

JANUARY 2025



PUBLIC REVIEW DRAFT  
ENVIRONMENTAL IMPACT REPORT

# HIVE LIVE



PREPARED FOR:



PREPARED BY:

**Michael Baker**  
INTERNATIONAL

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**PUBLIC REVIEW DRAFT  
ENVIRONMENTAL IMPACT REPORT**

SCH No. 2024060115

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**Hive Live**

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**LEAD AGENCY:**



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JN 200230

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# DRAFT EIR AND APPENDICES

The Notice of Availability (NOA), Draft EIR, and Appendices are available for download at the City's official website.

<https://www.costamesaca.gov/government/departments-and-divisions/economic-and-development-services/planning/environmental-notice-and-reports>

In addition to the City's official website, these documents are also available for review at the Office of Planning and Research's (OPR) CEQAnet online database, under SCH No. 2024060115:

<https://ceqanet.opr.ca.gov/>



## Acronyms and Abbreviations

°C	Degrees Celsius
°F	Degrees Fahrenheit
2020-2045 RTP/SCS	2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, also Connect SoCal 2024
2022 AQMP	2022 Air Quality Management Plan
2022 Scoping Plan	2022 Scoping Plan for Achieving Carbon Neutrality
AAA	Interinsurance Exchange of the Automobile Club
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACM	Asbestos-containing Material
AELUP	Airport Environs Land Use Plan
AF	Acre-feet
AFY	Acre-feet per Year
amsl	above mean sea level
ANSI	American National Standards Institute
APN	Assessor’s Parcel Number
AQMP	Air Quality Management Plan
AR4	2007 Intergovernmental Panel on Climate Change Fourth Assessment Report
ATP	Active Transportation Plan
BAAQMD	Bay Area Air Quality Management District
Basin	South Coast Air Basin
Basin Plan	Water Quality Control Plan for the Santa Ana River Basin (Region 8)
BAU	Business as Usual
bgs	Below Ground Surface
BMP	Best Management Practice
BP	Before Present
BTU	British Thermal Units
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model Version 2016.3
Cal/EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Cal/OSHA	California Occupational Safety and Health Administration
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission



## Acronyms and Abbreviations

CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFC	Chlorofluorocarbons
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
cfs	Cubic Feet per Second
CGS	California Geological Survey
CH <sub>4</sub>	Methane
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Projects
CIRP	California Inventory of Rare and Endangered Plants
City	City of Costa Mesa
CMFD	Costa Mesa Fire & Rescue Department
CMMC	Costa Mesa Municipal Code
CMPD	Costa Mesa Police Department
CMSD	Costa Mesa Sanitary District
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	carbon dioxide equivalent
COMM	Commercial and Sportfishing
County	Orange County
CPT	Cone Penetration Test
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Condition
CRHR	California Register of Historical Resources
CTC	County Transportation Commissions
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	Decibel
dBA	A-weighted Decibel
DDD	dichlorodiphenyldichloroethane
DDE	dichlorodiphenyldichloroethylene
DDT	dichlorodiphenyltrichloroethane
DMA	Drainage Management Areas
DOF	California Department of Finance
Draft EIR	Draft Environmental Impact Report
DSOD	California Division of Safety of Dams
DTSC	Department of Toxic Substances Control
DU	Dwelling Unit
DWR	Department of Water Resources



## Acronyms and Abbreviations

EC.....	Electrical Conductivity
EDD .....	California Employment Development Department
EIR.....	Environmental Impact Report
EO.....	Executive Order
EOP .....	Emergency Operations Plan
EPA.....	Environmental Protection Agency
EPCRA.....	Emergency Planning and Community Right-to-Know Act of 1986
EST.....	Estuarine Habitat
EV .....	Electric Vehicle
EVP.....	Emergency Vehicle Preemption
FAA.....	Federal Aviation Administration
FAR.....	Federal Aviation Regulation
FAR.....	Floor Area Ratio
FCAA.....	Federal Clean Air Act
FE.....	Federally Endangered
FEMA.....	Federal Emergency Management Agency
FESA.....	Federal Endangered Species Act
FHWA .....	Federal Highway Administration
FIRM.....	Flood Insurance Rate Map
FR.....	Federal Register
FTA.....	Federal Transit Administration
G/Ja.....	Gale/Jordan Associates, Inc.
General Plan .....	City of Costa Mesa General Plan
GHG.....	Greenhouse Gases
GMP.....	Groundwater Management Plan
gpad.....	gallons per acre per day
gpd .....	Gallons per Day
GPM.....	Gallons per Minute
GWh.....	Gigawatt-hour
GWP .....	Global Warming Potential
GWRS.....	Groundwater Replenishment System
H <sub>2</sub> S .....	water vapor
HAZWOPER.....	Hazardous Waste Operations and Emergency Response
HCD.....	California Department of Housing and Community Development
HCFC.....	Hydrochlorofluorocarbons
HFC.....	Hydrofluorocarbons
HI .....	Hazard Index
HP .....	Horsepower
Housing Element.....	City of Costa Mesa 2021-2029 Housing Element
HQTA.....	High Quality Transit Area
HRA .....	Health Risk Assessment
HREC.....	Historical Recognized Environmental Condition
HUD .....	US Department of Housing and Urban Development
HVAC.....	Heating, Ventilation, and Air Conditioning
I-405 Freeway .....	Interstate 405 Freeway; San Diego Freeway



## Acronyms and Abbreviations

IBC	International Building Code
IEPR	Integrated Energy Policy Reports
IP	Industrial Park (General Plan land use designation)
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
IRWD	Irvine Ranch Water District
IRWMP	Integrated Regional Water Management Plan
JWA	John Wayne Airport
km	kilometers
kWh	Kilowatt-hour
LBP	Lead-based Paint
lbs/day	Pounds Per Day
LCFS	Low Carbon Fuel Standard
L <sub>dn</sub>	Day-Night Average Sound Level
LEPC	Local Emergency Planning Committees
L <sub>eq</sub>	Equivalent Continuous Noise Level/Short-term
LHMP	Local Hazard Mitigation Plan
LID	Low Impact Development
L <sub>max</sub>	Maximum Sound Level
L <sub>min</sub>	Minimum Sound Level
LOS	Level of Service
LST	Localized Significance Threshold
MAR	Marine Habitat
Master Plan	Hive Live Master Plan
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Level
MEIR	Maximum Exposed Individual Resident
MEP	Maximum Extent Practicable
Metropolitan	Metropolitan Water District of Southern California
MFI	Median Family Income
Mg/kg	milligrams per kilograms
mg/L	Milligrams per Liter
mg/m <sup>3</sup>	Milligrams per cubic meter
mgd	Million Gallons per Day
Michael Baker	Michael Baker International
MLD	Most Likely Descendent
Mm	Millimeters
MMT	Million Metric Tons
MND	Mitigated Negative Declaration
mph	Miles Per Hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	municipal storm sewer system
MTCO <sub>2e</sub>	Metric Tons of Carbon Dioxide Equivalent
MUN	Municipal and Domestic Supply



## Acronyms and Abbreviations

Municipal Code .....	Costa Mesa Municipal Code
MW.....	Megawatt
MWD .....	Mesa Water District
MWDOC.....	Municipal Water District of Orange County
MWELo .....	Model Water Efficient Landscape Ordinance
MWh .....	Megawatt-hour
MWS .....	Modular Wetlands System
N <sub>2</sub> O.....	Nitrous Oxide
NAAQS.....	National Ambient Air Quality Standards
NAHC .....	Native American Heritage Commission
NCCP/HCP .....	County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan
ND .....	Negative Declaration
NDSP.....	National Dam Safety Program
NEHRP .....	National Earthquake Hazard Reduction Program
NFIP .....	National Flood Insurance Program
NHMLAC.....	Natural History Museum of Los Angeles County
NHPA.....	National Historic Preservation Act
NHTSA .....	National Highway Traffic and Safety Administration
NIOSH.....	National Institute for Occupational Safety and Health
NIRC.....	Newport-Inglewood-Rose Canyon Fault Zone
NMUSD .....	Newport-Mesa Unified School District
NO .....	Nitrogen Oxide
NO <sub>2</sub> .....	Nitrogen Dioxide
NOI.....	Notice of Intent
NOP.....	Notice of Preparation
NOVA .....	NOVA Services
NO <sub>x</sub> .....	Nitrogen Oxides
NPDES.....	National Pollutant Discharge Elimination System
NRHP.....	National Register of Historic Places
NWL .....	Natural and Working Lands
O&M.....	Operation and Maintenance
O <sub>3</sub> .....	Ozone
OC Basin .....	Orange County Groundwater Basin
OCCMP.....	Orange County Congestion Management Program
OCFA .....	Orange County Fire Authority
OCFCD .....	Orange County Flood Control District
OCHCA.....	Orange County Health Care Agency
OCPL.....	Orange County Public Library
OC SCS.....	Orange County Sustainable Communities Strategy
OCSd .....	Orange County Sanitation District
OCTA .....	Orange County Transportation Authority
OCWD .....	Orange County Water District
OES.....	Office of Emergency Services
OPR.....	Governor’s Office of Planning and Research



