, trenching, and grading phases of project-related ground disturbance to check for the inadvertent discovery of cultural resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the Lead Agency that monitoring may cease altogether.

MM CUL-2 In the event that buried cultural resources are discovered during construction, operations shall stop within a 100-foot radius of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the Lead Agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of but are not limited to stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the project area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures

for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

MM CUL-3 If during the course of project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

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

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

Environmental Evaluation

Setting

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

The proposed project may have an impact on the environment if it would:

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

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

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

Short-term Construction Impacts

For the purpose of this analysis, construction of the proposed project was estimated to begin in December 2025 and conclude in September 2028 and was modeled based on based on an applicant-provided preliminary schedule; see Appendix A. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require demolition, site preparation, grading, utility installation, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., site clearing, and grading), and the actual construction of the buildings. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, front-end loaders, forklifts, and cranes. On-site, off-road construction equipment is estimated to consume a total of approximately 42,842 gallons of diesel fuel over the entire construction duration (Appendix A).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to and from the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB Emissions Factors (EMFAC) model mobile source emission model. In total, the proposed project is estimated to generate approximately 1,765,502 VMT and a combined 96,720 gallons of combined gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Section 13-279 of the Costa Mesa Municipal Code restricts construction activities to between the hours of 7:00 a.m. and 7:00 p.m.[29] As on-site construction activities would be restricted to these hours, it is anticipated that the use of construction lighting would be minimal.

The overall construction processes are already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and

[29] City of Costa Mesa. 2024. Municipal Code, Chapter XIII Noise Control. Website: https://ecode360.com/42619140?highlight=construction,construction%20hours,hours&searchId=8627775032158158. Accessed October 2, 2024.

unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Long-term Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Operation of the proposed project would consume an estimated 646,733 kilowatt hours (kWh) of electricity. Energy consumption values were estimated without taking any reductions for the existing land uses or reductions from on-site renewable energy. The proposed project would include demolition of the 65,652-square-foot former Trinity Broadcasting Network (TBN) building, the demolition an existing 1,000-square-foot maintenance building, and removal of outside lighting. Thus, the proposed project's incremental increase in electricity consumption would be estimated lower than 646,733 kWh because the existing land use currently consumes electricity. In addition, 646,733 kWh represents the amount of electricity that would be used by the proposed project on an annual basis and not the amount that would need to be sourced from the energy grid. The proposed residential buildings would be built all-electric, and the proposed project would install solar photovoltaic (PV) systems that would generate renewable energy to offset the building's energy consumption. The proposed project's buildings (including townhomes) would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. The Title 24 Building Energy Efficiency Standards, specifically the 2022 update, set forth comprehensive requirements for energy efficiency in residential buildings, including townhomes. These standards are designed to ensure that buildings meet specific energy performance criteria to reduce energy consumption and GHG emissions. The Title 24 standards include requirements related to the building envelope, mechanical systems (such as requiring high-efficiency heating, ventilation, and air conditioning [HVAC] and water heating systems), indoor and outdoor lighting, and renewable energy. The Title 24 standards are widely regarded as the most advanced Building Energy Efficiency Standards and the proposed project's compliance with these standards would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.

Consistent with the project-specific trip generation rates presented in the Trip Generation Memorandum, the proposed project was estimated to generate approximately 997 daily vehicle trips for the 142-unit project.[30] Project-related vehicle trips would consume an estimated 100,010 gallons of gasoline and diesel annually and would involve activities and travel routes typical of a residential project. In addition, energy consumption values, including fuel consumption values, were estimated without taking any reductions for the existing land uses. Specifically, the existing site generates 530 daily trips that were not subtracted out when considering the proposed project's estimated consumption of fuel. Thus, the proposed project's net increase in fuel consumption would be lower than the annual estimate of 100,010 gallons of gasoline and diesel.

As detailed in Section 2.17–Transportation, development of the proposed project would result in a less than significant impact on VMT. Furthermore, the 2022 Title 24 standards applicable to the

[30] Urban Crossroads. August 8. 3150 Bear Street Due Diligence Trip Generation Assessment. 2024.

proposed project also include provisions for EV charging infrastructure in townhomes with private garages. This requirement would encourage the use of EVs by future residents. Because the proposed project's operations would involve activities and travel routes typical of a residential project, coupled with the finding that the proposed project would have a less than significant impact in regard to VMT, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

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

Less than significant impact. The proposed project would be evaluated with existing State energy standards and with energy conservation policies included in the General Plan.

The proposed project would be served with electricity provided by SCE. In 2022, SCE obtained 33.2 percent of its electricity from renewable energy sources. SCE also offers a Green Rate 50 percent option that sources 66.7 percent of its power mix from eligible renewable energy sources and a Green Rate 100 percent option that sources 100 percent of its power mix from eligible renewable energy sources.[31] It is expected that SCE would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. Additionally, the proposed project is planned to be an all-electric design and would therefore utilize more renewable energy sources during project operation compared to existing development.

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

The City of Costa Mesa 2015–2035 General Plan Conservation Element contains the following policies related to energy conservation.

Energy Efficiency and Conservation

Policy CON-2.A.1 Promote efficient use of energy and conservation of available resources in the design, construction, maintenance, and operation of public and private facilities, infrastructure, and equipment.

[31] Southern California Edison (SCE). 2022 Power Content Label. Website: https://www.sce.com/sites/default/files/custom-files/PDF_Files/SCE_2022_Power_Content_Label_B%26W.pdf. Accessed December 2, 2024.

Policy CON-2.A.2 Consult with regional agencies and utility companies to pursue energy efficiency goals. Expand renewable energy strategies to reach zero-net-energy for both residential and commercial new construction.

Policy CON-2.A.3 Continue to develop partnerships with participating jurisdictions to promote energy efficiency, energy conservation, and renewable energy resource development by leveraging the abilities of local governments to strengthen and reinforce the capacity of energy efficiency efforts.

Policy CON-2.A.4 Encourage new development to take advantage of Costa Mesa's optimal climate in the warming and cooling of buildings, including use of heating, ventilation and air conditioning (HVAC) systems.

Green Building Sustainable Development Practices

Policy CON-2.A.5 Promote environmentally sustainable development principles for buildings, master planned communities, neighborhoods, and infrastructure.

Policy CON-2.A.6 Encourage construction and building development practices that reduce resource expenditures throughout the lifecycle of a structure.

Policy CON-2.A.7 Continue to require all City facilities and services to incorporate energy and resource conservation standards and practices and require that new municipal facilities be built within the LEED® Gold standards or equivalent.

Policy CON-2.A.8 Continue City green initiatives in purchases of equipment, and agreements that favor sustainable products and practices.

Solid Waste Reduction and Recycling

Policy CON-2.A.9 Encourage waste management programs that promote waste reduction and recycling to minimize materials sent to landfills. Maintain robust programs encourage residents and businesses to reduce, reuse, recycle, and compost.

Policy CON-2.A.10 Support waste management practices that provide recycling programs. Promote organic recycling, landfill diversion, zero-waste goals, proper hazardous waste collections, composting, and the continuance of recycling centers.

Policy CON-2.A.11 Continue construction and demolition programs that require recycling and minimize waste in haul trips.

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

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

Mitigation Measures

None required.

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

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

Environmental Evaluation

The analysis in this section is based, in part, on the project-specific Supplemental Geotechnical Subsurface Exploration and Due Diligence Study (Geotechnical Exploration), prepared by SA Geotechnical, Inc. (SA GEO), dated February 14, 2024, included in Appendix D.

Setting

Geology

Geologic mapping indicates that the project site is mapped within Holocene- to late Pleistocene-age young alluvial fan deposits. These deposits are described as unconsolidated to moderately consolidated silt, sand, pebbly cobbly sand, and boulders in alluvial fan deposits.[32,33]

In general, Holocene-age sedimentary deposits have a low potential to contain significant paleontological resources at the surface, and the potential increases the potential increases with increased depth into the subsurface; the deeper layers of these deposits have a high potential to contain significant paleontological resources. In general, Pleistocene-age sedimentary deposits have a high potential to contain significant paleontological resources.

Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones; fish, amphibians, reptiles, birds, mammals, etc.), invertebrates (animals without backbones; starfish, clams, coral, etc.), microscopic plants and animals (microfossils), and trace fossils/ichnofossils (i.e., footprints, burrows, etc.). They are valuable, nonrenewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the

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

[33] Ibid.

area in which they are exposed. Most fossils are not large. Pleistocene fossils of small fish, amphibians, reptiles, birds, and mammals are usually found by screening sediment samples.

The entire project site has surface deposits composed of younger Quaternary Alluvium, derived broadly as alluvial fan deposits from the Santa Ana Mountains to the east via the Santa Ana River that currently flows just to the west. These deposits typically do not contain significant vertebrate fossils in the uppermost layers, but they are usually underlain by older Quaternary deposits that frequently do contain significant vertebrate fossils. The closest vertebrate fossil locality from these deposits is LACM 4219, south-southwest of the project site, in a roadcut for the Newport Freeway near Santa Isabel Avenue, which produced fossil sea turtle, Cheloniidae, and camel, Camelidae, bones in coarse, poorly sorted friable sands about 30 feet below the grade of Newport Boulevard. The University of California Museum of Paleontology (UCMP) at UC Berkeley also has a locality there (V-93124). It produced fossils of 41 species of marine fish, as well as pond turtle, four bird species, rabbit, sea otter, two kinds of sea lion, horse, camel, and bison.[34] Further to the southwest of the site, near the intersection of 19th Street and Anaheim Avenue, locality LACM 3267 produced a fossil specimen of undetermined elephant, Proboscidea. West-southwest of the site, along Adams Avenue near the top of the mesa bluffs east of the Santa Ana River, locality LACM 1339, produced fossil specimens of mammoth, *Mammuthus*, and camel, Camelidae, bones in sand approximately 15 feet below the top of the mesa that is overlain by shell bearing silts and sands. A very important site dug for a water reservoir 2.4 miles south of the project site produced rare records of Pleistocene plants including *Cupressus macrocarpa, Pinus radiata, Pinus muricata, Pinus remorata*, and *Quercus macdonaldii*.[35] There are also a large number of localities from the marine and terrestrial late Pleistocene terrace deposits on the east side of Upper Newport Bay about 3.25 miles south-southeast of the project site. Those localities have produced an extensive composite fauna.

Would the project:

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

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

Less than significant impact. The project site is in Southern California, which is a seismically active area. The type and magnitude of seismic hazards affecting the project site are dependent on the distance to the causative fault and the intensity and magnitude of the seismic event. The seismic

[34] Long, D. J. 1993. Preliminary list of the marine fishes and other vertebrate remains from the late Pleistocene Palos Verdes Sand Formation at Costa Mesa, Orange County. Paleobios 15:9-13.

[35] Axelrod, D. I., and F. Govean. 1996. An Early Pleistocene Closed-Cone Pine Forest at Costa Mesa, Southern California. International Journal of Plant Sciences. 157:323-329.

hazards may be primary, such as surface rupture and/or ground shaking, or secondary, such as liquefaction and/or ground lurching.

The project site is not within a fault rupture hazard zone as defined by the Alquist-Priolo Special Studies Act. In addition, State maps indicate that there are no active faults at the site and no geologic maps exhibit active faults crossing the project site. The nearest known active fault is the Newport-Inglewood Fault Zone, which is located over 5 miles southwest of the site.[36] As such, impacts related to rupture of a known earthquake fault would be less than significant.

ii) Strong seismic ground shaking?

Less than significant impact with mitigation incorporated. The City, along with all of Southern California, are subject to strong ground shaking. Seismic activity can be either Primary (directly related to energy release of the earthquake) or Secondary (related to the effect of earthquake energy on the physical world).

The City and project site have the primary risk of strong ground shaking, but very low risk of ground rupture, as described above.[37] The City requires that all construction meet the latest standards of the CBC for construction which considers proximity to potential seismic sources and the maximum anticipated ground shaking possible. The Geotechnical Exploration for the proposed project includes recommendations for final design parameters for the proposed site, which are referenced under MM GEO-1. The seismic design parameters are developed in accordance with ASCE 7-16 and 2022 CBC. Compliance with these building safety design standards under MM GEO-1 would ensure impacts associated with ground shaking effects are less than significant. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse impacts associated with strong seismic ground shaking. Impacts would be less than significant with mitigation incorporated.

iii) Seismic-related ground failure, including liquefaction?

Less than significant impact with mitigation incorporated. Liquefaction is the loss of soil strength or stiffness due to a buildup of pore-water pressure during a seismic event and is associated primarily with relatively loose, saturated fine- to medium grained unconsolidated soils. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. According to the California Geological Survey, Seismic Hazard Zone Map and the Geotechnical Report, the project site is located in an area with the potential for liquefaction.[38] Thus, in the event of a large earthquake with a high acceleration of seismic shaking, the potential for liquefaction exists. Given this potential, if liquefiable soils are not taken into consideration in the design of proposed structure and during construction site preparation activities,

[36] California Department of Conservation. 2024. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 18, 2024.

[37] SA Geotechnical, Inc. (SA GEO) 2024 Supplemental Geotechnical Subsurface Exploration and Due Diligence Study for the Proposed Residential Development, 3150 Bear Street, City of Costa Mesa, California. February 14.

[38] California Department of Conservation. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 18, 2024

liquefiable soils could have the potential to impact the structural components of the proposed project. As such, the proposed project would be required to implement MM GEO-1, which would require implementation of the recommendations of the Geotechnical Exploration, such as specific foundation design features, to further support proposed structures in the event of liquefaction. With the implementation of MM GEO-1, impacts due to seismic-related ground failure, including liquefaction would be less than significant with mitigation incorporated.

iv) Landslides?