## Acronyms and Abbreviations

OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PCE	Passenger Car Equivalent
PDC	Planned Development Commercial
PDI	Planned Development Industrial (zoning designation)
PDR-NCM	Planned Development Residential – North Costa Mesa
PFC	Perfluorocarbons
Phase I ESA	Phase I Environmental Site Assessment
PM <sub>10</sub>	Respirable Particulate Matter
PM <sub>2.5</sub>	Fine Particulate Matter
PMI	Point of Maximum Impact
PMP	Project Monitoring Plan
POTW	Publicly Owned Treatment Works
ppb	Parts Per Billion
ppd	Pounds per Day
ppm	Parts Per Million
PPP	Plans, Policies, Programs
Ppt	parts per trillion
PPV	Peak Particle Velocity
Preliminary WQMP	The Hive Live Preliminary Water Quality Management Plan
Project	Hive Live
PST	Pacific Standard Time
PUC	Public Utilities Code
RARE	Rare, Threatened or Endangered Species
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
REC1	Water Contact Recreation
REC2	Non-contact Water Recreation
REL	Reference Exposure Level
RFS	Renewable Fuel Standard
RHNA	Regional Housing Needs Assessment
RMS	Root Mean Square
ROG	Reactive Organic Gas
RPS	Renewables Portfolio Standard
RRP	Renovation, Repair and Painting
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCA	Standard Conditions of Approval
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center





## Acronyms and Abbreviations

SCE	Southern California Edison
SCS	Sustainable Communities Strategies
SE	State Endangered
SF <sub>6</sub>	Sulfur Hexafluoride
SFHA	Special Flood Hazard Area
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazard Mapping Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCP	Short-lived Climate Pollutants
SLF	Sacred Lands File
SO <sub>2</sub>	Sulfur Dioxide
SoCalGas	Southern California Gas Company
Specific Plan	North Costa Mesa Specific Plan
SR	State Route
SR-55	State Route 55; Costa Mesa Freeway
SR-73	State Route 73; San Joaquin Hills Transportation Corridor
SR-91	State Route 91
SRA	Source Receptor Area
STLC	Soluble Threshold Limit Concentrations
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TCR	Tribal Cultural Resources
TDM	Transportation Demand Management
TDS	Total Dissolved Solids
TERPS	Terminal En Route Procedures
TGD	Technical Guidance Document
TIA Guidelines	City of Costa Mesa Transportation Impact Analysis Guidelines
TMDL	Total Maximum Daily Load
TPA	Transit Priority Area
TRPH	Total Recoverable Petroleum Hydrocarbons
TSCA	Toxic Substances Control Act
TSD	Treatment, Storage, and Disposal
TSF	Thousand Square Feet
TSM	Transportation System Management
TTCP	Traditional Tribal Cultural Places
TTLC	Total Threshold Limit Concentrations
µg/m <sup>3</sup>	Micrograms per Cubic Meter
UBC	Uniform Building Code
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VTM	Vehicle Miles Traveled



## Acronyms and Abbreviations

VOC.....	Volatile Organic Compound
WARM.....	Warm Freshwater Habitat
WILD.....	Wildlife Habitat
WL.....	Watch List
Working Group.....	SCAQMD GHG CEQA Significance Threshold Working Group
WQMP.....	Water Quality Management Plan
WSA .....	Water Supply Assessment/Mesa Water District Water Supply Assessment Hive Live Development



## Chapter 1.0 Executive Summary



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# 1. Executive Summary

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## 1.1 INTRODUCTION

This Draft Environmental Impact Report (Draft EIR) addresses the environmental effects associated with the implementation of the proposed Hive Live (the project). The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. The intent of this EIR is to analyze the potential environmental consequences of the project, inform the public, and support informed decisions by the City of Costa Mesa and other local and State governmental agency decision makers. Issues considered potentially significant are addressed in Chapter 5, *Environmental Analysis*; issues determined to have no impact and how the determinations were made are provided in Chapter 8, *Impacts Found Not to Be Significant*.

This Draft EIR has been prepared pursuant to the requirements of CEQA and the City of Costa Mesa's CEQA procedures. The City of Costa Mesa, as the lead agency, has reviewed and revised all submitted drafts, technical studies, and reports as necessary to reflect its own independent judgment, including reliance on City technical personnel from other departments and review of all technical subconsultant reports.

Data for this Draft EIR are derived from field observations; discussions with affected agencies; analysis of adopted plans and policies; review of available studies, reports, data, and similar literature; and specialized environmental assessments (air quality and greenhouse gas emissions, cultural resources, geological resources, hazards and hazardous materials, hydrology and water quality, noise, transportation, and water supply).

## 1.2 ENVIRONMENTAL PROCEDURES

This Draft EIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. CEQA established six main objectives for an EIR:

1. Disclose to decision makers and the public the significant environmental effects of proposed activities.
2. Identify ways to avoid or reduce environmental damage.
3. Prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. Disclose to the public reasons for agency approval of projects with significant environmental effects.
5. Foster interagency coordination in the review of projects.
6. Enhance public participation in the planning process.



## 1. Executive Summary

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis, and full disclosure of the environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

An EIR is one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a statement of overriding considerations if significant impacts cannot be avoided.

### 1.2.1 EIR Format

**Chapter 1. Executive Summary:** Summarizes the background and description of the proposed project, the format of this EIR, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

**Chapter 2. Introduction:** Describes the purpose of this EIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

**Chapter 3. Project Description:** A detailed description of the project, including its objectives, its area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this EIR.

**Chapter 4. Environmental Setting:** A description of the physical environmental conditions in the vicinity of the project as they existed at the time the notice of preparation was published, from local and regional perspectives. These provide the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

**Chapter 5. Environmental Analysis:** Each environmental topic is analyzed in a separate section that discusses: the thresholds used to determine if a significant impact would occur; the methodology to identify and evaluate the potential impacts of the project; the existing environmental setting; the potential adverse and beneficial effects of the project; the level of impact significance before mitigation; the mitigation measures for the proposed project; the level of significance after mitigation is incorporated; and the potential cumulative impacts of the proposed project and other existing, approved, and proposed development in the area.

**Chapter 6. Significant Unavoidable Adverse Impacts:** Describes the significant unavoidable adverse impacts of the proposed project.

**Chapter 7. Alternatives to the Proposed Project:** Describes the alternatives and compares their impacts to the impacts of the proposed project. Alternatives include the No Project/No Development Alternative, No



## 1. Executive Summary

Project/Existing Zoning Alternative, Commercial Building Alternative, and a Reduced Development Intensity Alternative.

**Chapter 8. Effects Found Not to Be Significant:** Briefly describes the potential impacts of the project that were determined not to be significant by the Initial Study and were therefore not discussed in detail in this EIR.

**Chapter 9. Irreversible and Irretrievable Commitment of Resources:** Describes the significant irreversible environmental changes associated with the project.

**Chapter 10. Growth-Inducing Impacts of the Project:** Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical environmental impacts.

**Chapter 11. Organizations and Persons Consulted:** Lists the people who prepared this EIR as well as the people and organizations that were contacted during the preparation of this EIR.

**Chapter 12. Bibliography:** The technical reports and other sources used to prepare this EIR.

**Appendices:** The appendices for this document (in PDF format) comprise these supporting documents.

### 1.2.2 Type and Purpose of this Draft EIR

This Draft EIR has been prepared as a “Project EIR,” defined by Section 15161 of the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3). This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project including planning, construction, and operation.

## 1.3 PROJECT LOCATION

The approximately 14.25-acre project site is located at 3333 Susan Street, Costa Mesa, 92626. The site is specifically bound by Sunflower Avenue to the north, Susan Street to the east, South Coast Drive to the south, and a public trail (the “Rail Trail”), a pump station (operated by Mesa Water District), and Anduril Industries to the west. Regional access to the project site from the west and east is available via Interstate 405 (I-405), from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, South Coast Drive, and Sunflower Avenue are the major roadways that provide local access to the project site.

## 1.4 PROJECT SUMMARY

The project proposes to demolish the existing Hive Creative Office Campus and former Los Angeles Chargers practice field and construct a new multi-phased master-planned residential community (“Hive Live”). The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space. (i.e., publicly accessible open space area, private common open space, and private balconies. The proposed project requires approval of a General Plan



## 1. Executive Summary

Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement and Density Bonus Agreement.

### 1.5 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Areas of controversy known to the City at this time include transportation impacts.

Prior to preparation of the EIR, a Notice of Preparation (NOP) was distributed for comment, which extended from June 6, 2024 to July 5, 2024. Additionally, a public scoping meeting was conducted by the City on June 17, 2024 at the Norma Hertzog Community Center, 1845 Park Avenue, Costa Mesa, California 92627. NOP comment letters received during the review period are summarized in [Chapter 2, Introduction](#) (see [Section 2.3, Scoping Process](#), and [Appendix A, NOP Comments](#)).

The City invites any and all input and comments from interested agencies, persons, and organizations regarding the Notice of Availability (NOA) for the Hive Live Public Review Draft EIR. Commenters must submit any comments in response to the NOA beginning January 21, 2025 and ending at March 6, 2025.

### 1.6 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION

The City has determined that the project would result in no impact to the following topical areas as substantiated in [Chapter 8, Impacts Found Not to Be Significant](#):

- Agriculture and Forestry Resources;
- Mineral Resources; and
- Wildfire.

The City determined the 17 environmental factors required additional analysis, nine of which may result in potentially significant impacts without mitigation if the proposed project is implemented.

#### 1.6.1 Applicable PPPs and SCAs

This listing includes the identified applicable regulatory requirements, such as plans, policies, programs (PPP), based on Federal, State, or local laws currently in place, or standard conditions of approval (SCA) applied to the project, if applicable.

#### AESTHETICS

PPP AES-1 The City of Costa Mesa would verify the proposed project is developed pursuant to the development standards included in the North Costa Mesa Specific Plan.

PPP AES-2 In conjunction with the review and approval of any master plan for the areas containing the four-story industrial/office park buildings (and parking structures, as appropriate) north of





## 1. Executive Summary

South Coast Drive and west of Susan Street, the three-story townhomes (south of Sunflower Avenue and east of Susan Street), and the five-story office buildings (and parking structures, as appropriate) south of South Coast Drive and west of Fairview Road, the following provisions shall be applied:

- Provision of sufficient setbacks between buildings and Sunflower Avenue, Susan Street, South Coast Drive, Fairview Road, adjacent to the 1-405, and from other buildings to ensure that buildings do not create a "canyon effect.
- Use of low-reflective materials on buildings and parking structures that do not promote glare.
- Provision for architectural design, hardscape features, and landscaping open space areas, in surface parking areas, or on parking structures that reflect a consistent design theme.

PPP AES-2 Shade/shadow impacts of buildings in excess of two stories to surrounding land uses shall be considered during the project review.

PPP AES-3 Lighting for parking structures and lots shall be directed away and/or shielded from adjacent residential areas where applicable.

SCA AE-1 The City of Costa Mesa would be required to verify the proposed project is architecturally compatible (pertaining to building materials, style, colors, etc.) with the existing surrounding development and consistent with the North Costa Mesa Specific Plan during the plan check review process.

SCA AE-2 No modification(s) of the approved building elevations including, but not limited to, changes that increase the building height, removal of building articulation, or a change of the finish material(s), would be made during construction without prior Planning Division written approval. Failure to obtain prior Planning Division approval of the modification could result in requirement of the applicant to (re)process the modification through a discretionary review process, or modify the construction drawings to reflect the approved plans.

SCA AE-3 No exterior roof access ladders, roof drain scuppers, or roof drain downspouts would be permitted. This condition relates to visually prominent features of scuppers or downspouts that not only detract from the architecture but may be spilling water from overhead without an integrated gutter system which would typically channel the rainwater from the scupper/downspout to the ground. An integrated downspout/gutter system painted to match the building would comply with the condition. This condition would be completed under the direction of the Planning Division.



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- SCA AE-4 Permits would be required for all signs according to the provisions of the Costa Mesa Sign Ordinance. Freestanding signs would be subject to review and approval by the Planning Division/Development Services Director to ensure compatibility in terms of size, height, and location with the proposed/existing development and existing freestanding signs in the project vicinity.
- SCA AE-5 Prior to the issuance of the first building permit, the Applicant shall submit a Lighting Plan and Photometric Study for approval by the Development Services Director or designee. The Lighting Plan and Photometric Study shall demonstrate compliance with the following:
- Lighting design and layout shall limit spill light to no more than 0.5 foot candle at the property line of the surrounding neighbors, consistent with the level of lighting that is deemed necessary for the safety and security purposes on-site; and.
  - Glare shields may be required for select light standards.
- SCA AES-6 On-site lighting shall be provided in all parking areas, vehicular access ways, and along major walkways. The lighting shall be directed onto driveways and walkways within the project and away from dwelling units and adjacent properties to minimize light and glare impacts, and shall be of a type approved by the Development Services Director.

### AIR QUALITY

- PPP AIR-1 Construction activities are required to be conducted in compliance with 13 California Code of Regulations (CCR) Section 2499, which requires nonessential idling of construction equipment is restricted to five minutes or less.
- PPP AIR-2 Construction activities are required to comply with applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, including, but not limited, to the following:
- Rule 402, *Nuisance*, which states a project shall not “discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property;” and
  - Rule 1113, *Architectural Coatings*, which limits the volatile organic compound content of architectural coatings.
- PPP AIR-3 Construction activities are required to recycle/reuse at least 50 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard, and to use green building materials such as those materials that are rapidly renewable or resource efficient, and recycled and manufactured in an environmentally



## 1. Executive Summary

friendly way, for at least ten percent of the project, as specified in the California Department of Resources Recycling and Recovery Sustainable Green Building Program.

SCA PLNG-14 Demolition permits for existing structure(s) shall be obtained and all work and inspections completed prior to final building inspections. Applicant is notified that written notice to the South Coast Air Quality Management District (SCAQMD) may be required ten (10) days prior to demolition.

SCA AQMD-3 Applicant shall contact the South Coast Air Quality Management District (SCAQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by the district.

Refer to [Section 5.9, \*Hydrology and Water Quality\*](#), for a discussion of SCA HYD-1.

### CULTURAL RESOURCES

PPP CUL-1 The proposed project is required to comply with California Public Resources Code 5097.9-5097.991 (which protects Native American historical and cultural resources, and sacred sites) and Health and Safety Code Section 7050.5 (pertaining to the discovery or recognition of any human remains).

### ENERGY

PPP EN-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and the California Green Building Standards Code (CALGreen; Title 24, Part 11). The 2022 Building Energy and Efficiency Standards and 2022 CALGreen are most current standards and are updated tri-annually with a goal to achieve zero net energy for residential buildings and non-residential buildings.

PPP EN-2 To reduce water demands and energy use associated with landscape water use, the proposed project is required to implement a landscaping palette emphasizing drought-tolerant plants and water-efficient irrigation techniques consistent with provisions of the City's Model Water Efficient Landscape Ordinance (MWELO; Ordinance No. 16-03) requirements.

PPP EN-3 To reduce water demands and associated energy use associated with indoor water use, the proposed project is required to provide plumbing fixtures that meet the United States Environmental Protection Agency (EPA) Certified WaterSense, most current and applicable version California Green Building Standards Code (CALGreen) standards or equivalent, faucets, toilets, and other plumbing fixtures. The water conservation strategy is required to demonstrate a minimum 20 percent reduction in indoor water usage compared to baseline water demand (total expected water demand without implementation of the water conservation strategy).

PPP EN-4 The construction contractor is required to recycle/reuse at least 65 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber,



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metal, and cardboard, and to use “green building materials” such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, as specified in the California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program.

PPP EN-5 Per the most current and applicable version California Green Building Standards Code (CALGreen) standards, construction of the proposed project is required to include installation of electric vehicle (EV) charging stations and designated EV parking at non-residential and residential buildings. Preferential parking for low-emitting, fuel-efficient, and carpool/car share/van vehicles is required in all parking areas.

PPP EN-6 Construction contractors are required to minimize non-essential idling of construction equipment during construction in accordance with California Code of Regulations (CCR) Section 2449, Title 13, Article 4.8, Chapter 9.

### GEOLOGY AND SOILS

PPP GEO-1 As required by Municipal Code Section 5-1, *Construction Codes Adopted*, the project is required to comply with the most recent edition of the California Building Code (CBC). Adherence to the most recent edition of the CBC would preclude significant adverse effects associated with seismic hazards.

PPP GEO-2 As required by Municipal Code Section 5-1, *Construction Codes Adopted*, the project is required to comply with the recommendations outlined in a project-specific geotechnical report, such as the *Geotechnical Investigation, The Hive – Proposed Multi-Family Residential Development, Susan Street and West Sunflower Street, Costa Mesa, California* (Geotechnical Investigation), prepared by NOVA Services (NOVA), dated February 29, 2024.

Refer to Section 5.9, *Hydrology and Water Quality*, for a discussion of PPP HYD-1 through PPP HYD-3, PPP HYD-4, and PPP HYD-6.

Refer to Section 5.9, *Hydrology and Water Quality*, for a discussion of SCA HYD-1 through SCA HYD-3.

### GREENHOUSE GAS EMISSIONS

Refer to Section 5.4, *Energy*, for PPP EN-1 through PPP EN-3 and PPP EN-5.

### HAZARDS AND HAZARDOUS MATERIALS

PPP HAZ-1 A comprehensive asbestos and lead-based paint (LBP) survey shall be conducted at the project site. Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing material (ACM) or LBP shall be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District’s (SCAQMD’s) Rule 1403
- California Health and Safety Code (Section 39650 et seq.)



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- The California Occupational Safety and Health Administration (Cal/OSHA) Administration Regulations (California Code of Regulations [CCR] Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])
- Code of Federal Regulations (CFR) (Title 40, Part 61 [asbestos]; Title 40, Part 763 [asbestos]; Title 40, Part 745 [lead]; and Title 29, Part 1926 [asbestos and lead])
- U.S. Environmental Protection Agency's (EPA's) Lead Renovation, Repair and Painting Program Rules and Residential Lead-Based Paint Disclosure Program
- Sections 402, 404, and 403, as well as Title IV of the Toxic Substances Control Act (TSCA).

PPP HAZ-2 The removal of other hazardous materials, such as polychlorinated biphenyls (PCBs) containing less than 50 parts per million (ppm) of PCB concentrations, shall be completed by the local purveyor (i.e., Southern California Edison) in accordance with applicable regulations pursuant to 40 Code of Federal Regulations (CFR) 761 (PCBs) by workers with HAZWOPER training, as outlined in 29 CFR 1910.120 and 8 California Code of Regulations (CCR) 5192.

### HYDROLOGY AND WATER QUALITY

PPP HYD-1 National Pollutant Discharge Elimination System (NPDES): General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, NPDES No. CAS000002. Compliance requires filing a Notice of Intent (NOI), a Risk Assessment, a Site Map, a Storm Water Pollution Prevention Plan (SWPPP) with associated best management practices (BMPs), an annual fee, and a signed certification statement.

PPP HYD-2 Orange County MS4 Permit (R8-2009-0030, as amended by Order No. R8-2010-0062, or most recent): The MS4 Permit requires new development and redevelopment projects to:

- Control contaminants into storm drain systems;
- Educate the public about stormwater impacts;
- Detect and eliminate illicit discharges;
- Control runoff from construction sites; and
- Implement best management practices (BMPs) and site-specific runoff controls and treatments for new development and redevelopment.

PPP HYD-3 As required by Municipal Code Section 8-32, *Control of Urban Runoff*, the proposed project would be undertaken in accordance with the County's *Drainage Area Management Plan* (DAMP) and any conditions and requirements established by the Development Services Department and the Public Services Department, which are reasonably related to the



## 1. Executive Summary

reduction or elimination of pollutants in stormwater runoff from the project site. Prior to the issuance of a grading permit, building permit, or non-residential plumbing permit for any new development, or significant redevelopment, the Development Services Department and Public Services Department would review the project plans and impose terms, conditions, and requirements on the project in accordance with Municipal Code Section 8-32.