No impact. Landslides can occur if ground shaking and/or heavy rainfall disturb areas of steep slopes consisting of unstable soils. Generally, these types of failures consist of rock falls, landslides, and debris flows. Areas having the potential for earthquake-induced landslides generally occur in areas of previous landslide movement, or where topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.

The project site is surrounded by existing development on all sides and is not within a landslide zone according to the California Department of Conservation and as stated above, is not near any sloping or free facing ground.[39] Therefore, the proposed project would not result in impacts related to landslides.

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

Less than significant impact with mitigation incorporated. The Geotechnical Exploration indicates that the project site is underlain by thick Quaternary-age native alluvium that generally consists of interlayered clays, silty/sandy clays, clayey sands, and silty sands. The Geotechnical Exploration also noted the presence of undocumented fill material and weathered/unsuitable alluvium in the upper 5 feet below existing grades and determined that this material would need to be removed and replaced as compacted fill. The proposed project would be required to implement the site-specific recommendations referenced in MM GEO-1, which include remedial grading consisting of removal of undocumented fill materials in their entirety as well as removal of any weathered/unsuitable alluvium.

During construction, the proposed project would be required to comply with erosion and siltation control measures outlined in Costa Mesa Municipal Code Chapter 5-1.4: Adoption of the Orange County Grading and Excavation Code. Costa Mesa Municipal Code Chapter 5-1.4 adopts Codified Ordinance of the County of Orange, including the Grading Manual, in its entirety. Adherence to the City's Municipal code would reduce to a minimum the hazards and damage to public and private property. Additionally, the proposed project would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009DWQ, and all subsequent amendments) (Construction General Permit). The Construction General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring plan, which

[39] California Department of Conservation. Earthquake Zones of Required Investigation. Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed November 18, 2024.

must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Following compliance with the established regulatory framework including the Costa Mesa Municipal Code and Construction General Permit, and with implementation of MM GEO-1, potential impacts concerning soil erosion and loss of topsoil would be less than significant with mitigation incorporated.

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 with mitigation incorporated. As described above, the project site is located in an area subject to seismically induced liquefaction. The proposed project would not be located near any sloping ground or free face, and due to the relatively flat grades of the site, the likelihood of lateral spreading and landslides is considered to be low.

Subsidence occurs when the withdrawal of groundwater, oil, or natural gas vertically displaces a large portion of land. Soils that are particularly subject to subsidence include those with high silt or clay content. The project site is underlain by thick Quaternary-age native alluvium that generally consists of interlayered clays, silty/sandy clays, clayey sands, and silty sands. The Geotechnical Exploration evaluated site conditions and recommended disposal of unsuitable soils and fill materials generally to a depth of 5 feet, recompaction, and placement of additional engineered fill where appropriate.

Earthwork would be required to meet compaction standards and import soils must be approved by a Geotechnical Consultant. Compliance with these recommendations would be required by implementation of MM GEO-1 and would reduce potential impacts to less than significant with mitigation incorporated.

Furthermore, the Costa Mesa Planning Division would review construction plans to verify compliance with standard engineering practices, the Municipal Code, the CBC, and the site-specific recommendations contained in the Geotechnical Exploration as referenced in MM GEO-1. Following compliance with standard engineering practices, the established regulatory framework, and MM GEO-1, the proposed project would not be located on a geologic unit or soil that would become unstable. Therefore, with implementation of MM GEO-1, impacts would be less than significant with mitigation incorporated.

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 with mitigation incorporated. The Geotechnical Exploration anticipated that the expansion potential would range from "high" to "very high." As such, the proposed project would be required to implement MM GEO-1 which would require the proposed project to implement the recommendations in Geotechnical Exploration, such as site-specific design parameters for foundations and slab-on-grade and flatwork improvements to ensure that proposed buildings are not affected by expansion. With the implementation of MM GEO-1, impacts related to being located on expansive soils would be less than significant with mitigation incorporated.

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

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

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

Less than significant with mitigation incorporated. Surface grading or very shallow excavations in the younger Quaternary Alluvium exposed throughout the proposed project area would not uncover significant vertebrate fossil remains. Deeper excavations that extend down into older Quaternary deposits (2+ feet in depth), however, may well encounter significant fossil vertebrate specimens. Any substantial excavations in the proposed project area in previously undisturbed surface deposits, therefore, shall be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples in previously undisturbed surface deposits would be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation would be deposited in an accredited and permanent scientific institution for the benefit of current and future generations, as required by MM GEO-2. With adherence to the requirements of MM GEO-2 during construction, impacts would be less than significant.

Mitigation Measures

MM GEO-1 Prior to the issuance of a grading permit, the Owner/Developer shall implement the recommendations provided in Section 3, Conclusion and Preliminary Recommendations, in the Geotechnical Exploration prepared by SA Geotechnical, Inc. (SA GEO). The Exploration, included in Appendix F, is incorporated herein by reference as fully set forth in this mitigation measure.

MM GEO-2 Paleontological monitoring of excavations in previously undisturbed surface deposits by a qualified monitor shall be required. Sediment samples from deeper excavations, borings, trenching, or grading shall be wet screened if they cannot be dry screened. The concentrate from the screening activities shall be sorted with the aid of a 10x microscope. These mitigation efforts shall be consistent with the mitigation guidelines published by the Society of Vertebrate Paleontology (2010). In the event that earth-disturbing construction-related activities uncover any paleontological resources (i.e., bones or teeth) when a monitor is not present, those activities shall be diverted at least 15 feet away from the discovery until a qualified Paleontologist is brought on-site to assess the find for possible salvage. Construction workers shall not attempt to remove such finds. The Paleontologist shall document the discovery as needed and assess the significance of the find under the criteria set forth in CEQA Guidelines

Section 15064.5. The Paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the applicant determines that avoidance is not feasible, the qualified Paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the Department of Conservation and Development, Community Development Division for review and approval prior to implementation. The applicant shall adhere to the recommendations in the approved plan. Any significant fossils, as determined by the qualified Paleontologist, recovered shall be documented in a final report and offered to an appropriate facility for curation.

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

Environmental Evaluation

Setting

The project site is within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document-Interim CEQA GHG Significance Threshold (Interim GHG Thresholds) that could be applied by lead agencies. The working group has not provided additional guidance since the release of the interim guidance in 2008. In 2010, the SCAQMD Tier 3 threshold was expanded to include non-industrial projects, as explained in the minutes from the most recent working group meeting.[40] The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the Lead Agency in adopting its own threshold.

In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 parts per million (ppm), thus stabilizing global climate.

To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, the appropriate tier for this project is Tier 3, which states that if GHG emissions are less than 3,000 metric tons (MT) carbon dioxide equivalent (CO_2e) per year, project-level and cumulative GHG emissions would be less than significant. However, this threshold was

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

developed to meet the 2020 GHG emissions goals. To be consistent with State goals detailed in Senate Bill (SB) 32, Executive Order B-30-15, and Executive Order S-3-05 to reduce GHG emissions by 40 percent below 1990 levels by 2030, a scaled screening GHG threshold can be developed for an assumed opening year of 2027. Though the SCAQMD has not published a quantified threshold beyond 2020, a threshold of 2,160 MT CO_2e per year would be appropriate.[41] Therefore, this analysis utilizes 2,160 MT CO_2e per year for a quantitative threshold of significance for GHG emissions and ARB's 2022 Scoping Plan for consistency with an applicable GHG emissions reduction plan.

Would the project:

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

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

Project Greenhouse Gas Emissions

Construction Greenhouse Gas Emissions

The proposed project would generate GHG emissions during construction activities, resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod Version 2022.1. Table 8, below, shows the annual construction GHG emissions.

Table 8: Proposed Project Construction GHG Emissions

Construction Year	Total GHG Emissions (MT CO_2e per year)
Project Construction–2025	56
Project Construction–2026	416
Project Construction–2027	547
Project Construction–2028	276
Total Construction Emissions	**1,295**
Emissions Amortized Over 30 Years[1]	**43**

[41] The 2,160 MT CO_2e per year threshold for opening year of 2027 is calculated by reducing the 3,000 MT CO_2e per year threshold (developed to meet the 2020 GHG emissions goals) by 40 percent, then interpolating to obtain the scaled GHG emissions threshold for 2027. Based on a starting threshold of 3,000 MT CO_2e per year in 2020 and a threshold of 1,800 MT CO_2e per year in 2030, the 3,000 MT CO_2e per year threshold would be reduced by 120 MT CO_2e per year through 2030.

Construction Year	Total GHG Emissions (MT CO_2e per year)
Notes: GHG = greenhouse gas MT CO_2e = metric tons carbon dioxide equivalent [1] Construction GHG emissions are amortized over the 30-year lifetime of the proposed project. Source: Appendix A.	

As shown above, the proposed project would generate approximately 1,295 MT CO_2e during construction. Over 30 years the construction GHG emissions would be amortized to approximately 43 MT CO_2e per year. Since SCAQMD has not established a construction GHG threshold, total construction emissions were amortized over 30 years and included in the emissions inventory to account for the short-term, one-time GHG emissions from the construction phase of the proposed project.

Operational Greenhouse Gas Emissions

Operational, or long-term, emissions are those emissions that occur over the life of the project. Project operations were modeled for the 2027 operational year. To present a conservative estimate of emissions, the baseline for the analysis was assumed to be zero. Because the proposed project would demolish and replace existing structures, the proposed project's incremental increase in GHG emissions would be lower than what was estimated and presented below. Sources for operational GHG emissions are summarized below:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and other on-road vehicles that would travel to and from the project site. Based on the project-specific trip generation rates presented in the Trip Generation Memorandum, the proposed project was estimated to generate 997 daily vehicle trips for the 142-unit project.[42] The existing site generates 530 daily trips, with the proposed project resulting in a net increase of 467 daily trips; however, for the purposes of presenting a conservative estimate of emissions and a full accounting of ongoing operational GHG emissions, the analysis used the gross daily trips (997 daily trips).
- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. The proposed project would be built all-electric and would, therefore, not result in any GHG emissions from natural gas use.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project. The proposed project would install photovoltaic (PV) solar panels, consistent with Title 24, Part 6, California's Energy Code. The inclusion of solar panels would provide on-site renewable energy that would reduce the proposed project's consumption of electricity generated at off-site power plants.

[42] Urban Crossroads. August 8. 3150 Bear Street Due Diligence Trip Generation Assessment. 2024.

- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the proposed project.

Table 9 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 9, the proposed project would generate approximately 1,110 MT CO2e per year after the inclusion of 43 MT CO2e per year from project construction.

Table 9: Operational Greenhouse Gas Emissions—Unmitigated

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Area	11
Energy	102
Mobile (Automobiles)	905
Waste	35
Water	14
Refrigerants	0
Amortized Construction	43
Total Annual Project Emissions	**1,110**
Applicable Threshold[1]	**2,160**
Exceed Applicable Threshold?	**No**

Notes:
MT CO_2e = metric tons carbon dioxide equivalent
[1] The 2,160 MT CO_2e per year threshold for opening year of 2027 is calculated by reducing the 3,000 MT CO_2e per year threshold (developed to meet the 2020 GHG emissions goals) by 40 percent, then interpolating to obtain the scaled GHG emissions threshold for 2027.
Source: Appendix A.

As shown in Table 9, the proposed project's GHG emissions would not exceed the applicable threshold of significance. In addition, the emissions shown in Table 9 were estimated without taking any reductions for the existing land uses. The proposed project would replace existing structures with new residential buildings. The existing uses are currently generating GHG emissions that would no longer occur once the existing structures are demolished. Thus, the proposed project's net increase in GHG emissions would be even lower than what is shown in Table 9. In summary, construction and operational GHG emissions would result in a less than significant impact on the environment.

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

The 2022 Scoping Plan identifies additional GHG reduction actions and strategies necessary to achieve Assembly Bill (AB) 1279 target of 85 percent below 1990 levels by 2045. These actions and strategies build upon those identified in the first update to the Scoping Plan (2013) and in the second update to the Scoping Plan (2017). Although a number of these measures are currently established as statewide regulations, some measures have not yet been formally proposed or adopted. It is expected that these measures or similar actions to reduce GHG emissions will be adopted as required to achieve statewide GHG emissions targets. An evaluation of applicable reduction actions/strategies by emissions source category was conducted to determine how the proposed project would be consistent with reduction actions/strategies outlined in the 2022 Scoping Plan. The proposed project's consistency with those measures is provided below in Table 10.

Table 10: Consistency with the 2022 Scoping Plan

AB 32 GHG Inventory Sector and Scoping Plan Action	Project Consistency
GHG Emissions Reductions Relative to the SB 32 Target	
40 percent below 1990 levels by 2030.	**Consistent.** As demonstrated in Impact 2.8(a) above, the proposed project's GHG emissions would not exceed the applicable threshold of significance and would, therefore, not conflict with the State's ability to achieve GHG emission reduction targets. SB 1020 requires that by end of 2035, 90 percent of electricity and by end of 2045 that 100 percent of electricity is generated from renewable and zero-carbon resources. As such, the proposed project would not conflict with this strategy.
Smart Growth/Vehicle Miles Traveled (VMT)	
VMT per capita reduced 25 percent below 2019 levels by 2030 and 22 percent below 2019 levels by 2045.	**Consistent.** As detailed in Section 2.17–Transportation, development of the proposed project would have a less than significant impact on VMT.
Light-Duty Vehicle (LDV) Zero-Emission Vehicles (ZEVs)	
100 percent of LDV sales are ZEV by 2035.	**Not Applicable.** Executive Order N-79-20 requires all new LDVs sold in California to be zero-emission by the year 2035. The proposed project would not include any vehicle sales activities.
Truck ZEVs	
100 percent of medium-duty (MDV)/heavy-duty commercial sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies report).	**Not Applicable.** Executive Order N-79-20 requires all new LDVs sold in California to be zero-emission by the year 2045. The proposed project would not include any truck sales activities.