- PPP HYD-5 As required by Municipal Code Section 8-32, the project is required to comply with the recommendations outlined in the *Preliminary Water Quality Management Plan* (Preliminary WQMP), prepared by Urban Resource Corporation on April 30, 2019. A final WQMP must be submitted and approved by the City prior to the issuance of a grading permit. The WQMP includes site design measures, source control measures, and treatment measures that minimize the potential for erosion and siltation. In addition, the WQMP must include an operations and maintenance (O&M) plan and maintenance agreement for review and approval by the City to ensure the treatment measures installed at the site are maintained for perpetuity.
- SCA HYD-1 South Coast Air Quality Management District (SCAQMD) Rule 403 would be adhered to, ensuring the cleanup of construction-related dirt on approach routes to the project site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile, or disturbed surface area beyond the property line of the emission sources. Particulate matter deposits on public roadways are also prohibited.
- SCA HYD-2 Adequate watering techniques would be employed to partially mitigate the impact of construction-generated dust particulates. Portions of the project site that are undergoing earth moving operations would be watered such that a crust is formed on the ground surface and then watered again at the end of the day.
- SCA HYD-3 Grading operations would be suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

### LAND USE AND PLANNING

- PPP LU-1 The proposed project would be designed and constructed as Planned Development Commercial (PDC) and Planned Development Residential – High North Costa Mesa (PDR-NCM) in accordance with the applicable provisions of Municipal Code Section 13-20, *Zoning Districts*. Future development would also be subject to the North Costa Mesa Specific Plan and proposed Master Plan regulations. Where these documents are silent, the Municipal Code would prevail.

### NOISE

- PPP N-1 Residential stationary noise sources are required to comply with Municipal Code Section 13-280, *Exterior Noise Standard*.



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- 50 dBA from 11:00 pm to 7:00 am; and
- 55 dBA from 7:00 am to 11:00 pm.

PPP N-2 Construction activities are required to comply with the following standards detailed in Municipal Code Section 13-279, *Exceptions for Construction*:

- Allowed from 7:00 a.m. to 7:00 p.m. on Mondays through Fridays;
- Allowed from 9:00 a.m. to 6:00 p.m. on Saturdays; and
- Prohibited on Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

SCA CONST HRS-2 All noise-generating construction activities shall be limited to 7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. Saturday. Noise-generating construction activities shall be prohibited on Sunday and the following Federal holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

### POPULATION AND HOUSING

There are no plans, policies, programs (PPP), or standard conditions of approval (SCA) applicable to the project related to population and housing impacts.

### PUBLIC SERVICES

- PPP FS-1 The proposed project is required to comply with the 2022 edition of the California Fire Code.
- PPP FS-2 The proposed project is required to comply with Municipal Code Title 5, *Buildings and Structures*, and all adopted State construction codes.
- PPP FS-3 The project is required to pay development impact fees established based on the Costa Mesa Fire Protection System Fee Study and as required in the Development Agreement.
- PPP SS-1 The project applicant shall pay developer fees per square foot for residential and commercial construction pursuant to the Newport-Mesa Unified School District (NMUSD) requirements.
- PPP R-1 The proposed project shall comply with Government Code Section 66477 (Quimby Act) and Measure Z as required by the Development Agreement, related to payment of an open space and public park impact fee.
- SCA PD-1 Outside security lighting shall be provided under the direction and upon the recommendation of the City of Costa Mesa Development Services Department and/or the Police Department.



## 1. Executive Summary

### RECREATION

PPP R-1 The proposed project shall comply with Government Code Section 66477 (Quimby Act) and Measure Z as required by the Development Agreement, related to payment of an open space and public park impact fee.

### TRANSPORTATION

PPP T-1 Pursuant to Circulation Element Recommendation C-9.14, the applicant would provide detours through or around construction zones that are designed for safety and convenience, and with adequate signage for cyclists and pedestrians.

PPP T-2 The City of Costa Mesa has a traffic impact fee program. This is a cumulative impact fee which would be determined in consultation with City of Costa Mesa Transportation Services Division staff to be paid in addition to direct project improvements required of the applicant. The City of Costa Mesa Transportation Services Division shall collect the project's traffic impact fee prior to issuance of the project's first residential building permit or as otherwise agreed to in the project's Development Agreement.

PPP T-3 The City of Costa Mesa has a fair share program. As projects are approved, and a need for a capital improvement(s) are identified, the City's Capital Improvement Projects (CIP) list is updated accordingly on an annual basis. The master CIP list, overseen by the Public Works Department, identifies (by each specific capital improvement) the necessary improvement, the specific funding amount, and the status of the improvement.

### TRIBAL CULTURAL RESOURCES

PPP TCR-1 The proposed project is required to comply with California Public Resources Code 5097.9-5097.991 (which protects Native American historical and cultural resources, and sacred sites) and Health and Safety Code Section 7050.5 (pertaining to the discovery or recognition of any human remains).

### UTILITIES AND SERVICE SYSTEMS

PPP USS-1 The project's sewer infrastructure improvements are required to be designed, constructed, and operated in accordance with the Costa Mesa Sanitary District (CMSD) Operations Code.

PPP USS-2 The project's sewer infrastructure is required to be designed, constructed, and operated in accordance with the Orange County Sanitation District (OCSD) Ordinance Nos. 40 and 48, and all wastewater discharges into OCSD facilities shall be required to comply with the discharge standards set forth to protect the public sewage system/and Waters of the United States.

PPP USS-3 The project's sewer infrastructure is required to be designed, constructed, and operated in accordance with Municipal Code Sections 15-6, *Placing Oil On Streets or in Sewers Prohibited*, 15-67, *Required Construction*, 13-180, *Application Requirements*, and 13-71, *Utility Requirements*.





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- PPP USS-4 The project's water infrastructure improvements are required to be designed, constructed, and operated in accordance with the Mesa Water District's (MWD's) *Standard Specification and Standard Drawings for the Construction of Water Facilities*.
- PPP USS-5 The proposed project is required to be planned, designed, installed, and maintained in accordance with Municipal Code Section 13-107, *Irrigation Requirements*, and Section 13-71, *Utility Requirements*.
- PPP USS-6 The project is required to comply with California Energy Code and Green Building Code provisions related to water and energy conservation.
- PPP USS-7 The project's stormwater infrastructure shall be planned, designed, installed, and maintained in accordance with Municipal Code Section 8-35, *Permits*, which regulates permitted and illicit connections to the City's storm drain system in accordance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.
- PPP USS-8 The proposed project's solid waste infrastructure improvements are required to be designed, constructed, and operated in accordance with the applicable regulations in the Costa Mesa Sanitary District (CMSD) Operations Code.
- PPP USS-9 The proposed project is required to store and collect recyclable materials in compliance with AB 341 and handle green waste in accordance with AB 1826.
- PPP USS-10 The proposed project is required to recycle construction waste in accordance with the California Green Building Standards Code (CALGreen) requirements.
- SCA FIRE-24 Water mains and hydrants shall be installed to the standards of Mesa Water District's (MWD) and dedicated along with repair easements to MWD.
- SCA WQMP-66 Prior to or concurrent with submittal of plans for grading, building plan check, and/or submittal of the final subdivision map for engineering plan check, the applicant shall prepare and submit documentation for compliance with the State Water Resources Control Board (SWRCB) Water Quality Order 99-08-DWQ; National Pollutant Discharge Elimination System (NPDES) Permit No. WQ 2022-0057-DWQ, CAS000002 for Storm Water Discharges Associated with Construction Activity (General Permit); the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) Order No. R8-2009-0030, as amended by Order No. R8-2010-0062 (NPDES Permit No. CAS618030); and the City's Ordinance No. 97-20 for compliance with the NPDES permit. Such documentation shall include a Storm Water Pollution Prevention Plan (SWPPP) if over one acre and a Water Quality Management Plan (WQMP) identifying and detailing the implementation of applicable best management practices (BMPs).
- SCA ENG-18 Proposed storm drain facilities shall be constructed pursuant to the *City of Costa Mesa Master Drainage Plan*.



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SCA ENG-19 The project shall fulfill drainage ordinance fee requirements prior to approval of final maps and plans.

SCA ENG-21 Private on-site drainage facilities and parkway culverts or drains will not be maintained by the City and shall be maintained by the owner or developer of the property. Private lateral connections to City storm drains shall require a hold harmless agreement prior to issuance of grading or building permits.

Refer to Section 5.9, *Hydrology and Water Quality*, for a discussion of PPP HYD-1, PPP HYD-2, and PPP HYD-4.

### 1.6.2 Project-Specific Impacts And Mitigation Measures

Table 1-1, *Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*, summarizes the conclusions of these environmental topic areas. Impacts are identified as less than significant or potentially significant, and mitigation measures are identified, if feasible, for potentially significant impacts. The level of significance after incorporation of the mitigation measures, if feasible, is also presented.



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**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>5.1 AESTHETICS</b>			
<b>Impact 5.1-1</b> – In an urbanized area, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.1-2</b> – The proposed project would not create a substantial new source of light and glare.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.1-3</b> – Development of the proposed project and related projects would not conflict with applicable zoning and other regulations governing scenic quality.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.1-4</b> – Development of the proposed project and related projects would not create a new substantial source of light and glare.	Less Than Significant Impact	No mitigation measures are required.	Less Than Significant Impact.
<b>5.2 AIR QUALITY</b>			
<b>Impact 5.2-1</b> – Construction activities associated with the proposed project would not generate short-term emissions in exceedance of SCAQMD’s threshold criteria that would cumulatively contribute to the nonattainment designations in the Basin.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-2</b> – Operational air emissions associated with the proposed project would not exceed applicable SCAQMD threshold criteria that would cumulatively contribute to the nonattainment designations in the Basin.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-3</b> – Project construction would not expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant Impact.	AQ-1 Prior to initiation of any construction activities, the project applicant shall provide documentation to the City of Costa Mesa Building Safety Division that all off-road diesel-powered construction equipment greater than 50 horsepower to be	Less Than Significant Impact with Mitigation Incorporated.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		utilized during construction would meet the Tier 4 emission standards. A copy of each unit's certified tier specification and California Air Resources Board (CARB) or South Coast Air Quality Management District (SCAQMD) operating permit shall be provided to the City of Costa Mesa Building Safety Division at the time of mobilization of each applicable unit of equipment.	
<b>Impact 5.2-4</b> – Project operations would not expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-5</b> – The proposed project would be consistent with the applicable air quality management plan.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-6</b> – The proposed project would not result in odors that affect a substantial number of people.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.2-7</b> – Short-term construction activities associated with the proposed project and other related cumulative projects, would not result in increased air pollutant emission impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-8</b> – Implementation of the proposed project and other related cumulative projects would not result in increased impacts pertaining to operational air emissions.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-9</b> – Implementation of the proposed project and related projects would not result in cumulatively considerable carbon monoxide hotspot impacts and localized health risk.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.2-10</b> – Implementation of the proposed project and related projects would not result in cumulatively considerable inconsistencies with the applicable air quality plan.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<p><b>Impact 5.2-11</b> – Implementation of the proposed project and related projects would not result in cumulatively considerable odors that affect a substantial number of people.</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant Impact.</p>
<b>5.3 BIOLOGICAL RESOURCES</b>			
<p><b>Impact 5.3-1</b> – Development of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	<p>Less Than Significant Impact.</p>	<p>No mitigation measures are required.</p>	<p>Less Than Significant Impact.</p>
<p><b>Impact 5.3-2</b> – Development of the proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site.</p>	<p>Potentially Significant Impact.</p>	<p>BIO-1 If project-related activities are to be initiated during the nesting season (January 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist retained by the project applicant no more than three days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a “no-disturbance” buffer shall be established around the active nest. The size of the “no-disturbance” buffer shall be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the “no-disturbance” buffer disturb the birds and if the buffer shall be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.</p>	<p>Less Than Significant Impact With Mitigation Incorporated.</p>



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>Cumulative Impacts</i>			
<p><b>Impact 5.3-3</b> – Development of the proposed project and related projects could result in cumulatively considerable impacts to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.</p>	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<p><b>Impact 5.3-4</b> – Development of the proposed project and related projects could result in cumulatively considerable impacts with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site.</p>	Potentially Significant Impact.	Refer to Mitigation Measure BIO-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>5.4 CULTURAL RESOURCES</b>			
<p><b>Impact 5.4-1</b> – Development of the project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	Potentially Significant Impact.	<p>CUL-1 Prior to issuance of grading permits, the City of Costa Mesa shall ensure a qualified archaeologist who meets the Secretary of the Interior’s Standards for professional archaeology has been retained for the project and shall be on-call during all demolition and grading/excavation. The qualified archaeologist shall ensure the following measures are followed for the project:</p> <ul style="list-style-type: none"> <li>• Prior to any ground disturbance, the qualified archaeologist, or their designee, shall provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural (prehistoric and historic) resources. As part of this training, construction personnel shall be briefed on proper procedures to follow should resources of a potentially cultural nature be discovered during construction. Workers shall be provided contact information and protocols to follow in the event that inadvertent discoveries are made. The training can be in the form of a video or PowerPoint presentation. Printed literature (handouts) can accompany the training and can also be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.</li> </ul>	Less Than Significant Impact With Mitigation Incorporated.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<ul style="list-style-type: none"> <li>• Prior to any ground disturbance, the applicant shall submit a written Project Monitoring Plan (PMP) to the City of Costa Mesa's Development Services Director for review and approval. The monitoring plan shall include monitor contact information (including the qualified archeologist and the Native American Monitor per Mitigation Measure TCR-1), specific procedures for field observation, diverting and grading to protect finds, and procedures to be followed in the event of significant finds.</li> <li>• In the event resources of a potentially Native American nature are discovered during any stage of project construction, all construction work within 50 feet (15 meters) of the discovered tribal cultural resource ("TCR") shall cease and the Monitor shall assess the discovery. Construction activities outside the buffer zone may continue during the Monitor's assessment.               <ul style="list-style-type: none"> <li>○ <u>Non-Native American (Non-TCR) Discoveries:</u> If warranted based on the qualified archaeologist's evaluation of the archaeological (but non-TCR) discovery, the archaeologist shall collect the resource and prepare a test-level report describing the results of the investigation. The test-level report shall evaluate the site including discussing the significance (depth, nature, condition, and extent of the resource), identifying final Cultural Mitigation Measures, if any, that the City of Costa Mesa's Development Services Director shall verify are incorporated into future construction plans, and providing cost estimates.</li> <li>○ <u>Conjoined Archaeological and Native American (TCR) Discoveries:</u> If, following consultation with the Monitor, it is determined that a historic or prehistoric discovery includes Native American materials or resources, then the Monitor shall determine the appropriate treatment of the discovered TCR(s) consistent with Mitigation Measure TCR-1. The Monitor shall prepare a TCR discovery report, which may include descriptions and evaluations of the area and conditions at the site of the discovery (i.e., depth, nature, condition, and extent of the resources), as well as a discussion of the significance to the Kizh Nation.</li> <li>○ The requirements of Section 15064.5 of the CEQA Guidelines</li> </ul> </li> </ul>	



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		shall be followed. Construction work within the buffer area surrounding a TCR discovery shall resume only after the Monitor has (1) appropriately inventoried and documented the resource and any surrounding material of significance to the Kizh Nation, and (2) completed the appropriate treatment of the resource consistent with Mitigation Measure TCR-1.	
<b>Impact 5.4-2</b> – Development of the project could disturb human remains, including those interred outside of dedicated cemeteries.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.4-3</b> – Development of the proposed project and related projects could result in cumulatively considerable impacts to archaeological resources.	Potentially Significant Impact.	Refer to Mitigation Measure CUL-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>Impact 5.4-4</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts to human remains, including those interred outside of dedicated cemeteries.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.5 ENERGY</b>			
<b>Impact 5.5-1</b> – The project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.5-2</b> – The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			





## 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.5-3</b> – The project would not result in a cumulatively significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.5-4</b> – The proposed project, in combination with related projects, would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.6 GEOLOGY AND SOILS</b>			
<b>Impact 5.6-1</b> – Development of the proposed project would not directly or indirectly cause potential substantial adverse effects involving seismic-related hazards.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.6-2</b> – Development of the proposed project would not result in substantial soil erosion or loss of topsoil.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.6-3</b> – Development of the proposed project would not 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.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.6-4</b> – The proposed project would not create substantial risks to life and property due to expansive soils.	No Impact.	No mitigation measures are required.	No Impact.
<b>Impact 5.6-5</b> – Development of the proposed project could impact unknown paleontological resources.	Potentially Significant Impact.	GEO-1 Prior to issuance of a grading permit and any ground-disturbing activities, the project applicant shall consult with a geologist or paleontologist to confirm whether anticipated grading would occur at depths that could encounter highly sensitive sediments for paleontological resources. If confirmed that underlying sediments may have high sensitivity, construction activity shall be monitored by a qualified paleontologist retained by the project applicant and a written Project Monitoring Plan (PMP) shall be submitted to the City of Costa Mesa's	Less Than Significant Impact With Mitigation Incorporated.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>Development Services Director for review and approval. The monitoring plan shall include monitor contact information, specific procedures for field observation, diverting and grading to protect finds, and procedures to be followed in the event of significant finds. The paleontologist shall have the authority to halt construction during construction activity. Because the project area is immediately underlain by Holocene sediments (low sensitivity) and the depth of these sediments is unknown, spot-check monitoring shall be conducted to identify potential fossils and the lithological transition to Pleistocene sediments. If Pleistocene-aged sediments are discovered at depth, monitoring shall transition to full-time as ground-disturbing activities occur at or below this identified depth because these Pleistocene units have been identified as having high sensitivity for paleontological resources.</p> <p>GEO-2 In the event of any fossil discovery, regardless of depth or geologic formation, construction work shall halt within a 50-foot radius of the find until a qualified paleontologist retained by the project applicant can determine its significance. Significant fossils shall be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the Society of Vertebrate Paleontology (2010). The most likely repository is the Natural History Museum of Los Angeles County (NHMLAC). The repository shall be identified, and a curatorial arrangement shall be signed prior to the collection of the fossils.</p>	
<i>Cumulative Impacts</i>			
<b>Impact 5.6-6</b> – Development of the proposed project and related projects would not result in cumulatively considerable geology and soils impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.6-7</b> – Development of the proposed project and related cumulative projects could result in cumulatively considerable impacts to paleontological resources.	Potentially Significant Impact.	Refer to Mitigation Measures GEO-1 and GEO-2.	Less Than Significant Impact With Mitigation Incorporated.
<b>5.7 GREENHOUSE GAS EMISSIONS</b>			
<b>Impact 5.7-1</b> – Implementation of the proposed project would not generate a net increase in	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
GHG emissions that would have a significant impact on the environment.			
<b>Impact 5.7-2</b> – Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.7-3</b> – Greenhouse gas emissions generated by the project and other related cumulative projects would not have a significant cumulative impact on global climate change or could conflict with an applicable greenhouse gas reduction plan, policy, or regulation. [Threshold GHG-1 and.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.8 HAZARDS AND HAZARDOUS MATERIALS</b>			
<b>Impact 5.8-1</b> – Project construction and operations would not create a significant hazard through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.8-2</b> – Project development could affect the implementation of an emergency responder or evacuation plan.	Potentially Significant Impact.	HAZ-1 At least three business days prior to any lane closure, the construction contractor shall notify the Costa Mesa Police Department and Costa Mesa Fire Department, along with the City of Costa Mesa Public Services Director, as well as relevant departments associated with the City of Santa Ana, of construction activities that would impede movement (such as road or lane closures), to allow for uninterrupted emergency access of evacuation routes.	Less Than Significant Impact With Mitigation Incorporated.
<i>Cumulative Impacts</i>			
<b>Impact 5.8-3</b> – Construction and operation of the proposed project and related projects would not result in a cumulatively considerable impact through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.8-4</b> – Development of the proposed project and related projects could affect the implementation of an emergency responder or evacuation plan.	Potentially Significant Impact.	Refer to Mitigation Measure HAZ-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>5.9 HYDROLOGY AND WATER QUALITY</b>			
<b>Impact 5.9-1</b> – The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-2</b> – The proposed project would not 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.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-3</b> – The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-4</b> – The proposed project would not substantially increase the rate or amount of surface runoff and result in flooding on- or off-site.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-5</b> – The proposed project would not impede or redirect flood flows.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-6</b> – The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			