AB 32 GHG Inventory Sector and Scoping Plan Action	Project Consistency
Aviation	
10 percent of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. Sustainable aviation fuel meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries.	**Not Applicable.** The proposed project would not utilize any aviation fuel.
Ocean-going Vessels (OGV)	
2020 OGV At-Berth regulation fully implemented, with most OGVs utilizing shore power by 2027. 25 percent of OGVs utilize hydrogen fuel cell electric technology by 2045.	**Not Applicable.** The proposed project would not utilize any OGVs.
Port Operations	
100 percent of cargo handling equipment is zero-emission by 2037. 100 percent of drayage trucks are zero-emission by 2035.	**Not Applicable.** The proposed project would not impact any operations at any ports.
Freight and Passenger Rail	
100 percent of passenger and other locomotive sales are ZEV by 2030. 100 percent of line haul locomotive sales are ZEV by 2035. Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity.	**Not Applicable.** The proposed project would not impact any freight or passenger rail operations.
Oil and Gas Extraction	
Phase out oil and gas extraction operations by 2045.	**Not Applicable.** The proposed project would not impact any oil and gas extraction activities.
Petroleum Refining	
Carbon capture and storage (CCS) on majority of petroleum refining operations by 2030. Production reduced in line with petroleum demand.	**Not Applicable.** The proposed project would not impact any petroleum refining activities.
Electricity Generation	
Electric sector GHG target of 38 MMT CO_2e in 2030 and 31 MMT CO_2e in 2045. Retail sales load coverage	**Consistent.** Senate Bill 1020 requires that 100 percent of retail sales of electricity be generated by renewable or zero-carbon source of electricity by December 1, 2045. As such, the proposed project would not conflict with this strategy.

AB 32 GHG Inventory Sector and Scoping Plan Action	Project Consistency
New Residential and Commercial Buildings	
All electric appliances beginning 2026 (residential) and 2029 (commercial).	**Consistent.** The proposed project would be an all-electric development and would not include any natural gas hookups.
Existing Residential Buildings	
80 percent of appliance sales are electric by 2030 and 100 percent of appliance sales are electric by 2035. Appliances are replaced at end of life**.**	**Not Applicable.** The proposed project would not include the operations of any existing residential buildings. The proposed project would replace existing structures with new residential buildings.
Existing Commercial Buildings	
80 percent of appliance sales are electric by 2030, and 100 percent of appliance sales are electric by 2045. Appliances are replaced at end of life.	**Not Applicable.** At project buildout, the proposed project would not include any existing commercial buildings.
Food Products	
7.5 percent of energy demand electrified directly and/or indirectly by 2030; 75 percent by 2045.	**Not Applicable.** The proposed project would not include any commercial food production activities.
Construction Equipment	
25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	**No Conflict.** Executive Order N-79-20 requires all off-road vehicles and equipment to transition to 100 percent zero-emission equipment, where feasible, by 2035. All construction equipment fleets utilized during construction of the proposed project are required to be registered with ARB and meet ARB's current emission reductions regulations, which are anticipated to be updated to meet Executive Order N-79-20 requirements. As such, the proposed project would not conflict with this strategy.
Chemicals and Allied Products; Pulp and Paper	
Electrify 100 percent of boilers by 2045. Hydrogen for 25 percent of process heat by 2035 and 100 percent by 2045. Electrify 100 percent of other energy demand by 2045.	**Not Applicable.** The proposed project would not include any pulp and paper production activities.
Stone, Clay, Glass, and Cement	
CCS on 40 percent of operations by 2035 and on all facilities by 2045. Process emissions reduced through alternative materials and CCS.	**Not Applicable.** The proposed project would not include any stone, clay, glass and cement production activities.

AB 32 GHG Inventory Sector and Scoping Plan Action	Project Consistency
Other Industrial Manufacturing	
0 percent energy demand electrified by 2030 and 50 percent by 2045.	**Not Applicable.** The proposed project would not include any other industrial manufacturing activities.
Combined Heat and Power	
Facilities retire by 2040.	**Not Applicable.** The proposed project would not include any existing combined heat and power facilities.
Agriculture Energy Use	
25 percent energy demand electrified by 2030 and 75 percent by 2045.	**Not Applicable.** The proposed project would not include any commercial agriculture activities.
Low Carbon Fuels for Transportation	
Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.	**Not Applicable.** The proposed project would not include any production of fuels for transportation.
Low Carbon Fuels for Buildings and Industry	
In 2030s, renewable natural gas (RNG) blended in pipeline. Renewable hydrogen blended in natural gas pipeline at 7 percent energy (approximately 20 percent by volume), ramping up between 2030 and 2040. In 2030s, dedicated hydrogen pipelines constructed to serve certain industrial clusters.	**Not Applicable.** The proposed project would not include any production of fuels for buildings and industry.
Non-combustion Methane Emissions	
Increase landfill and dairy digester methane capture. Some alternative manure management deployed for smaller dairies. Moderate adoption of enteric strategies by 2030. Divert 75 percent of organic waste from landfills by 2025. Oil and gas fugitive methane emissions reduced 50 percent by 2030 and further reductions as infrastructure components retire in line with reduced fossil gas demand.	**Not Applicable.** The proposed project would not include the operation of any landfill or dairy.
High Global Warming Potential (GWP) Emissions	
Low GWP refrigerants introduced as building electrification increases, mitigating hydrofluorocarbon (HFC) emissions.	**Not Applicable.** The proposed project would not include the manufacturing of appliances that use low GWP refrigerants.
Compensate for Remaining Emissions	
Carbon Dioxide Removal (CDR) demonstration projects deployed by 2030.	**Not Applicable.** The proposed project would not include any CDR demonstration projects.

AB 32 GHG Inventory Sector and Scoping Plan Action	Project Consistency
CDR scaled to compensate for remaining GHG emissions in 2045	
Source: California Air Resources Board (ARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality.	

As demonstrated in Table 10, while most of the measures are not applicable, the proposed project would be consistent with the appliable measures outlined in the 2022 Scoping Plan. Therefore, the proposed project would be consistent with the 2022 ARB Scoping Plan and potential impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Environmental Evaluation

Setting

The analysis in this section is based, in part, on the Phase I Environmental Site Assessment (Phase I ESA) prepared by Hillmann Consulting LLC, on January 5, 2024. The Phase I ESA is included in Appendix E of this document.

No Recognized Environmental Conditions (RECs), Historical Recognized Environmental Conditions (HRECs), Controlled Recognized Environmental Conditions (CRECs), or significant data gaps (SDGs) were identified on the project site. No RECs, CRECs, HRECs, or SDGs were identified on the project site. The following *de minimis* conditions are described below:

The project site currently manages a 500-gallon diesel aboveground storage tank (AST) that is attached to an emergency backup generator located within the auxiliary maintenance building. No staining was observed in the proximity of the AST enclosure. Additionally, the project site formerly utilized a 250-gallon diesel underground storage tank (UST) that served as the backup power generator. Local fire department permit records and prior environmental reports document that the 250-gallon UST was removed in June 1996 with no indication of a petroleum release having been encountered. The prior environmental reports included a Limited Phase II with soil sampling in 2016, and a geophysical survey for abandoned USTs in 2018. Based on the prior investigations as well as the regulatory records reviewed, the former 250-gallon diesel UST is not considered to be a REC in connection with the project site.

Would the project:

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

Less than significant impact. Construction of the proposed project would include the transport, use, and disposal of limited quantities of hazardous materials necessary for construction, including fuel and solvents. The use of these hazardous materials necessary would be typical of construction projects, would be short-term, and would be handled in accordance with standard construction practices, as well as with applicable federal, State, and local regulations. Regulatory requirements

would include California Code of Regulations Title 22, Division 4.5, for appropriate management of hazardous materials, as well as the requirements of the EPA, Resource Conservation and Recovery Act (RCRA), California Department of Toxic Substance Control (DTSC), California Occupational Safety and Health Administration (Cal/OSHA), and California Department of Transportation (Caltrans).

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

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

Less than significant impact. As discussed above, the Phase I ESA did not identify site any RECs, HRECs, or CRECs. As previously discussed above under Impact 2.9(a), the proposed project would be required to comply with all applicable local, State, and federal laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste during the construction phase to reduce the likelihood and severity of accidents during transit. Proper handling of the use and disposal of hazardous materials associated with residential uses would reduce the potential for exposure. During site reconnaissance associated with the Phase I ESA, Hillman conducted a cursory visual screening of accessed portions of the building built prior to 1990 for suspect asbestos-containing materials (ACM). Suspected ACM noted within the accessed building areas included exterior stucco finishes, interior drywall, acoustic ceilings, multiple vinyl floorings, flooring mastic, and thermal systems insulation (TSI).

The proposed project would develop residential uses; accordingly, operation of the proposed project would not involve the transport, use, or disposal of large quantities of hazardous materials. The use of hazardous materials on the project site postconstruction would consist of those commonly used in a residential setting for routine maintenance and cleaning associated with typical residential development and would not be of a significant quantity to create a reasonably foreseeable upset or accident. Therefore, impacts would be less than significant, and no mitigation would be required.

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

No impact. There are no schools within 0.25 mile of the project site. The nearest schools are Paularino Elementary School (1060 Paularino Avenue), 0.61 mile southwest of the project site; and Sonora Elementary School (966 Sonora Road), 0.73 mile southwest of the project site. As discussed

in Impact 2.9(a), construction of the proposed project would include the limited use of hazardous materials, such as fuel and solvents. However, use of these hazardous materials would be in compliance with all applicable local, State, and federal regulations. During operation of the proposed project, limited use of hazardous materials would likely be used for building maintenance. Similarly, these hazardous materials would be stored, handled, and disposed of in accordance with applicable regulations. Thus, the proposed project would not include any uses that could potentially generate hazardous materials in significant quantities that would have an impact on surrounding schools. Therefore, there would be no impact.

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

Less than significant impact. Government Code Section 65962.5 refers to the Hazardous Waste and Substance Site List, commonly known as the Cortese List. The Cortese List contains hazardous waste and substance sites with known USTs having a reportable release; and solid waste disposal facilities from which there is a known migration. The Cortese List also includes hazardous substance sites selected for remedial action; historic Cortese Sites; and sites with known toxic materials identified through the abandoned site assessment program. The proposed project would not be located on a site which is included on a hazardous materials site list compiled pursuant to California Government Code Section 65962.5.[43] The closest site recognized by the Cortese List is approximately 1.58 miles southwest of the project site and is an active Voluntary Cleanup Site at 1170 Baker Road. The proposed development is not close enough to the activity occurring at this site for the proposed project to have an impact. Therefore, the proposed project would not create a significant hazard to the public or the environment. No impact would occur, and no mitigation is required.

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

Less than significant impact. The Airport Environs Land Use Plan (AELUP) is the comprehensive land use plan adopted and administered by the Airport Land Use Commission (ALUC) for Orange County, as required by Section 21675 of the California Public Utilities Code. The AELUP establishes land use guidelines based on noise and safety impacts for areas surrounding airports. The most current AELUP for John Wayne Airport (SNA) was approved in April 2008. The project site is located approximately 1.37 miles west of SNA, and thus is within the Airport Planning Area of SNA according to the ALUC. Land uses within the planning area boundaries of the AELUP must conform to the following safety and height restriction standards. The project site is located more than 7,000 feet west of SNA. In accordance with Federal Regulation Part 77, any construction or alteration occurring within

[43] California Department of Toxic Substances Control (DTSC). Hazardous Waste and Substances Site List (Cortese). Website: https:// www.envirostor.dtsc.ca.gov/public/map/?global_id=38330005. Accessed November 13, 2024.

20,000 feet of a public airport (i.e., an airport with a runway of more than 3,200 feet in length such as SNA) which exceeds a100 foot horizontal by 1 foot in vertical height must notify the Federal Aviation Administration (FAA). Furthermore, buildings greater than 70 feet must notify the FAA. Because the proposed buildings would not exceed 50 feet in height, the proposed project would be consistent with the height restriction standards.

The proposed project would be reviewed by the ALUC to determine whether any structure would be inconsistent with the AELUP. Since the proposed project is located within the vicinity of SNA's Planning Area, it is subject to the safety restrictions of the AELUP. The proposed project's building height would not "interfere with the established, or planned, airport flight procedures, patterns, or navigational systems" since it would meet the development standards specified in the Costa Mesa General Plan. In addition, the proposed project would not threaten, endanger, or interfere with aeronautical operations due to the proposed project's exterior lighting, when it would be clearly visible during hours of twilight or darkness. Additionally, although the proposed project is within the vicinity of SNA's Airport Planning Area, it is not within the vicinity of the SNA Safety Zone.[44] Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the project area. Impacts would be less than significant.

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

Less than significant impact. The Costa Mesa Disaster Plan serves as the community's Emergency Operations Plan (EOP), which provides guidance during emergency situations and natural disasters. Evacuation operations would be conducted by law enforcement agencies, highway/road/street departments, and public and private transportation providers.[45] The project site is located along a designated emergency evacuation route along Bear Street and adjacent to I-405. The proposed project would be constructed completely within the project site and construction equipment would access the project site via Bear Street, which is the main access point to the project site. If any road closures to Bear Street are required, the project applicant and construction crew would be required to coordinate with the City of Costa Mesa Public Works Department to ensure that emergency access routes are maintained during construction. During operation, the proposed project does not include any uses or design features that would result in interference with any adopted emergency response plan or emergency evacuation plan. The design of the proposed project would provide adequate emergency access consistent with City requirements, including the required number and design of access points and safety features. Therefore, the proposed project would not result in significant impacts to emergency access during construction and/or operation. The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

[44] Airport Land Use Commission (ALUC) Airport Environs. 2008. Land Use Plan for John Wayne Airport. Website: https://files.ocair.com/media/2021-02/JWA_AELUP-April-17-2008.pdf? VersionId=cB0byJjdad9OuY5im7Oaj5aWaT1FS.vD. Accessed November 13, 2024.