## 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.9-7</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts to water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-8</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts to groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin is impeded.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-9</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-10</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantially increasing the rate or amount of surface runoff and result in flooding on- or off-site.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-11</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts related to impeding or redirecting flood flows.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.9-12</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts related to conflicting with or obstructing implementation of	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
a water quality control plan or sustainable groundwater management plan.			
<b>5.10 LAND USE AND PLANNING</b>			
<b>Impact 5.10-1</b> – Project implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.10-2</b> – Development of the proposed project in combination with related projects would not result in cumulatively considerable conflicts with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.11 NOISE</b>			
<b>Impact 5.11-1</b> – Construction activities would result in temporary noise increases in the project vicinity, but would not exceed applicable standards.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.11-2</b> – Long-term operational noise generated by the proposed project would not exceed applicable standards.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.11-3</b> – The project would not generate excessive short- or long-term groundborne vibration or noise.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.11-4</b> – The proximity of the project site to the John Wayne Airport would not result in exposure of future residents and/or workers to excessive airport-related noise.	No Impact.	No mitigation measures are required.	No Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.11-5</b> – Cumulative construction activities would not result in temporary noise increases that could exceed applicable standards.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.11-6</b> – Implementation of the proposed project, in combination with related projects, would not result in a cumulatively significant long-term operation-related noise impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.11-7</b> – Implementation of the proposed project, in combination with related projects, would not cumulatively create excessive long-term or short-term groundborne vibration and groundborne noise.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.11-8</b> – Project development, in combination with related projects, would not cumulatively expose future residents and/or workers to excessive airport-related noise.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.12 POPULATION AND HOUSING</b>			
<b>Impact 5.12-1</b> – The proposed project would not directly or indirectly result in substantial unplanned population growth in the project area.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative Impacts</i>			
<b>Impact 5.12-2</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantial unplanned population growth.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>5.13 PUBLIC SERVICES AND RECREATION</b>			
<b>Impact 5.13-1</b> – The proposed project would increase the intensity of the project site, but would not result in the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-2</b> – The proposed project could significantly increase the intensity of development at the site, thereby increasing the demand for police protection facilities and personnel.	Potentially Significant Impact.	PS-1 The applicant shall coordinate with the Costa Mesa Police Department for the installation and operation of an Automated License Plate Reader on all vehicle entrances to the project site. The applicant shall be responsible for the initial and future funding of the Automated License Plate Reader program on the property.	Less Than Significant Impact With Mitigation Incorporated.
<b>Impact 5.13-3</b> – The proposed project would introduce new students into the NMUSD service area, but would not adversely impact school enrollment capacities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-4</b> – Project development would introduce additional residents in the City, but would not substantially increase demands for park facilities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-5</b> – Project development would not significantly increase residents in the OCPL service area, such that new or physically altered library service facilities would be needed, the construction of which could cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.





# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>Cumulative Impacts</i>			
<b>Impact 5.13-6</b> – The project, combined with other related projects, could increase demand for CMFD services, but would not cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-7</b> – The project, combined with other cumulative projects, could substantially increase demand for CMPD services that could cause significant environmental impacts.	Potentially Significant Impact.	Refer to Mitigation Measure PS-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>Impact 5.13-8</b> – Development of the proposed project, in combination with related projects, would not adversely impact NMUSD’s facilities and resources.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-9</b> – The project, combined with other cumulative projects, would not substantially increase demand for park facilities that could cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.13-10</b> – The project, combined with other cumulative projects, would not substantially increase demands for OCPL services that could cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.14 RECREATION</b>			
<b>Impact 5.14-1</b> – The project would not 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.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.14-2</b> – The project includes recreational facilities, but the construction of such recreational facilities would not have an adverse physical effect on the environment.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.14-3</b> – The project, combined with other related projects, would not 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.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.14-4</b> – The project, combined with other cumulative projects, include recreational facilities, but would not have an adverse physical effect on the environment.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.15 TRANSPORTATION</b>			
<b>Impact 5.15-1</b> – The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.15-2</b> – The project could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Potentially Significant Impact.	T-1 The project Applicant shall provide community-based travel planning (CBTP) to project residents, including but not limited to customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.	Significant and Unavoidable Impact.
<b>Impact 5.15-3</b> – The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.15-4</b> – The project would not result in inadequate emergency access.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>Cumulative</i>			
<b>Impact 5.15-5</b> – Development of the proposed project and related projects would not cumulatively conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.15-6</b> – Development of the proposed project and related projects could cumulatively conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	Potentially Significant Impact.	Refer to Mitigation Measure TRA-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>Impact 5.15-7</b> – Development of the proposed project and related projects would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.15-8</b> – Development of the proposed project and related projects would not result in cumulatively considerable impacts to emergency access.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>5.16 TRIBAL CULTURAL RESOURCES</b>			
<b>Impact 5.16-1</b> – Development of the proposed project could impact unknown tribal cultural resources.	Potentially Significant Impact.	TCR-1 Prior to issuance of any grading permits, the Applicant shall formally retain a Native American monitor from the Native American tribe that is culturally and ancestrally affiliated with the Project location: the Gabrieleño Band of Mission Indians – Kizh Nation. The Applicant shall allow at least 45 days from initial contact with the first preference tribe (Kizh Nation) to enter into a contract for monitoring services. If the Applicant can demonstrate they were unable to secure an agreement with the first preference tribe after a good faith effort, or if the contracted tribe fails to fulfill its obligation under the contract terms, then the Applicant may retain an alternative qualified tribal monitor approved by the City. The City approved qualified tribal monitor (the “Monitor”), shall monitor all “ground-disturbing” Project activities, which includes but is not limited to: demolition, grubbing/clearing, rough grading, precise grading, mass grading,	Less Than Significant Impact With Mitigation Incorporated.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		<p>trenching, excavation, boring, auguring, and weed abatement on previously disturbed and undisturbed ground (collectively "ground disturbing activities"). A copy of the executed contract shall be submitted to the Costa Mesa Development Services Department prior to the issuance of any permit necessary to commence ground-disturbing activities.</p> <p>The Monitor shall prepare daily monitoring logs that include descriptions of the relevant ground disturbing activities, locations of such activities, observed soil types, and the presence or absence of tribal cultural-related materials. Should tribal cultural-related resources be discovered, monitor logs shall identify and describe such resources, including but not limited to, Native American cultural and historical artifacts, as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the City of Costa Mesa and maintained as confidential. In the event resources are discovered during any phase of ground disturbing activities, and it is determined by the Monitor, in consultation with the City, to be Native American in origin, then all construction activity within fifty (50) feet (15 meters) of the find shall cease until the Monitor can assess the find. Work shall be allowed to continue outside of the buffer zone. The Monitor shall determine the appropriate treatment of the discovered resource that is consistent with the tribe's cultural practices, including reinterment on site in an appropriate area determined by the tribe in consultation with the City and the Applicant, or retention of the discovered resource for educational purposes. Construction work within the buffer area surrounding a TCR discovery shall resume only after the Monitor has (1) appropriately inventoried and documented the resource and any surrounding material of significance to the Kizh Nation, and (2) completed the appropriate treatment of the resource.</p> <p>Monitoring for tribal cultural resources ("TCR") shall conclude upon the City's receipt of written confirmation from the Monitor that ground disturbing activities with potential impacts to discovered and/or undiscovered TCRs are complete.</p>	



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<i>Cumulative Impacts</i>			
<b>Impact 5.16-1</b> – Development of the proposed project and related projects could result in cumulatively considerable impacts to unknown tribal cultural resources.	Potentially Significant Impact.	Refer to Mitigation Measures TCR-1.	Less Than Significant Impact With Mitigation Incorporated.
<b>5.17 UTILITIES AND SERVICE SYSTEMS</b>			
<b>Impact 5.17-1</b> – Require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would not cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-2</b> – Wastewater provider has adequate capacity to serve the project's projected demands and the provider's current commitments.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-3</b> – Require the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-4</b> – Sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-5</b> – Require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would not cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-6</b> – Existing solid waste facilities would be able to accommodate project-generated solid waste and the project would comply with existing solid waste regulations.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



# 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.17-7</b> – Require the relocation or construction of new or expanded electric, natural gas, and telecommunication facilities, the construction or relocation of which would not cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<i>Cumulative</i>			
<b>Impact 5.17-8</b> – Development of the project, in combination with related projects, would not require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-9</b> – Development of the project, in combination with related projects, would not significantly impact the wastewater provider’s ability to meet projected and current demands.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-10</b> – Development of the project, in combination with related projects, would require the relocation or construction of new or expanded water facilities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-11</b> – Sufficient water supplies are available to serve the project and related projects during normal, dry, and multiple dry years.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-12</b> – Development of the project, in combination with related projects, would require the relocation or construction of new or expanded stormwater facilities.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.
<b>Impact 5.17-13</b> – The proposed project, in combination with related projects, would not adversely impact the capacity of existing solid waste facilities and would comply with existing solid waste regulations.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



## 1. Executive Summary

**Table 1-1 Summary of Environmental Impacts, Mitigation Measures, and Levels of Significance After Mitigation, continued**

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
<b>Impact 5.17-14</b> – Development of the project, in combination with related projects, would require the relocation or construction of new or expanded electrical, natural gas, or telecommunication facilities, the construction or relocation of which would not cause significant environmental impacts.	Less Than Significant Impact.	No mitigation measures are required.	Less Than Significant Impact.



## 1. Executive Summary

### 1.7 SUMMARY OF PROJECT ALTERNATIVES

In accordance with CEQA Guidelines Section 15126.6, this section provides a summary description of the alternatives to the project, which could feasibly attain most of the project's basic objectives, while avoiding or substantially lessening the project's significant effects. The evaluation considers the comparative merits of each alternative. The analysis focuses on alternatives capable of avoiding or substantially lessening the project's significant environmental effects, even if the alternative would impede, to some degree, the attainment of the proposed project objectives. The following alternatives are considered in this EIR:

- No Project/No Development Alternative;
- No Project/Existing Zoning Alternative;
- Commercial Building Alternative; and
- Reduced Density Alternative.

Throughout [Chapter 7, \*Alternatives to the Proposed Project\*](#), the alternatives' impacts are analyzed for each environmental issue area, as examined in [Sections 5.1 through 5.17](#) of this EIR. In this manner, each alternative was compared to the project on an issue-by-issue basis. The following is a summary description of each of the alternatives evaluated in [Chapter 7](#).

#### 1.7.1 No Project/No Development Alternative

The No Project/No Development Alternative is required to discuss the existing conditions at the time the Notice of Preparation is published (June 2024) (CEQA Guidelines Section 15126.6[e]). Therefore, the No Project/No Development Alternative assumes the Specific Plan would not be amended and no new development would occur on-site. The existing Hive Creative Office Campus (in the northern portion) would continue to operate similar to existing conditions. This alternative assumes that the Los Angeles Chargers practice field could continue to be leased out and used in a similar manner as the existing condition.

#### 1.7.2 Reduced Development Intensity Alternative

The Costa Mesa City Council adopted the North Costa Mesa Specific Plan (Specific Plan) in July 1994, which included the project site and surrounding area as Segerstrom Home Ranch (Area 1). In 2001, a Development Agreement (DA-00-01) was approved and authorized a maximum 0.40 FAR for the project site. In 2002, the current development was approved through Master Plan PA-02-34. In 2008, Final Master Plan PA-08-09 was approved to allow for a new office building in the southern portion of the lot. The building was never constructed and Final Master Plan PA-08-09 approval has since expired. In 2003, the project site was graded and the existing 182,520-square foot Hive Creative Office Campus was built in the north and central portions of the project site. In 2017, the southern portion of the site was converted into the Los Angeles Chargers practice field. On November 1, 2023, the Los Angeles Chargers announced their intention to relocate their operations from the project site to the City of El Segundo. The existing Development Agreement expires on August 27, 2030. As such, the No Project/Existing Zoning Alternative assumes reapproval and development of the Final Master Plan PA-08-09 and the existing Development Agreement.





## 1. Executive Summary

The No Project/Existing Zoning Alternative assumes that the existing three two-story office buildings would continue to operate and that the practice field would be redeveloped into another office building per the Final Master Plan PA 08-09 and the existing Development Agreement; refer to Exhibit 7-1, *No Project/ Existing Zoning Alternative*.

Under this alternative, the existing Hive Creative Office Campus two-story office buildings would remain on-site and the southern portion of the site (the practice field) would be redeveloped into another office building. Under this alternative, 245 surface parking spaces would be installed in the southern portion of the project site to support the new office building, rather than the project's 538 parking spaces proposed in a wrap around parking structure at Building A. This office building (Building D) would be approximately 65,435 square feet and two stories in height and would result in 72 new employees on-site. Proposed uses would be general office space and related ancillary support areas for corporate training. The northeast section of the first floor would be used for conference facilities and video conferencing. Various other meeting spaces would serve as group training areas for 20 to 30 employees from other locations that would arrive on-site via vanpool or small bus. This fourth building represents the remaining development on this property, as allowed pursuant to the Segerstrom Home Ranch Development Agreement ( DA 00-01).

Overall, this alternative would result in the reduction in residential development (1,050 fewer residential units, and elimination of the associated bicycle and pedestrian connections) and an increase in 65,435 square feet of office space. These modifications would decrease associated vehicle trips, compared to the proposed project, by 2,373 daily trips; refer to Table 7-1, *No Project/Existing Zoning Alternative Trip Generation*.

Discretionary actions required under this alternative would include re-approval of the Master Plan. Unlike the proposed project, this alternative would not require a General Plan Amendment, Zone Change, Specific Plan Amendment, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement

### 1.7.3 Commercial Building Alternative

The Commercial Building Alternative considers residential development of the proposed project at the northern and central portions of the project site, as well as development of a commercial office building (consistent with Final Master Plan PA-08-09 and Development Agreement DA-00-01), instead of Building A in the southern portion of the project site; refer to Exhibit 7-2, *Commercial Building Alternative*. This alternative would construct two new residential buildings (Buildings B and C) and a new 65,435-square foot commercial building (replacing the existing practice field) up to two stories in height

Under this alternative, 245 surface parking spaces would be installed in the southern portion of the project site to support the new office building, rather than the project's 538 parking spaces proposed in a wrap around parking structure at Building A. The project's proposed co-work/flex space would not be constructed. Also, the project's retail space and the public plaza space would not be constructed. No public art would be installed. Overall, this alternative would result in the reduction in residential development (315 fewer residential units, 3,692 fewer square feet of retail space) and an increase in 65,435 square feet of office space (72 new employees). This alternative would still provide affordable units, but the number of units would be



## 1. Executive Summary

proportionally lower than the proposed project. These modifications would reduce associated vehicle trips. Refer to [Table 7-2, \*Commercial Building Alternative Trip Generation\*](#).

Discretionary actions required under this alternative would include a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement.

### 1.7.4 Reduced Development Intensity Alternative

The Reduced Development Intensity Alternative was selected to avoid or substantially lessen the proposed project's impacts related to air quality, greenhouse gas emissions, and energy. This alternative assumes a 20 percent reduction in residential units and elimination of the 3,692-square foot retail space and public plaza space. Similar to the proposed project, and as shown on [Exhibit 7-3, \*Reduced Development Intensity Alternative\*](#), a total of 840 residential units would be constructed in three four-story buildings. The footprint of the three buildings would be slightly reduced compared to the proposed project. This alternative would still provide affordable units, but the number of units would be proportionally lower than the proposed project. Given the reduction in residential units, parking on-site would also be reduced by a proportional amount while still meeting the Specific Plan parking requirements.

Under this alternative, the project's proposed co-work/flex space would not be constructed. Also, the project's retail space and the public plaza space would not be constructed. No public art would be installed. Overall, this alternative would result in the reduction in residential development (210 fewer residential units, 3,692 fewer square feet of retail space). Overall, the reduction in residential and non-residential development would reduce associated vehicle trips as well. Refer to [Table 7-3, \*Reduced Development Intensity Alternative Trip Generation\*](#).

Discretionary actions required under this alternative would be similar to the proposed project, and would include a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement.

### 1.7.5 Environmentally Superior Alternative

[Table 1-2, \*Comparison of Alternatives\*](#), summarizes the comparative analysis presented above (i.e., the alternatives compared to the proposed project). Review of [Table 1-2](#) indicates that both of the "no project" alternatives, the No Project/No Development Alternative and the "No Project/Existing Zoning" Alternative are the environmentally superior alternatives, as they would avoid or lessen most of the project's less than significant environmental impacts. According to CEQA Guidelines Section 15126.6(e), "if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Accordingly, both build alternatives considered, the Commercial Building Alternative and the "Reduced Development Intensity" Alternative are considered environmentally superior to the proposed project.



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**Table 1-2 Comparison of Alternatives**

Environmental Topical Areas/Sections	Proposed Project	No Project/No Development Alternative	No Project/Existing Zoning Alternative	Commercial Building Alternative	Reduced Development Intensity Alternative
Aesthetics	LTS	✓	=	=	=
Air Quality	LTS/M	✓	✓	✓	✓
Biological Resources	LTS/M	✓	✓	=	=
Cultural Resources	LTS/M	✓	✓	=	=
Energy	LTS	✓	✓	✓	✓
Geology and Soils	LTS/M	✓	✓	=	=
Greenhouse Gas Emissions	LTS	✓	✓	✓	✓
Hazards and Hazardous Materials	LTS/M	✓	✓	=	=
Hydrology and Water Quality	LTS/M	=	=	=	=
Land Use and Planning	LTS	✓	✓	=	=
Noise	LTS	✓	✓	✓	✓
Population and Housing	LTS	=	=	=	=
Public Services	LTS/M	✓	✓	=	=
Recreation	LTS	✓	=	=	=
Transportation	LTS/M	=	=	=	=
Tribal Cultural Resources	LTS/M	✓	✓	=	=
Utilities and Service Systems	LTS	✓	✓	=	=

Notes: LTS = Less Than Significant; LTS/M = Less Than Significant With Mitigation; **S/U = Significant and Unavoidable**  
 ▲ Indicates an impact that is greater than the project (environmentally inferior).  
 ✓ Indicates an impact that is less than the project (environmentally superior).  
 = Indicates an impact that is equal to the project (neither environmentally superior nor inferior).  
 \* Indicates an impact that would eliminate one or more significant and unavoidable impacts associated with the project.