[45] City of Costa Mesa. Costa Mesa General Plan. Safety Element.

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 in an urbanized, flat area and does not contain slopes that could contribute to wildfire. The project site is not located along an urban-wildfire interface. CAL FIRE has mapped fire threat potential throughout California and ranks fire threats on a scale of no fire threat, moderate, high, and very high fire severity. According to the CAL FIRE Hazards Severity Zone Map Viewer, the project site is not located in a Fire Hazard Severity Zone (FHSZ).[46] Additionally, the City's Safety Element indicated that no part of Costa Mesa is listed as a State Responsibility Area (SRA) for fire hazard or located within a Very High FHSZ.[47] Thus, urban and grassland fires within open space areas, such as Talbert Regional Park, represent the only fire risks within the City.[48] Further, the project site is in a developed, built-up urban area that is not adjacent to any Very High FHSZ or large areas of open space. Therefore, the proposed project is not likely to expose people or structures to wildland fire hazards. No impact would occur.

Mitigation Measures

None required.

[46] California Department of Forestry and Fire Protection (CAL FIRE). 2024. Fire Hazard Severity Zones in State Responsibility Area. Website: https:// calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed November 14, 2024.

[47] City of Costa Mesa. 2015. Costa Mesa General Plan, Chapter 8: Safety Element. Website: https;// ftp.costamesaca.gov/costamesaca/generalplan2015-2035/adopted/08_FinalDraft_SafetyElement.pdf. Accessed November 14, 2024.

[48] Ibid.

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

Environmental Evaluation

Setting

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

The proposed project is located within the Santa Ana Watershed. In general, drainage flows from south to north. Peak flow originates as sheet flow in the south which then transitions into piped flow for conveyance at the off-site discharge point at the northwest corner of the property.

The project site discharges to the existing Orange County Flood Control District (OCFCD) 72-inch public storm drain that lies at the northwest corner of the site at node 110. This storm drain known as OCFCD D03S03 Gisler Storm Channel, flows into the Greenville Banning Channel, connecting to the Santa Ana River Channel, which ultimately discharges to the Pacific Ocean.

The existing on-site drainage is collected by area drains and conveyed by on-site storm drains that eventually join with the existing 27-inch and 72-inch public storm drains to the southwest and northwest corner of the site, respectively.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) of the area, the project site is within an area with 0.2 percent annual chance flood hazard of 1 percent annual chance flood with average depth less than 1 foot or with drainage areas of less than 1 square mile (Zone X).[49]

Would the project:

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

Less than significant impact. Construction activities would include demolition of the existing paved surfaces and structures, site preparation, grading, building construction, architectural coatings, and paving. The City of Costa Mesa is in the jurisdictional area of the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB). The Santa Ana RWQCB requirements are further clarified by the County of Orange Drainage Area Management Plan (DAMP) which requires the preparation and implementation of WQMP's for development projects. Consistent with the DAMP, the project applicant would be required to submit a SWPPP prior to project grading and construction for City review along with a Preliminary Project WQMP and a Hydrology Report.

[49] Federal Emergency Management Agency (FEMA). 2024. FEMA's national Flood Hazard Layer (NFHL) Viewer. Website: https:// hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-117.91077285913687,33.67623138861032,-117.86923080591424,33.69408627053917. Accessed November 14, 2024.

As described in the proposed project's Hydrology Report, drainage flows from south to north. Peak flow originates as sheet flow in the south which then transitions into piped flow for conveyance at the off-site discharge point at the northwest corner of the property. The overall proposed condition drainage would ultimately retain the existing condition flow drainage in the south to north direction. The existing condition topography previously discussed has an overall grade tilting from southeast to northwest. However, the proposed condition will be graded from southwest to northeast. The subsurface storm drain network would retain the overall existing drainage pattern, maintaining the off-site discharge to storm drain facilities northwest of the site. The proposed project would also include proprietary vegetated biotreatment systems as a biotreatment BMPs and BMPs to ensure that the ongoing operation and maintenance of the proposed project is consistent with the DAMP.

Compliance with these regulations would ensure that impacts to water quality during construction and operation of the proposed project would be less than significant. In addition, as described in the Hydrology Report, runoff from the project site is directed to the Modular Wetland Systems (MWS) unit and a proprietary biotreatment BMP for water quality treatment. Treated stormwater then exits the project site on Bear Street through the 72-inch public storm drain to enter the Gisler Storm Channel, flowing into the Greenville Banning Channel, connecting to the Santa Ana River Channel, which ultimately discharges to the Pacific Ocean. Therefore, 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.

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. As discussed in the Geotechnical Report prepared by SA GEO, groundwater was encountered at depths ranging from 18.3 to 20.7 feet. Historic high groundwater is mapped between 10 and 30 feet below grade. The project site has been developed with impervious surfaces for over 40 years and is not used as a groundwater recharge location. As impervious surfaces under the proposed project would be similar to those under existing conditions, development of the proposed project would not interfere with groundwater recharge. As such, the proposed project would not impede sustainable groundwater management of a basin. Impacts would be less than significant.

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

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

Less than significant impact. As discussed above, the proposed project would not substantially increase impervious surfaces at the project site. Additionally, the proposed project would not alter the course of a river or stream, as the site is developed and located in an urban and developed area. As such, the proposed project would not alter the existing drainage pattern at the project site in a manner which would result in on- or off-site erosion or siltation. Additionally, the proposed project would

implement the provisions provided in the WQMP prepared for the proposed project, which includes ongoing operation and management of BMPs at the project site. Further, adherence to the WQMP would ensure compliance with County NPDES Stormwater Program. The impact would be less than significant.

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

Less than significant impact. As discussed above, the proposed project would not substantially alter the existing drainage pattern at the project site through the increase of impervious surfaces at the project site, or by altering the course of a river or stream. The proposed project would be designed consistent with the approved drainage plan provided in the Hydrology Report and would not result in increased surface runoff in a manner which would result in flooding. As such, impacts would be less than significant.

(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less than significant impact. As discussed above, the proposed project would not substantially alter the existing drainage pattern at the project site through the increase of impervious surfaces at the project site, or by altering the course of a river or stream. The proposed project would connect existing water and sanitary sewer lines and would include the installation of stormwater management systems on-site. Stormwater from the proposed development will be intercepted by downspouts and new area drains that convey stormwater into two separate MWS (proprietary biofiltration BMPs) to meet water quality objectives as required by the Municipal Separate Stormwater Sewer System (MS4) Permit. Stormwater flows then enter the public storm drain. The proposed project would be designed consistent with the approved drainage plan provided in the Hydrology Report and would not exceed the capacity of the existing stormwater drainage system. Additionally, the proposed project would implement the provisions provided in the WQMP prepared for the proposed project—which includes ongoing operation and management of BMPs at the project site. Further, adherence to the WQMP would ensure compliance with County NPDES Stormwater Program. Compliance with the WQMP would address potential additional sources of polluted runoff from the project site. The impact would be less than significant.

(iv) impede or redirect flood flows?

Less than significant impact. The project site is within an area with 0.2 percent annual chance flood hazard of 1 percent annual chance flood with average depth less than 1 foot or with drainage areas of less than 1 square mile (Zone X); however, the proposed project would be designed consistent with the approved drainage plan provided in the Hydrology Report and would not cause flood flows to be impeded or redirected. Any potential flooding on-site would be treated via two MWS and then be directed to the public storm drain. As such, the impact would be less than significant.

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

Less than significant impact. The project site is approximately 5.53 miles from the Pacific Ocean and is not near any other large body of water; therefore, the project site is not at risk of inundation from a tsunami or seiche. As discussed above, the project site is within an area with 0.2 percent annual chance flood hazard of 1 percent annual chance flood with average depth less than 1-foot or with drainage areas of less than 1 square mile; however, it would not include the storage of hazardous materials that could be released into the environment due to inundation from a flood other than small quantities of typical household cleaners. As such, the impact would be less than significant.

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

Less than significant impact. The project site is within the Santa Ana River watershed and the Water Quality Control Plan for Santa Ana River Basin (Basin Plan) would be applicable to the proposed project. The Basin Plan includes an implementation plan describing the actions by the RWQCB and others that are necessary to achieve and maintain the water quality standards as well as water quality goals and policies that govern the Santa Ana River Basin.[50] The proposed project would be required to comply with the goals and policies outlined in the Basin Plan. Therefore, the proposed project would not conflict with or obstruct implementation of a water quality control plan. Impacts would be less than significant.

The project site is also located within the Orange County Water District (OCWD), which includes a Groundwater Management Plan that was last updated in June 2015. As discussed in the Groundwater Management Plan, groundwater basin management goals include (1) to protect and enhance groundwater quality, (2) to protect and increase the sustainable yield of the groundwater basin in a cost-effective manner, and (3) to increase the efficiency of OCWD operations.[51] As discussed above, the project applicant would be required to submit a SWPPP prior to project grading and construction. Compliance with these regulations would ensure that impacts to water quality during construction and operation of the proposed project would be less than significant. In addition, as described in the Hydrology Report, runoff from the project site is directed to the MWS unit and proprietary biotreatment BMPs for water quality treatment. Therefore, the proposed project would not conflict with or obstruct implementation of a sustainable groundwater management plan. Impacts would be less than significant.

Mitigation Measures

None required.

[50] California State Water Resources Control Board (State Water Board). Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB). 2024. Santa Ana River Basin Plan. Website: https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/index.html. Accessed November 14, 2024.

[51] Orange County Water District (OCWD). 2015. Groundwater Management Plan 2015 Update. Website: https://www.ocwd.com/wp-content/uploads/groundwatermanagementplan2015update_20150624.pdf. Accessed November 14, 2024.

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

Environmental Evaluation

Setting

The General Plan currently designates the project site as General Commercial. The proposed project would require a GPA to amend the General Plan land use designation from General Commercial to High-Density Residential. The High-Density Residential land use designation is intended to provide residential development with a density of up to 20 dwelling units per acre (du/acre).

The project site is currently zoned AP. The proposed project would require a rezone to change the zoning designation from AP to R-3. The R-3 zoning district is intended to promote the development of multi-family rental as well as ownership dwelling units. The required minimum lot size is 12,000 square feet in the R-3 zone. The maximum density allowed is 2,178 square feet per dwelling unit, which equals 20 dwelling units per gross acre.

Would the project:

a) Physically divide an established community?

Less than significant impact. The project site is in a highly developed and urbanized area. The surrounding area contains commercial and residential uses, similar to the project site. The proposed project would not be designed in a way that would create a physical barrier within an established community. A typical example of such a barrier would be a project that involved a continuous right-of-way, such as a roadway, which would divide a community and impede access between parts of the community. The proposed project does not include these types of features but would rather improve connectivity in the surrounding area by providing an extension of the existing Olympic Avenue connecting to the project site. Implementation of the proposed project would not disrupt the

surrounding land uses or divide the physical arrangement of the established communities to the north and east of the project site. Therefore, the proposed project would not physically divide an established community. Impacts would be less than significant, and no mitigation is required.

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

Less than significant impact. The proposed project would include a GPA to change the General Plan land use designation from General Commercial to High Density Residential. Surrounding land uses are designated as Regional Commercial to the north, Public/Institutional and Low Density Residential to the east, Neighborhood Commercial and Low Density Residential to the south, and Low Density Residential to the west. The proposed project would comply with applicable General Plan policies and Costa Mesa Municipal Code requirements adopted to avoid or reduce environmental impacts. For example, as discussed above, the proposed project would comply with Municipal Code Chapter 13-VII by submitting site plans to the Planning Division that identify existing and replacement trees with a written request and justification for their removal. Similarly, the proposed project would be consistent with Municipal Code Section 13.279 regarding noise standards for construction activities and equipment. Additionally, the proposed project would comply with the SDBL. Therefore, with the implementation of the GPA, the proposed project would not conflict with any applicable land use plan, policy, or regulation. Impacts are therefore considered less than significant, and no mitigation is required.

Mitigation Measures

None required.

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

Environmental Evaluation

Setting

The project site is zoned General Commercial (GC) and is located in an urbanized area in the City of Costa Mesa, and no known mineral resources are present on-site.

Would the project:

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

No impact. According to the General Plan EIR, mineral resources present in the City's planning area are oil, peat, and aggregate. According to the Department of Conservation Division of Oil, Gas, and Thermal Resources, there are 15 active oil wells in the planning area. The Newport West Oil Field is located entirely outside of the City. Peat is restricted to areas adjacent to the Santa Ana River.[52]

The project site is located in the northeastern portion if the City and is not located in an area near any mineral resources; therefore, project implementation would not affect any known mineral deposits. Additionally, the entire project site would be within the R-3 zoning district; therefore, project implementation would not result in the loss of availability of known mineral resources. Thus, no impacts would occur.

[52] City of Costa Mesa. 2016. Final Environmental Impact Report for the 2015-2035 General Plan. Mineral Resources. Website: http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/Final-EIR.pdf. Accessed November 12, 2024.

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 existing General Plan does not identify any locally important mineral resources. No other City planning documents identify any locally important mineral resources.[53] As such, no impacts to locally important resources would occur.

Mitigation Measures

None required.

[53] City of Costa Mesa. 2016. Final Environmental Impact Report for the 2015-2035 General Plan. Mineral Resources. Website: http://ftp.costamesaca.gov/costamesaca/generalplan2015-2035/Final-EIR.pdf. Accessed November 12, 2024.

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

Environmental Evaluation

Setting

The proposed project site is located within the City of Costa Mesa, in Orange County, California. The site is surrounded by residential uses to the east and south while I-405 is located immediately north and Bear Street bounds the west side of the project site.

Existing Conditions

Ambient Noise

The dominant noise sources in the project vicinity include traffic on local roadways, primarily from traffic on I-405 which runs along the northern boundary of the project site.

An ambient noise monitoring effort was conducted to document daytime ambient noise levels on the project site. Short-term noise monitoring was conducted by FCS on October 29, 2024, between 12:06 p.m. and 1:22 p.m. The noise measurements were taken during the midday hours, as the midday hours typically have the highest daytime noise levels in urban environments. It should be noted that

peak noise hours often vary slightly from peak traffic hours, as peak noise hours more closely align with high volume traffic that is still free flowing; while peak traffic hours often result in slower vehicle speeds due to the volume of traffic on the roadway. The short-term existing noise measurement results are summarized in Table 12. The noise monitoring data sheets are included in Appendix G.

Table 11: Existing Ambient Noise Levels on the Project Site

Site ID #	Description	L_{eq}	L_{min}	L_{max}
ST-1	On southeast corner of the project site	60	57.3	64.2
ST-2	On northeast corner of the project site	73.1	69.2	77.3
ST-3	On northwest corner of the project site	73.9	70.7	83.4

Notes:
L_{eq} = equivalent sound level
L_{min} = minimum noise/sound level
L_{max} = maximum noise level
Source: FirstCarbon Solutions (FCS). 2024.

Characteristics of Noise

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

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

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

Regulatory Framework

The project site is located within the City of Costa Mesa, in Orange County. The City of Costa Mesa addresses noise in the Noise Element of the General Plan and the Municipal Code.

City of Costa Mesa General Plan

The City of Costa Mesa addresses noise in the City's 2015-2035 General Plan. The objectives of the General Plan's Noise Element are to identify noise sources in Costa Mesa and define strategies for reducing the negative impact of noise on the community. The Noise Element identifies baseline and projected noise levels so that this information can guide future land use decisions in a manner that limit noises and its effect on the community.

The following General Plan noise policies are applicable to the Costa Mesa Bear Street multi-family residential project:

Table N-3 (Table 12 below): Noise and Land Use Compatibility Matrix presents the guidelines promulgated by federal and State agencies, modified to meet local conditions and Costa Mesa's needs. This table represents the primary tool the City will use to ensure integrated planning compatibility between land uses and outdoor noise.

Table 12: Noise and Land Use Compatibility Matrix

Table N-3: Noise and Land Use Compatibility Matrix				
	Community Noise Exposure Ldn or CNEL, dBA			
Land Use Category	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential: Low Density	50-60	60-70	70-75	≥75
Residential: Multiple-Family	50-65	65-70	70-75	≥75
Mixed use	50-65	65-70	70-75	≥75
Transient Lodging-Motel, Hotels	50-65	65-70	70-80	≥80
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	≥80
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	≥80
Sports Arenas, Outdoor Spectator Sports	NA	50-75	NA	≥80
Playgrounds, Neighborhood Parks	50-67.5	NA	67.5-75	≥75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-80	≥80
Office Buildings, Business Commercial and Professional	50-67.5	67.5-77.5	77.5-85	≥85 unless appropriately insulated
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	80-85	NA

Table N-3: Noise and Land Use Compatibility Matrix				
	Community Noise Exposure Ldn or CNEL, dBA			
Land Use Category	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Normally Acceptable. *Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.*				
Conditionally Acceptable. *New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction but with closed windows and fresh air supply systems or air conditioning will normally suffice.*				
Normally Unacceptable. *New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.*				
Clearly Unacceptable. *New construction or development should generally not be undertaken.*				
NA: *Not Applicable*				
Source: Modified from U.S. Department of Housing and Urban Development Guidelines and State of California Standards.				

Source: City of Costa Mesa 2015-2035 General Plan Noise Element.

Goals, Objectives, and Policies

Goal N-1: Noise Hazards and Conditions

The City of Costa Mesa aims to protect residents, local workers, and property from injury, damage, or destruction from noise hazards and to work toward improved noise abatement.

Objective N-1A Control noise levels within the City for the protection of residential areas, park areas, and other sensitive land uses from excessive and unhealthful noise.

Policy N-1.1 Enforce the maximum acceptable exterior noise levels for residential areas at 65 CNEL.

Goal N-2 Noise and Land Use Compatibility. Integrate the known impacts of excessive noise on aspects of land use planning and siting of residential and nonresidential projects.

Objective N-2A Plan for the reduction in noise impacts on sensitive receptors and land uses.

Policy N-2.2 Require, as a part of the environmental review process, that full consideration be given to the existing and projected noise environment.

Policy N-2.4 Require that all proposed projects are compatible with adopted noise/land use compatibility criteria

Policy N-2.5 Enforce applicable interior and exterior noise standards.

Policy N-2.6 Allow a higher exterior noise level standard for infill projects in existing residential areas adjacent to major arterials if it can be shown that there are no feasible mechanisms to meet the exterior noise levels. The interior standard of 45 dBA CNEL shall be enforced for any new residential project.

City of Costa Mesa Municipal Code

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

13-279–Exceptions for Construction. Construction equipment, vehicles, or work between the following approved hours, is allowed provided that all required permits for such construction, repair, or remodeling have been obtained from the appropriate City departments: 7:00 a.m. through 7:00 p.m. Monday through Friday, 9:00 a.m. through 6:00 p.m. Saturday. Construction activities on Sundays and the following specified federal holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day are prohibited all hours.

13-280–Exterior Noise Standards.

(a) The following noise standards, unless otherwise specifically indicated, shall apply to all residential property within the City:

Residential Exterior Noise Standards

Noise Level	Time Period
55 dB(A)	7:00 a.m. through 11:00 p.m.
50 dB(A)	11:00 p.m. through 7:00 a.m.

In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by 5 dBA.

(b) It is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, either within or outside the City, to exceed:
   (1) The noise standard for a cumulative period of more than 30 minutes in any hour;
   (2) The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour;
   (3) The noise standard plus 10 dBA for a cumulative period of more than 5 minutes in any hour;

(4) The noise standard plus 15 dBA for a cumulative period of more than 1 minute in any hour; or
(5) The noise standard plus 20 dBA for any period of time.

(c) In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

(d) The exterior noise standards shown in subsection (a) shall not apply to the following exterior areas of multi-family residential development or live/work units located within a mixed-use overlay district where the base zoning district is nonresidential, approved pursuant to a master plan, and subject to the land use regulations of an urban plan:
(1) Private balconies or patios regardless of size;
(2) Private or community roof decks/roof terraces;
(3) Internal courtyards and landscaped walkways that do not include resident-serving, active recreational uses such as community pool, spa, tennis courts, barbeque, and picnic areas.

(e) In high-rise residential developments in the North Costa Mesa Specific Plan, the exterior noise standards shown in subsection (a) shall only apply to the common outdoor recreational amenity areas located on the ground level. Recreational amenity areas located above the ground level and private balconies and patios shall be exempt from this standard.

13-281. Interior Noise Standards.

(a) The following noise standards, unless otherwise specifically indicated, shall apply to all residential property within the City:

Residential Interior Noise Standards

Noise Level	Time Period
55 dBA	7:00 a.m. through 11:00 p.m.
45 dBA	11:00 p.m. through 7:00 a.m.

In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

(b) It is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level when measured within any other dwelling unit on any residential property, either within or outside the City, to exceed:
(1) The interior noise standard for a cumulative period of more than 5 minutes in any hour;
(2) The interior noise standard plus 5 dBA for a cumulative period of more than 1 minute in any hour; or
(3) The interior noise standard plus 10 dBA for any period of time.

(c) In the event the ambient noise level exceeds either of the first two noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the third noise limit category the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

13.283–Loud, Unnecessary Noise: It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area, regardless of whether the noise level exceeds the standards specified in Section 13-280. The standard which may be considered in determining whether a violation of the provisions of this section exists may include, but not be limited to the following:

a. The level of the noise;
b. Whether the nature of the noise is usual or unusual;
c. Whether the origin of the noise is natural or unnatural;
d. The level and intensity of the background noise, if any;
e. The proximity of the noise to residential sleeping facilities;
f. The nature and zoning of the area within which the noise emanates;
g. The density of the inhabitation of the area within which the noise emanates;
h. The time of the day and night the noise occurs;
i. The duration of the noise;
j. Whether the noise is recurrent, intermittent, or constant; or
k. Whether the noise is produced by a commercial or noncommercial activity.

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

Short-term Construction Impacts

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

The Municipal Code Section 13.279 establishes allowable hours and noise standards for construction activities and equipment. Construction activities, including the operation of any tools or equipment used in construction, are restricted between the hours of 7:00 a.m. through 7:00 p.m. Monday through Friday, 9:00 a.m. through 6:00 p.m. Saturday. Construction activities on Sundays and the following specified federal holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day are prohibited all hours.

While the City does not establish noise level thresholds for construction activities, this analysis uses this analysis uses the noise limits established by the Federal Transit Administration (FTA) to identify the potential for impacts due to substantial temporary construction noise. The FTA identifies construction noise limits in the Transit Noise and Vibration Impact Assessment Manual.[19] During daytime hours, a significant temporary increase would be an increase in excess of the 8-hour average noise level of 80 dBA L_{eq} as measured at a receiving residential land use.

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

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

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

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

The façade of the nearest residence would be located approximately 25 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would potentially operate simultaneously during site preparation of the proposed project site.

At this distance and assuming minimal shielding from the existing 6-foot concrete wall on the east and south side of the project site, relative worst-case single-hour average construction noise levels would attenuate to 84 dBA $L_{eq(1\text{-}hour)}$ at this nearest sensitive receptor. When averaged over an 8-hour work

day, conservative worst-case average construction noise levels during the loudest phase of construction could range up to 78 dBA $L_{eq(8\text{-}hour)}$ as measured at the nearest sensitive receptor. The calculation sheet is provided in Appendix G.

These reasonable worst-case construction noise levels would only occur periodically throughout the day as construction equipment operates along the nearest project boundaries. Additionally, these noise levels would drop off at a rate of 6 dBA per doubling of distance as the equipment moves over the project site.

These calculated conservative worst-case construction noise levels would not exceed the FTA's 8-hour average daily threshold of 80 dBA L_{eq} as measured at the nearest residential receptors. In addition, the proposed project would comply with the City of Costa Mesa's permissible hours for construction (7:00 a.m. through 7:00 p.m. Monday through Friday and 9:00 a.m. through 6:00 p.m. Saturday), which would ensure that construction noise would not result in any substantial increase in nighttime noise levels in the project vicinity. Therefore, construction noise impacts on sensitive receptors in the project vicinity would be to less than significant and no mitigation would be required.

Operational/Stationary Source Noise Impacts

Less than significant impact. A significant impact will occur if the project results in an exceedance of the City's noise performance standards for stationary noise sources. A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of any of the noise performance thresholds established by the City. According to Section 13-280 of the Municipal Code, the maximum permissible noise performance threshold for residential zones is 55 dBA L_{eq} during the daytime hours (7:00 a.m. to 11:00 p.m.) and 50 dBA L_{eq} during nighttime hours (11:00 p.m. to 7:00 a.m.).

Implementation of the proposed project would include operation of new mechanical ventilation equipment. Noise levels for residential-grade mechanical ventilation equipment systems range up to approximately 70 dBA L_{eq} at a distance of 3 feet. The proposed project would have residential-grade mechanical ventilation equipment for each proposed residential unit. The proposed mechanical ventilation equipment could be located as close as 25 feet from off-site receptors. At this distance, with minimal shielding from a 6-foot concrete wall, worst-case resulting noise levels could range up to approximately 25 dBA L_{eq}. The noise calculation sheet is provided in Appendix G.

These operational noise levels would not exceed the City's noise performance thresholds of 50 dBA L_{eq} during nighttime hours as measured at the nearest residential property. Therefore, rooftop mechanical ventilation system operational noise levels would not result in a substantial permanent increase in noise levels in excess of established standards. The impact of mechanical ventilation equipment operational noise levels on sensitive off-site receptors would be less than significant.

Operational/Mobile Source Noise Impacts

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

According to the transportation analysis prepared Urban Crossroads,[54] the existing PM peak-hour trips on Bear Street adjacent to the project site are 97 AM peak-hour trips and 87 PM peak-hour trips. However, the proposed project would only generate 64 AM peak-hour trips and 83 PM peak-hour trips. Thus, the proposed project is expected to generate a net reduction of 33 AM peak-hour trips and 4 fewer PM peak-hour trips as compared to the trips generated by the existing land use.

Therefore, net new proposed project trips would not double existing traffic trips on any roadway segment in the project vicinity. Furthermore, this increase in trips would result in a less than 1 dBA increase in traffic noise levels along any roadway segment in the project vicinity. This increase is below a level that would be a perceptible increase and well below a level that would be considered a substantial increase in traffic noise levels. Therefore, the proposed project would not double average daily trips on Camden Avenue and Singletree Way adjacent to the project site and would not generate 3 dBA increase in traffic noise levels. Thus, the proposed project would not result in a substantial permanent increase in ambient noise levels from project-generated traffic trips, and mobile source operational noise impacts would be less than significant**.**

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

Less than significant impact. A significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of established standards. The City of Costa Mesa has not adopted criteria for groundborne vibration impacts. The City has not established requirements regarding construction vibration impacts, therefore, for the purposes of this analysis, the FTA guidelines for vibration impacts are used to determine potential significant construction and operational-related vibration impacts.[55]

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

[54] Urban Crossroads. August 8. 3150 Bear Street Due Diligence Trip Generation Assessment. 2024.

[55] Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.

groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

Short-term Construction Vibration Impacts

Of the variety of equipment that would be used during construction, small vibratory rollers would produce the greatest groundborne vibration levels. Impact equipment such as pile drivers would not be used during construction of this project. Small vibratory rollers produce groundborne vibration levels ranging up to 0.101 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The nearest off-site receptor to the project construction footprint where vibratory rollers would operate are the residential land uses on Tara Street, south of the project site. The closest structure to this site is the pool located approximately 25 feet from the nearest construction footprint where the small vibratory rollers would potentially operate. At this distance, groundborne vibration levels would range up to 0.1 in/sec PPV from operation of the types of equipment that would produce the highest vibration levels. This is well below the FTA's Construction Vibration Impact Criteria of 0.5 in/sec PPV for this type of structure, which is a pool constructed of reinforced concrete. Accordingly, construction activities would not adversely impact this structure.

The nearest residential structure is located approximately 25 feet from the nearest construction footprint where small vibratory rollers would potentially operate. At this distance, groundborne vibration levels would range up to 0.1 in/sec PPV from operation of the types of equipment that would produce the highest vibration levels. This is below the FTA's construction vibration damage criteria of 0.2 in/sec PPV for this type of structure, a building of nonengineered timber and masonry construction. As a result, construction of the proposed project would not expose nearby buildings to groundborne vibration levels in excess of their applicable FTA damage criteria, and this impact would be less than significant.

Operational Vibration Impacts

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

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

Less than significant impact. The airport nearest to the project site is John Wayne International Airport, located approximately 1.31 miles southeast of the project site. While aircraft noise is occasionally audible at the project site, due to the distance from the airport and the orientation of runways and flight patterns, the project site does not lie within the established noise contours of John

Wayne International Airport and is not close enough to any other airports to be affected by aviation noise. Therefore, impacts of aviation noise would be less than significant. Because of the distance to the airport and the orientation of the runways, the project site lies outside of the 65 dBA CNEL noise contours of the airport. Therefore, implementation of the proposed project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would exceed normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

None required.

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

Environmental Evaluation

Setting

The City's 2021-2029 Housing Element projected that the City would reach a population of 113,900 persons by 2020.[56] However, according to the California Department of Finance, the City only has a population of 109,423 persons as of January 1, 2024.[57]

Would the project:

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

Less than significant. As described above, the City had a provisional population of 109,423 persons as of January 1, 2024.[58] According to the California Department of Finance the City has an average of

[56] City of Costa Mesa. 2021. Housing Element, Community Profile. Website: https://ftp.costamesaca.gov/costamesaca/planningcommission/agenda/2021/2021-12-13/PH-1-SuppMemo-3.pdf. Accessed November 12, 2024.

[57] California Department of Finance. 2024. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2024. Website: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fdof.ca.gov%2Fwp-content%2Fuploads%2Fsites%2F352%2FForecasting%2FDemographics%2FDocuments%2FE-5_2024_InternetVersion.xlsx&wdOrigin=BROWSELINK. Accessed November 12, 2024.

[58] Ibid.

2.52 persons per household.[59] The proposed project would include the construction of 142 for-sale townhomes, which would increase the City's population by up to 358 persons based on the average household size.[60] This is approximately 0.3 percent of the City's existing population, which is a negligible increase. The City's 2021-2029 Housing Element projected that the City would reach a population of 113,900 persons by 2020.[61] Because the City has not yet reached the projected population by the start of 2025, and the proposed project would not result in an exceedance of this projection, the population growth resulting from the proposed project can be considered planned growth. Therefore, the proposed project would not induce unplanned population growth either directly or indirectly. Therefore, impacts would be less than significant.

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

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

Mitigation Measures

None required.

[59] California Department of Finance. 2024. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2024. Website: https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/. Accessed November 12, 2024.

[60] 2.52 persons per residential unit * 142 residential units = 357.84 persons

[61] City of Costa Mesa. 2021. Housing Element, Community Profile. Website: https://ftp.costamesaca.gov/costamesaca/planningcommission/agenda/2021/2021-12-13/PH-1-SuppMemo-3.pdf. Accessed November 12, 2024.

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

Environmental Evaluation

Setting

The information in this section is based, in part, on correspondence with City of Costa Mesa public service providers, included as Appendix H of this report.

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

a) Fire protection?

Less than significant impact. Costa Mesa Fire Department (CMFD) provides fire protection services to the project site. Costa Mesa Fire and Rescue is a full-service organization designed to provide essential public safety and emergency services to the community and its visitors.

Fire stations are strategically located in the City of Costa Mesa to ensure efficient demand response to all risk hazards and to maintain recommendations for response times. The project site is currently serviced by the CMFD via the existing infrastructure. Additionally, both automatic and mutual aid agreements exist with surrounding jurisdictions. The nearest station to the project site is Fire Station No. 2, located 0.43 mile south of the project site at 800 Baker Street. The proposed project would be

required to comply with all currently adopted codes and standards at the time of plan submittal, including the CBC and California Fire Code. Furthermore, the proposed project would be required to include the provision of smoke detectors, fire extinguishers, and fire sprinklers in proposed buildings, and would be required to pay Fire Department development fees. In addition, the design of the proposed project would be submitted to CMFD for review and approval. Finally, the project applicant would be required to pay fire development fees for future fire facilities and equipment. Because the proposed project would comply with required codes and standards and would pay required fees and the project site is currently serviced by CMFD, impacts associated with fire protection services would be less than significant.

b) Police protection?

Less than significant impact. The Costa Mesa Police Department (CMPD) provides law enforcement and crime prevention services to the Citty. Officers operate out of the Costa Mesa Police Station, approximately 1.6 miles southwest of the project site located at 99 Fair Drive. CMPD also operates out of two substations located at South Coast Plaza and 567 West 18th Street. CMPD contracts with the Huntington Beach Police Department for airborne law enforcement patrols and related services.[62] CMPD operates under several divisions, including Administration, Field Operations, and support services. Decisions are further broken down into specialty areas such as Emergency Management, Patrol, Traffic Safety, Air Support, Crime Scene Unit, and others.[63]

The proposed project would add up to 368 residents to the City, potentially increasing the need for police protection. The existing project site is served by CMPD. The proposed project would include safety measures including nighttime security lighting at proposed units and fencing around detached townhomes to deter crime in at the project site. Furthermore, the proposed project would be reviewed by CMPD to ensure that safety measures are put in place to the satisfaction of the department. With the implementation of proposed safety measures, impacts related to police protection would be less than significant.

c) Schools?

Less than significant impact. The City of Costa Mesa is served by Newport-Mesa Unified School District (NMUSD). The District has four zones that it serves: the Corona Del Mar Zone, the Costa Mesa Zone, the Estancia Zone, and the Newport Harbor Zone. The project site is located within the Costa Mesa Zone, which contains four elementary schools (College Park Elementary, Killybrooke Elementary, Paularino Elementary, and Sonora Elementary), and Costa Mesa Middle/High School. Davis Magnet School and Monte Vista Independent School are also within the Costa Mesa Zone but have districtwide attendance boundaries.[64] NMUSD requires the payment of developer fees of $1.84

[62] City of Costa Mesa. Costa Mesa General Plan. Safety Element.

[63] City of Costa Mesa. Costa Mesa Police Department. Website: https://www.costamesaca.gov/government/departments-and-divisions/police. Accessed November 21, 2024.

[64] Newport-Mesa Unified School District (NMUSD). 2023. Feeder School Flow Chart. Website: https://web.nmusd.us/schools. Accessed November 21, 2024.

per square foot for residential development. The project applicant would be required to pay such fees to reduce potential impacts to school facilities resulting from the proposed project. With the payment of fees, impacts would be less than significant.

d) Parks?

Less than significant impact. The City of Costa Mesa contains 25 neighborhood parks and seven community parks. In addition to these parks, the City is home to Talbert Regional Park, a regional nature preserve. The City strives to meet its minimum parkland ratio of 4.26 acres of parkland per 1,000 residents. As of 2015, the City had approximately 3.66 acres of parkland per 1,000 residents.[65]

The nearest park to the project site is Schiffer Park, located immediately west of the site across Bear Street. While the proposed project would include lawn areas, barbeque and picnic areas, and play equipment within the site, there is potential for increased use of Schiffer Park and other parks within the City as a result of the proposed project. The proposed project would be required to pay park development fees to offset any impacts resulting from the new residential development. These fees would be used to maintain existing parks within the City. With the payment of fees, impacts would be less than significant.

e) Other public facilities?

Less than significant impact. Other public facilities within the City include libraries. Libraries within the City include the Donald Dungan Library, and Mesa Verde Library, located approximately 3.53 miles southwest and 2.11 miles southwest of the project site. Population increase resulting from the proposed project would result in an increase in library usage of facilities within the City. The proposed project would be required to pay a library impact fee, as required by the City, to offset potential impacts to local libraries. With the payment of fees, impacts would be less than significant.

Mitigation Measures

None required.

[65] City of Costa Mesa. Costa Mesa General Plan. Open Space and Recreation Element.

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

Environmental Evaluation

Setting

The City of Costa Mesa owns and operates approximately 415 acres of developed neighborhood and community parks. The City maintains a park dedication standard of 4.26 acres of parkland for every 1,000 residents.[66] Pursuant to State law (State Government Code Section 66477), the City may collect up to 3.0 acres of parkland or in lieu fees from new residential subdivisions for every 1,000 residents. Accordingly, the City adopted a Local Park Ordinance to implement its park and recreational land dedication requirements (Title 13, Chapter XI, Article 5–Park and Recreation Dedications). However, to reach the goal of 4.26 acres per 1,000 residents, the City must pursue alternative funding sources for the additional park acreage and/or park improvements that exceed the State standard. Alternative funding sources include general fund revenues, development impact fees, federal and State grants, user group contributions, and school district joint-use contributions.[67]

[66] City of Costa Mesa. 2015. General Plan, Open Space and Recreation Element. Website: https://www.costamesaca.gov/home/showpublisheddocument/34706/636740022584770000. Accessed November 12, 2024.

[67] Ibid.

The nearest park to the proposed project is Shiffer Park, located at 3143 Bear Street, which is 0.07 mile west of the project site. Shiffer Park is 6.72 acres and includes recreational amenities such as picnic tables, barbecues, playgrounds, and volleyball and basketball courts.[68]

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

Less than significant impact. The proposed project would develop up to 146 townhomes. The City has an estimated population of 109,423 as of January 1, 2024. As discussed previously in Section 2.14, Population and Housing, given the proposed project would develop up to 146 dwelling units, the proposed project would generate up to 368 new residents, which could increase the demand on existing neighborhood and regional parks.

The proposed project would provide 78,392 square feet in total open space area which is less than the 111,784 square feet of required open space. However, because 5 percent of the total units proposed would be Affordable Housing units, the proposed project is requesting a waiver related to the required amount of open space. Furthermore, the proposed project would comply with the City's Park Impact Fee Ordinance, which requires developers to pay park and recreation fees in conjunction with the establishment of new residential units.[69] Therefore, with the construction of proposed park improvements and payment of the park impact fees, impacts would be less than significant.

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

Less than significant impact. The proposed project would result in up to 146 new residential units and up to 368 new residents, which would place additional demand on the existing parks, including the nearest parks, Shiffer Park and Paularino Park. The proposed project would provide open space and amenity areas throughout the project site. However, the proposed project does not include the construction or expansion of public recreational facilities. As described above, the proposed project would be required to pay park and recreation fees in accordance with the City's Park Impact Fee Ordinance. With the payment of park fees, the proposed project would not result in adverse physical impacts associated with such facilities, and impacts would be less than significant with mitigation incorporated.

Mitigation Measures

None required.

[68] City of Costa Mesa. 2024. Shiffer Park. Website: https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/shiffer-park. Accessed November 12, 2024.

[69] City of Costa Mesa. 2024. Municipal Code. Website: https://ecode360.com/42619108?highlight=development,fee,park,park%20fee&searchId=8724191438789860. Accessed November 12, 2024.

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

Environmental Evaluation

The analysis in this section is based, in part, on the project-specific Trip Generation Assessment[70] and Vehicle Miles Traveled Analysis[71] prepared by Urban Crossroads, Inc. included in Appendix H.

Would the project:

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

Less than significant impact. A Trip Generation Assessment was prepared to compare the trip generation of the existing site use with the proposed project. The existing site generates 530 daily two-way trips including 97 AM peak-hour trips and 87 PM peak-hour trips. The proposed project would generate 1,024 two-way trips including 64 AM peak-hour trips and 83 PM peak-hour trips. As shown on Table 13 below, the proposed project would result in a net increase of 494 two-way trips compared to the existing use.

[70] The Trip Generation Assessment assumed construction of 146 units.

[71] The Vehicle Miles Traveled Analysis assumed the construction of 146 units.

Table 13: Trip Generation Comparison

	AM Peak-hour			PM Peak-hour			
	In	Out	Total	In	Out	Total	Daily
Former Use: TBN Building	90	7	97	8	79	87	530
Proposed Use: Multi-family/Affordable Housing	16	48	64	52	31	83	1,024
Net Change in Trips	**-74**	**41**	**-33**	**44**	**-48**	**-4**	**494**
Note: Negative value represents a reduction in comparison to the former use.							

City of Costa Mesa traffic guidelines require a Level of Service (LOS) based traffic study for development projects that generate 50 or more vehicle trip ends during a peak-hour.[72] As shown on Table 13 above, the proposed project is anticipated to generate fewer than 50 net new peak-hour trips in either peak-hour, which falls below the City's threshold. As such, no further analysis is required beyond what was analyzed in the project-specific Trip Generation Memorandum.

The proposed project would support City programs, plans, and ordinances related to pedestrian facilities through the provision of internal sidewalks and pedestrian pathways throughout the site, as well as through the provision of a pedestrian gate connecting to Olympic Avenue to allow neighbors to the east with a more direct walking path to Schiffer Park. In addition, a signalized intersection at the southwest corner of the site is proposed, along with a continental style crosswalk to provide improved pedestrian access to Schiffer Park. As such, the proposed project would be consistent with the City of Costa Mesa Pedestrian Master Plan, as well as policies related to pedestrian access found in the Circulation Element of the General Plan. As such, the proposed project would not conflict with a program plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts would be less than significant.

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

Less than significant impact. City Guidelines identifies the Orange County Transportation Analysis Model (OCTAM) as the appropriate tool for conducting VMT forecasting and analysis for land use projects in the City of Costa Mesa, as it considers interaction between different land uses based on socioeconomic data, such as population, households, and employment. The current version of OCTAM was last released in March 2019 and represents the most current sub-regional transportation

[72] The applicable thresholds under CEQA for evaluating potential impacts related to traffic and transportation, provide that traffic impacts are to be evaluated on the basis of the Vehicle Miles Traveled (VMT) that are generated by traffic serving or accessing a project. The use of VMT as the metric for evaluating traffic impacts under CEQA replaces the earlier practice of evaluating traffic primarily on the basis of vehicle delay, as reflected in traffic Level of Service (LOS) standards. Under the requirements of CEQA, vehicle delay as measured by LOS cannot be considered a significant impact on the environment (Public Resources Code [PRC] § 21099(b)(2); State CEQA Guidelines § 15064.3(b)(2).

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

Origin/Destination (OD) VMT

The OD method for calculating VMT sums all weekday VMT generated by trips with at least one trip end in the study area (i.e., project boundary) and tracks those trips to their estimated origins/destinations. Origins are all vehicle trips that start in a specific Traffic Analysis Zone (TAZ) and destinations are all trips that end in a specific TAZ. Boundary VMT

City Guidelines also acknowledge that the VMT analysis should also contain an evaluation of a project's effect on VMT, which can be performed using the boundary method of calculating VMT. The boundary method is the sum of all weekday VMT on the roadway network within a designated boundary (i.e., City boundary). The boundary method estimates VMT by multiplying vehicle trips on each roadway segment within the boundary by that segment's length. This approach consists of all trips, including those trips that do not begin or end in the designated boundary. Consistent with City Guidelines, the County of Orange was used as the boundary for this assessment.

VMT Metric and Significance Threshold

According to City Guidelines, the proposed project's effect on VMT would be considered significant if it resulted in either of the following conditions to be satisfied:

1. The baseline link-level citywide VMT per service population increases under the plus project condition compared to the no project condition, or

2. The cumulative link-level citywide VMT per service population increases under the plus project condition compared to the no project condition.

City of Costa Mesa baseline VMT per service population value has been calculated using OCTAM. Table 14 presents the resulting City of Costa Mesa VMT per service population threshold of 22.0.

Table 14: City of Costa Mesa Baseline VMT Per Service Population

Service Population	Baseline
Service Population	257,088
VMT	6,661,448

Service Population	Baseline
VMT per Service Population	25.9
Threshold 85% of City VMT per SP	22.0
Source: Urban Crossroads, 2024.	

Project-generated VMT was evaluated by converting the proposed project's projected dwelling units into an OCTAM compatible data set. The OCTAM model utilizes socioeconomic data (SED) (e.g., population) for the purposes of vehicle trip estimation. Table 15 presents the SED inputs added to the proposed project's TAZ to represent the project in OCTAM.

Table 15: City of Costa Mesa Baseline VMT Per Service Population

Land Use	Dwelling Units	Conversion Factor[1]	Population
Service Population	146	2.18 persons per household	318

[1] Person per household was maintained using data contained in Orange County Transportation Analysis Model (OCTAM).
Source: Urban Crossroads, 2024.

Project Generated VMT

Table 16 shows project-generated OD VMT and the resulting OD VMT per service population for baseline and cumulative conditions. As shown in Table 3, the proposed project would generate OD VMT per service population above the City's threshold under baseline conditions.

Table 16: Project Generated VMT

Service Population	Baseline	Cumulative
Service Population	318	318
VMT	7,712	6,729
VMT per Service Population	24.3	21.2
Threshold 85% of City VMT per Service Population	22.0	22.0
	Yes	No
Source: Urban Crossroads, 2024.		

As shown in Table 16, the proposed project would exceed the threshold under the baseline condition. Therefore, the proposed project would be required to provide measures to mitigate his impact to a level below the City's threshold. A minimum reduction of 10.5 percent would be required.

VMT Mitigation Measures

The California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (Handbook) was utilized to determine trip reduction measures that may be applicable to the proposed project. The Handbook describes methods to quantify reductions in greenhouse gas emissions and in the case of Transportation measures, the associated reductions to VMT. This evaluation focuses on a review of the Handbook's Transportation measures that are determined to be applicable to the proposed project.

To determine which transportation measures should be considered from the Handbook, land use type, scale, and locational context are each identified as key factors for determining an individual measure's applicability to a project. The Handbook contains a factsheet for each measure that describes the measure, locational context, scale of application, implementation requirements, and other considerations that should be reviewed to determine a measure's applicability.

Project Type

Project type is an important consideration when determining which measures are applicable for consideration. For example, measures associated with neighborhood design are not applicable to an office project, whereas trip reduction programs intended to reduce employee commute VMT would not be applicable to a residential project.

Scale

The Handbook identifies that measures can be applied at different scales or geographic levels, however, "some measures may only be applicable at the project-level, whereas others may be more appropriate within a broader planning context such as for a general plan or climate action plan." The geographic levels considered in the Handbook include Project/Site and Plan/Community. Project/Site applies to measures that can reduce VMT at the scale of an individual development project or employer. Plan/Community refers to measures that reduce VMT at the scale of a specific plan, general plan, or climate action plan. Transportation measures can be quantified at either the Project/Site scale or the Plan/Community scale but never both.

Locational Context

The Handbook describes locational context as "used to identify trip reduction measures within the transportation sector that are appropriate in certain types of neighborhoods differentiated by transportation characteristics and level of development (e.g., rural, suburban, and urban)."

More specifically, rural, suburban, and urban are defined as follows:

Rural: An area characterized by little development. Compared to urban and suburban areas, rural areas have a lower density of residences, higher numbers of single-family residences, and higher numbers of vehicle-dependent land use patterns. Where applicable, the Handbook provides three land use distinctions within the rural locational context category—R_a, R_b, and R_c. R_a refers to rural areas within a master planned community. These rural areas often include a broad offering of amenities and services, which may be accessed by walking or other alternative forms of transportation. R_b refers to rural areas adjacent to a commuter rail station with convenient rail service to a major employment center. As the name implies, these rural areas have greater access to commuter rail as an alternative mode of transportation. R_c refers to rural areas with transit service and that are near jobs/services.

Suburban: An area characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside of the central city. Also known as a suburb.

Urban: An area located within the central city with higher density land uses than in the suburbs. Often characterized by multi-family housing, tall office buildings, and dense retail.

The proposed project's locational contest is determined to be suburban.

Project Design Features–VMT Reduction

T-1 Increase Residential Density

The VMT Analysis notes that an increase in density is considered to be a project design feature that generally results in VMT reductions. Increased density would reduce VMT associated with the proposed project because it would place residents in proximity to several public transportation options, services and amenities. This accounts for the VMT reduction achieved by a project that is designed with a higher density of dwelling units 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 residential density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in VMT. Table 17 below shows the calculation variables and formula used to calculate VMT reduction.

Table 17: Calculation Variables and Formula

ID	Variable		Unit	Source
Output				
A	Percent reduction in GHG emissions from project VMT in study area	0-30.0	percent	Calculated
User Inputs				
B	Residential density of project development	—	Du/acre	User input

ID	Variable		Unit	Source
Output				
Constants, Assumptions, and Available Defaults				
C	Residential density of typical development	9.1	Du/acre	Ewing et al. 2007
D	Elasticity of VMT with respect to residential density	-0.22	unitless	Ewing et al. 2007
Source: Urban Crossroads, 2024.				

The following formula is used:

$$A = \frac{B - C}{B} \times D$$

Project TAZ 1246 in the horizon year model is approximately 212 acres and contains assumed households totaling 1,757 dwelling units, which does not include the proposed project. As calculated, Project TAZ 1246 results in a density of 8.3 du/acre. In order to provide a conservative estimate of VMT reduction, the higher national typical residential unit density documented in the Handbook of 9.1 du/acre was used,

The proposed project, as contemplated, would develop 142 dwelling units on approximately 6.2 acres, resulting in 23.5 du/acre.

$$-34.8\% = \frac{23.5 - 9.1}{9.1} \times -0.22$$

As calculated above, the proposed project as designed is expected to reduce its VMT per service population by 33.4 percent. However, the Handbook has placed a reduction cap of 30 percent to limit the influence of any single built environmental factor (such as density). Projects that implement multiple land use strategies (e.g., density, design, diversity of uses) will show more of a reduction than relying on improvements from a single built environment factor. The proposed project as designed is expected to reduce its VMT impact by 30 percent, which exceeds the required 10.5 percent VMT reduction to be below the City's impact threshold.

Cumulative VMT Impacts

The proposed project's effect on VMT was calculated using the boundary method. Land use information representing the proposed land use changes contemplated by the proposed project were coded into the project TAZ to represent the "With Project" condition. Table 18 summarizes the

boundary VMT under the No Project and With Project scenarios for both baseline and cumulative conditions.

Table 18: Boundary VMT

Scenario	Baseline		Cumulative	
	No Project	With Project	No Project	With Project
Service Population	219,336	219,411	236,264	236,339
Boundary VMT	3,326,733	3,326,428	3,412,324	3,412,096
VMT per Service Population	15.2	15.2	14.4	14.4
Change in VMT per Service Population	0.0		0.0	

The boundary VMT was found to increase under the With Project scenario for both the baseline and cumulative conditions, as expected when increases in development are added to the model. However, to measure the efficiency of a land use project or land use plan, the boundary VMT was divided by the service population to frame an efficiency metric. The resulting VMT per service population was found to remain the same in the With Project scenario under both conditions.

Although the proposed project was not screened out from the City's screening criteria because it was initially found to generate VMT per service population exceeding the City's threshold, with the implementation of project design features through the inclusion of an increased residential density, the proposed project's VMT per service population would be reduced below the City's impact threshold. As such, impacts related to VMT would be less than significant.

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

Less than significant impact. The proposed project would develop 142 for-sale 2- and 4-story townhomes on an existing developed site. The proposed project would connect to existing Olympic Avenue and provide improved connectivity to Bear Street. The proposed project does not include sharp curves or dangerous intersections. As such, impacts would be less than significant.

d) Result in inadequate emergency access?

Less than significant impact. Signalized access to the project site would be provided via an existing driveway on Bear Street. An internal private roadway system would provide two-way access to each units' parking garage as well as guest parking spaces distributed throughout the site. A secondary emergency vehicle access exists at the east edge of the property near the terminus of Olympic Avenue. This gated access will remain to provide access for emergency vehicles. The access will be redesigned with a new Knox box gate and a pedestrian gate on a timer to accommodate pedestrian access into the project site during park hours, allowing existing neighbors to the east to utilize a more

direct walking path to Shiffer Park. As such, the proposed project would provide adequate emergency access to the site. Impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

Setting

According to the Mesa Water District's 2020 Urban Water Management Plan (UWMP), the City relies on Mesa Water meets all water demands through a combination of local groundwater, recycled water and, if needed, imported water. Mesa Water works together with two primary agencies, Municipal

Water District of Orange County (MWDOC) and OCWD, to ensure a safe and reliable water supply that will continue to serve the community in periods of drought and shortage. The sources of imported water supplies include water from the Colorado River and the California State Water Project (SWP) provided by Metropolitan Water District of Southern California (MET) and delivered through MWDOC.

As discussed in Section 1.4, Project Description, water services for the proposed project would be provided by Mesa Water District. The proposed project would connect to an existing 6-inch domestic water line within Olympic Avenue and an existing 12-inch water line within Bear Street. The proposed project would connect to an existing storm rain to the northwest of the project site and an existing 8-inch sanitary sewer lines within Olympic Avenue. An existing hydrant is located adjacent to the project site on Olympic Avenue as well as diagonally across Bear Street near the entrance of Shiffer Park.

Would the project:

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

Less than significant impact. The proposed project would be served by six new transformers. Electrical service is currently available in the project area and would be provided by SCE. Natural gas would be provided by Southern California Gas Company (SoCalGas) and communication systems would be provided by AT&T and Comcast Cable. The project site is currently developed, and the proposed project would connect to existing electrical, natural gas, and communication systems. The proposed project would connect to existing water lines and would be served by the Mesa Water District. Additionally, the proposed project would connect to existing sanitary sewer lines and would be served by the CMSD.

All existing storm drains within the project site would be removed and replaced. Additionally, the proposed project would connect to existing storm drains within Bear Steet. Stormwater from the proposed development would be intercepted by downspouts and new area drains that convey stormwater into two separate proprietary biofiltration BMPs to meet water quality objectives as required by the MS4 Permit. Stormwater flows would then enter the public storm drain.

Overall surface drainage would maintain the existing flow from south to north. The existing condition topography previously discussed has an overall grade tilting from southeast to northwest. However, the proposed condition will be graded from southwest to northeast. The subsurface storm drain network would retain the overall existing drainage pattern, maintaining the off-site discharge to storm drain facilities at the northwest corner of the site.

As the proposed storm drain system would be designed consistent with the WQMP, the addition of the new storm drain would not cause significant environmental effects. Further, the new transformers would connect to the existing underground vault and would not cause significant environmental effects. Impacts would be less than significant.

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

Less than significant impact. As discussed above, the proposed project would connect to existing water lines and system. The 2020 UWMP includes a supply and demand assessment for projected years between 2025 and 2045 for normal year, single dry year, and multiple years. For each scenario the UWMP indicates that the City would be able to meet the projected water demand based on the available supply. The demands are expected to be met through a combination of local groundwater, recycled water and, if needed, imported water. Mesa Water works together with two primary agencies, MWDOC and OCWD, to ensure a safe and reliable water supply that will continue to serve the community in periods of drought and shortage.[73] The UWMP accounts for projected water demand based on water consumption by single- and multi-family residences, commercial, and institutional/government customers. The UWMP also accounts for projected land use, population, economic growth, and future conservation.[74]

As noted in the UWMP, the City would have sufficient water supply for normal year, single dry year, and multiple years. According to the California Department of Finance the City has an average of 2.52 persons per household.[75] The proposed project would include the construction of up to 146 for-sale townhomes, which would increase the City's population by up to 368 persons based on the average household size.[76] Based on Mesa Water District's 2020 target consumption of 143 gallons per capita per day (GPCD), estimated water generation for a multi-family development is estimated to be 360.4 gallons per day (GPD) per unit. For the 146 units under the proposed project, this would result in 52,618.4 gallons or 0.16 acre-feet of water. As noted in the UWMP, the projected water use in 2025 is 16,354 acre-feet. Therefore, the small projected water use of the proposed project can be reasonably considered a part of the existing demand projections in the UWMP. As such, the proposed project would not significantly impact water supplies. Impacts would be less than significant.

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

Less than significant impact. As discussed above, the proposed project would connect to existing sanitary sewer lines. The CMSD is responsible for maintenance of the City's sewer and storm drain lines. CMSD maintains 224 miles of gravity sewer mains ranging from 8-inches to 30-inches in diameter. There are approximately 5,650 sewer manholes within the system, which are used as access points for cleaning and inspection purposes. As of 2019, CMSD's wastewater system contains a total of 47,471 connections to single-family residences, multi-family residences, commercial

[73] Mesa Water District. 2021. 2020 Urban Water Management Plan. June.

[74] Ibid.

[75] Ibid.

[76] 2.52 persons per residential unit * 146 residential units = 367.92 persons

properties, and industrial properties.[77] CMSD's wastewater collection system collects and transports wastewater from homes and businesses to the Orange County Sanitation District (OC San), where it is treated and recycled.[78]

A Municipal Service Review was prepared for OC San in 2020.[79] The purpose of the review was—in part—to review and study future growth in the service area and to determine whether OC San can efficiently, equitably, and reliably provide services. At the time of the review OC San was providing service to approximately 2.6 million people, and it was projected that by 2040 the OC San service area would include 2.8 million residents and 940,653 housing units. The review determined that OC San existing and planned operations and infrastructure are able to meet current and future service demands.[80] Utilizing OC San's average wastewater generation rate of 75 GPCD, the proposed project would result in approximately 189 gallons per unit per day or up to 27,594 total gallons of wastewater per day. Based on the Municipal Service Review conclusions, OC San would have adequate capacity to serve the wastewater demands of the proposed project. Therefore, impacts would be less than significant.

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

Less than significant impact. The CMSD is an independent special district formed in 1944 under the Sanitary District Act of 1923. CMSD is responsible for residential solid waste collection and its transmittal to recycling facilities for sorting, recycling, and disposal for the City of Costa Mesa and small portions of Newport Beach and unincorporated Orange County, serving a population of approximately 118,000.[81] Solid waste is disposed of in Orange County landfills. Currently, there are three active landfills that are owned and operated by the County, including Frank R. Bowerman Landfill in Irvine, Olinda Alpha Landfill in Brea, and Prima Deshecha Landfill in San Juan Capistrano. To ensure that the maximum permitted daily tonnage at a particular landfill is not exceeded, refuse trucks may have to transport material among one another. The majority of this waste is taken to the Olinda Alpha Sanitary Landfill. The Olinda Alpha Landfill is the closest facility to the project site and would likely be the solid waste facility most often receiving waste from the project site.[82] According to the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS), the Olinda Alpha Sanitary Landfill has a maximum daily throughput of

[77] Costa Mesa Sanitary District (CMSD). 2024. Sewer System Information. Website: https:// www.cmsdca.gov/sewer/sewer_system_information/index.php. Accessed November 12, 2024.

[78] Ibid.

[79] Orange County Local Agency Formation Commission (Orange County LAFCo). 2020. Municipal Service Review for the Orange County Sanitation District. Final Report. September 9, 2020.

[80] Ibid.

[81] Costa Mesa Sanitary District (CMSD). 2024. About Us. Website: https:// www.cmsdca.gov/who_we_are/about_us.php. Accessed November 12, 2024.

[82] California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details, Olinda Alpha Landfill. Website: https:// www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093. Accessed November 12, 2024.

8,000 tons per day and a remaining capacity of 17,500,000 cubic yards as of October 2020.[83] Prima Deshecha Landfill has a maximum daily throughput of 4,000 tons per day and a remaining capacity of 128,800,000 cubic yards as of September 2023.[84] Frank R. Bowerman Landfill has a maximum daily throughput of 11,500 tons per day and a remaining capacity of 205,000,000 cubic yards as of February 2008.[85]

CalRecycle provides a solid waste generation factor to estimate the amount of solid waste generated by residential projects.[86] Using the generation rate of 12.23 pounds (lbs) per household per day for residential development, the proposed project would generate approximately 1,785.58 pounds per day of solid waste, or approximately 0.89 tons per day (based on 146 residential units)—which is well within the maximum daily capacity and remaining capacity of the three landfills. Therefore, Orange County landfills would have sufficient capacity to serve the proposed project and solid waste generated during construction and operations would represent a negligible increase compared to the daily permitted tonnage. Additionally, the proposed project would also include recycling programs to reduce solid waste and comply with all applicable regulations for solid waste. The impact would be less than significant, and no mitigation is required.

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

Less than significant impact. The City complies with all federal, State, and local statutes and regulations related to solid waste. Regulations specifically applicable to the proposed project include the California Integrated Waste Management Act of 1989 (AB 939), SB 2202, SB 1016, 2019 CALGreen Section 4.408, and AB 341, which requires multiple-family residential development and commercial uses to implement recycling programs.

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

[83] California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details, Olinda Alpha Landfill. Website: https:// www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093. Accessed November 12, 2024.

[84] California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details, Prima Deshecha Landfill. Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085. Accessed November 12, 2024.

[85] California Department of Resources Recycling and Recovery (CalRecycle). 2024. SWIS Facility/Site Activity Details, Frank R. Bowerman Landfill

[86] California Department of Resources Recycling and Recovery (CalRecycle). 2024. Estimated Solid Waste Generation Rates. Website: https:// www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed November 12, 2024.

SB 2202 made a number of changes to the municipal solid waste diversion requirements under A 939. These changes included a revision to the statutory requirement for 50 percent diversion of solid waste to clarify that local governments shall continue to divert 50 percent of all solid waste on and after January 1, 2000.

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

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

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

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

Mitigation Measures

None required.

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

Environmental Evaluation

Setting

The CAL FIRE FHSZ Map indicates that the project site is not within an SRA. The closest SRA is approximately 9.05 miles northeast of the project site. No part of Costa Mesa is listed as an SRA or located within a Very High FHSZ.[87]

[87] City of Costa Mesa. 2025. General Plan Safety Element. Website: https://www.costamesaca.gov/home/showpublisheddocument/34702/636740022576330000. Accessed November 12, 2024.

Would the project:

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

No impact. The proposed project is not located within an SRA. The Costa Mesa Disaster Plan serves as the community's EOP, which provides guidance during emergency situations and natural disasters. The plan addresses potential large-scale disasters that require a coordinated and immediate response. The General Plan Safety Element designates I-405 and SR-73 as evacuation routes for the City. The project site is within 0.25 mile of each of these evacuation routes and both would serve the project site in the event of an emergency.

The proposed project would not impede use of the road for emergencies or access for emergency response vehicles. Therefore, the proposed project would not result in inadequate emergency access. As such, no impact would occur.

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

No impact. The proposed project is not located within an SRA. The project site is located in an urbanized, flat area and does not include features with the potential to exacerbate wildfire. The site and its surrounding area have no history of wildfire.[88] As described above, the project site is not located in an SRA Very High FHSZ. Therefore, the proposed project would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

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

No impact. The proposed project is not located within an SRA or Very High FHSZ. The project site is located in an urbanized area of the City and would connect to existing infrastructure that currently serves the site and the surrounding area. The proposed project would not include the installation of infrastructure that would exacerbate wildfire risk. Therefore, the proposed project would not exacerbate fire risk. No impact would occur.

[88] California Department of Forestry and Fire Protection (CAL FIRE). 2020. California Wildfire History Map. Website: https://projects.capradio.org/california-fire-history/#6/38.58/-121.49. Accessed October 3, 2024.

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

No impact. The proposed project is not located within an SRA. The project site is flat and is not located within an area identified as having a potential for landslides by the California Geological Survey.[89] As described above, the project site is not located in an SRA within a Very High FHSZ. The proposed project does not have other features with the potential to exacerbate wildfire, downstream flooding, or landslide risks. Furthermore, the proposed project is not located in an area designated as an area of 0.2 percent annual chance flood hazard zone and would not be subject to flood hazards.[90] Therefore, the proposed project would not contribute to runoff or flooding. No impact would occur.

Mitigation Measures

None required.

[89] California Department of Conservation. 2024. Geologic Hazards. Website: https://maps.conservation.ca.gov/geologichazards/DataViewer/index.html. Accessed October 3, 2024.

[90] Federal Emergency Management Agency (FEMA). 2024. FEMA's National Flood Hazard Layer Viewer. Website: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd&extent=-117.93768185224067,33.63323283538241,-117.81803387250437,33.70466581971302. Accessed October 3, 2024.

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

Environmental Evaluation

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

Less than significant impact with mitigation incorporated. As concluded in Section 2.4, Biological Resources, the project site has the potential to provide suitable habitat for Cooper's hawk and other nesting birds. These impacts would be reduced with the implementation of MM BIO-1a and MM BIO-1b. The proposed project would not affect wildlife or wildlife corridors or impede the use of a wildlife nursery, would not conflict with local policies and ordinances protecting biological resources, and would not conflict with any local, regional, or State conservation plans. Therefore, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. As evaluated and disclosed in Section 2.5, Cultural Resources and Tribal Cultural Resources, the project site does not contain known historically or culturally significant resources, and the potential impact to unidentified archaeological resources is low due to the site's developed nature. However, implementation of MM CUL-1, MM CUL-2, and MM CUL-3 would be required to reduce any potential impacts related to the unanticipated discovery of human remains and TCRs. Therefore, project implementation would not eliminate important examples of the major periods of California history. Impacts would be less than significant with the implementation of mitigation.

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

Less than significant impact with mitigation incorporated. The proposed project would not result in any cumulative impact for those thresholds that were determined to be "no impact" as discussed above. For those thresholds that were determined to be less than significant or less than significant with mitigation, the proposed project would not have a cumulatively considerable contribution to any cumulative impact. Potential impacts associated with past and present projects are considered as part of the baseline conditions, and reasonably foreseeable future development are considered in terms of agency projections and adopted planning documents. Accordingly, as discussed throughout this document, there are no known cumulative impacts.

Further, as discussed throughout this document, the proposed project would not have a cumulatively considerable contribution to the less than significant cumulative impacts. The proposed project would

include standard conditions that would be imposed on the proposed project pertaining to procedures to protect air quality, and mitigation measures would be required to reduce impacts related to biological resources, cultural resources, and geology and soils. Compliance with these standard conditions would minimize project impacts and ensure that project impacts remain less than significant. Because of the number of trips generated by the proposed project, the proposed project would not result in cumulatively considerable impacts related to traffic and circulation. No significant adverse environmental effects on human beings would result, either directly or indirectly, from the proposed project. Cumulatively, the proposed project would not result in any significant impacts that would substantially combine with impacts of other current or probable future impacts. Therefore, the proposed project, in conjunction with other future development projects, would not result in any cumulatively considerable impacts. As such, impacts would be less than significant.

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

Less than significant impact with mitigation incorporated. There are no known substantial adverse effects on human beings that would be caused or exacerbated by the proposed project. As concluded within these environmental impact analyses and as summarized above, the proposed project would result in less than significant environmental impacts. Project compliance with the mitigation measures contained in this Draft IS/MND would ensure that the proposed project's impacts on human beings are less than significant. Additionally, the proposed project would have a beneficial impact by creating needed housing within the City that would further the goals of the City's General Plan to provide additional housing options for various income levels. Impacts are less than significant, and no mitigation is required.

Mitigation Measures

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

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3 - LIST OF PREPARERS

FirstCarbon Solutions
250 Commerce, Suite 210
Irvine, CA 92602
Phone: 714.508.4100

Project Director ..... Mary Bean
Senior Project Manager ..... Cecilia So
Project Manager ..... Brittany Hagen, MBA
Legal Counsel ..... Megan Starr, JD
Director of Cultural Resources ..... Dana DePietro, PhD, RPA
Senior Archaeologist ..... Stefanie Griffin
Director of Noise and Air Quality ..... Phil Ault, LEED® AP
Air Quality Specialist ..... Kimber Johnson
Air Quality Specialist ..... Ji Luo
Noise Analyst ..... Sara Landucci
Environmental Services Analyst ..... Alex Ortiz
Environmental Services Analyst ..... Henry Welch
Senior Managing Editor ..... Susie Harris
Technical Editor ..... Sarah Vine
Publications Coordinator ..... Alec Harris
Document Specialist ..... Melissa Ramirez
GIS/Graphics ..... Karlee McCracken
GIS/Graphics ..... Sebastian Macias

South Environmental—Technical Subconsultant
2061 North Los Robles Avenue, Suite 205
Pasadena, California 91104
Phone: 626.314.2961

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