As summarized in [Section 7.4.18](#), no development would occur on-site under the No Project/No Development Alternative. The existing commercial uses would continue to operate on-site and none of the project objectives would be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City’s housing stock, including affordable housing (Objective No. 2); provide enhanced recreation and open space opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5); implement sustainable development practices (Objective No. 6); or enhance the visual attributes of the project site and surrounding area (Objective No. 7).

As summarized in [Section 7.5.18](#), under the No Project/Existing Zoning Alternative, a new commercial office building would be constructed, and the existing commercial uses would continue to operate on-site; majority of the project objectives would not be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City’s housing stock, including affordable housing (Objective No. 2); or improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5). Although the following would be implemented through enhanced landscaping along South Coast Drive, the following objectives would not be achieved to the extent of the project: provide enhanced recreation and open space



## 1. Executive Summary

opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); or enhance the visual attributes of the project site and surrounding area (Objective No. 7). This alternative may implement sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6) through construction of a new commercial use that comply with the latest building standards.

The Commercial Building Alternative considers residential development of the proposed project at the northern and central portions of the project site, as well as development of a new 65,435-square foot commercial office building (consistent with Final Master Plan PA-08-09 and Development Agreement DA-00-01), instead of Building A in the southern portion of the project site. As summarized in [Section 7.6.18](#), under the Commercial Building Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would provide a mix of residential and commercial/office units in a master-planned setting (Objective No. 1), enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3) and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).

The Reduced Development Intensity Alternative would construct a total of 840 residential units in three four-story buildings (a 20 percent reduction in residential units) and eliminate the 3,692-square foot retail space and public plaza space. The footprint of the three buildings would be slightly reduced compared to the proposed project. As summarized in [Section 7.7.18](#), under the Reduced Development Intensity Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3), and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).



## Chapter 2.0 Introduction



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## 2. Introduction

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### 2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

#### 2.1.1 California Environmental Quality Act Compliance

The California Environmental Quality Act (CEQA) requires that all State and local governmental agencies consider the environmental consequences of projects over which they have discretionary authority before taking action on those projects. This Draft Environmental Impact Report (Draft EIR) has been prepared to satisfy CEQA, as amended by Public Resources Code Section 21000 et seq., and the CEQA Guidelines, as amended by California Code of Regulations Section 15000 et seq. The Draft EIR is a public document designed to provide decision makers and the public with an analysis of the environmental effects of the proposed project, to indicate possible ways to reduce or avoid environmental damage, and to identify alternatives to the project. The EIR must also disclose significant environmental impacts that cannot be avoided; growth inducing impacts; effects found not to be significant; and significant cumulative impacts of all past, present, and reasonably foreseeable future projects.

The intent of the Draft EIR is to provide information on the potential environmental impacts of the proposed project to allow the City of Costa Mesa (City) to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the City are described in [Section 3.6, \*Permits and Approvals\*](#).

The overall purpose of this Draft EIR is to inform the lead agency, responsible agencies, decision makers, and the general public about the environmental effects of the construction and operation of the proposed project. This Draft EIR addresses effects that may be significant and adverse, identifies mitigation measures to reduce or avoid adverse effects, and evaluates alternatives to the project.

#### 2.1.2 Lead Agency and Responsible Agencies

In accordance with CEQA Guidelines Section 21067, the lead agency is defined as “the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment.” The City has the principal responsibility for approval of the proposed Hive Live (project). For this reason, the City is the CEQA lead agency for this project. The City will be reviewing and considering the determinations of the Final EIR prior to exercising its independent judgment to approve, modify, or reject the proposed project.

A responsible agency is the public agency which has the responsibility to carry out or approve a project for which a lead agency is preparing or has prepared an environmental document. For the purposes of CEQA, the term “responsible agency” includes all public agencies other than the lead agency which have discretionary approval power over the project.



## 2. Introduction

### 2.2 ENVIRONMENTAL PROCEDURES

This Draft EIR has been prepared pursuant to CEQA to assess the environmental effects associated with implementation of the proposed project, as well as anticipated future discretionary actions and approvals. The six main purposes of this document, as established by CEQA, are listed below:

1. To disclose to decision makers and the public the significant environmental effects of proposed activities.
2. To identify ways to avoid or reduce environmental damage.
3. To prevent environmental damage by requiring implementation of feasible alternatives or mitigation measures.
4. To disclose to the public reasons for agency approval of projects with significant environmental effects.
5. To foster interagency coordination in the review of projects.
6. To enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation identified in CEQA and the CEQA Guidelines to provide the information needed to assess the environmental consequences of a proposed project. EIRs are intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a proposed project with the potential to result in significant adverse environmental impacts.

An EIR is also one of various decision-making tools used by a lead agency to consider the merits and disadvantages of a project that is subject to its discretionary authority. Before approving a proposed project, the lead agency must consider the information in the EIR; determine whether the EIR was properly prepared in accordance with CEQA and the CEQA Guidelines; determine that it reflects the independent judgment of the lead agency; adopt findings concerning the project's significant environmental impacts and alternatives; and adopt a Statement of Overriding Considerations if the proposed project would result in significant environmental impacts even after incorporation of feasible mitigation measures, and if there are, on balance, overriding benefits which outweigh the remaining adverse impacts.

#### 2.2.1 EIR Format

This Draft EIR has been formatted as described below.

**Section 1. Executive Summary:** Summarizes the background and description of the proposed project, project alternatives, any critical issues remaining to be resolved, and the potential environmental impacts and mitigation measures identified for the project.

**Section 2. Introduction:** Describes the purpose of this Draft EIR, background on the project, the format of this Draft EIR, the Notice of Preparation (NOP), the use of incorporation by reference, and Final EIR certification.





## 2. Introduction

**Section 3. Project Description:** Provides a detailed description of the project, including its objectives, area and location, approvals anticipated to be required as part of the project, necessary environmental clearances, and the intended uses of this Draft EIR.

**Section 4. Environmental Setting:** Includes a description of the physical environmental conditions in the vicinity of the project as they existed at the time the NOP was published, from local and regional perspectives. This provides the baseline physical conditions from which the lead agency determines the significance of the project's environmental impacts.

**Section 5. Environmental Analysis:** Each environmental topic is analyzed in a separate section that discusses:

- Existing regulatory and environmental setting;
- Thresholds used to determine if a significant impact would occur;
- Applicable plans, programs, policies, and standard conditions of approval;
- Potential environmental impacts of the project;
  - Level of impact significance before mitigation;
  - Mitigation measures for the proposed project;
  - Level of significance after mitigation is incorporated; and
- Potential cumulative impacts.

**Section 6. Significant and Unavoidable Adverse Impacts:** Describes the significant unavoidable adverse impacts of the proposed project.

**Section 7. Alternatives to the Proposed Project:** Describes a reasonable range of alternatives to the proposed project and the impacts of the alternatives compared to the proposed project.

**Section 8. Effects Found Not to Be Significant:** Describes the potential impacts of the project that were determined not to be significant and were, therefore, not discussed in detail in this Draft EIR.

**Section 9. Irreversible and Irretrievable Commitment of Resources:** Describes the significant irreversible environmental changes associated with the proposed project.

**Section 10. Growth-Inducing Impacts of the Proposed Project:** Describes the ways in which the proposed project would cause increases in employment or population that could result in new physical or environmental impacts.

**Section 11. Organizations/Persons Consulted/Preparers of the Environmental Document:** Lists the people who prepared this Draft EIR and organizations and persons contacted during the preparation of this Draft EIR.



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**Section 12. Bibliography:** Lists the technical reports and other sources used to prepare this Draft EIR.

**Appendices:** The appendices for this document comprise these supporting documents:

- Appendix A: Notice of Preparation (NOP)
- Appendix B: NOP Comments
- Appendix C: Air Quality/Greenhouse Gas Emissions/Energy Data
- Appendix D: Biological Resources Assessment
- Appendix E: Cultural and Paleontological Resources Identification Memorandum
- Appendix F: Geotechnical Investigation
- Appendix G: Phase I Environmental Site Assessment Report
- Appendix H: Hydrology and Water Quality Studies
- Appendix I: Noise and Vibration Analysis
- Appendix J: Transportation Study
- Appendix K: Water Supply Assessment
- Appendix L: Public Services and Utilities Correspondence

### 2.2.2 Type and Purpose of This EIR

This EIR has been prepared as a “Project EIR” as defined by CEQA Guidelines Section 15161. This type of EIR examines the environmental impacts of a specific development project and should focus primarily on the changes in the environment that would result from the development project. The EIR examines all stages of the project, including planning, construction, and operation.

## 2.3 SCOPING PROCESS

The City determined that an EIR would be required for this project and issued an NOP on June 6, 2024; refer to [Appendix A, \*Notice of Preparation \(NOP\)\*](#). The NOP was distributed for public review from June 6, 2024 to July 5, 2024, in accordance with the required 30-day public review period. Comment letters received are provided in [Appendix B, \*NOP Comments\*](#).

The NOP process helps determine the scope of the environmental issues to be addressed in the Draft EIR. Based on this process, certain environmental categories were identified as having the potential to result in significant impacts. Issues considered potentially significant are addressed in [Section 5.0, \*Environmental Analysis\*](#); issues determined to have no impact and how the determinations were made are provided in [Section 8.0, \*Effects Found Not to Be Significant\*](#).

As detailed in [Table 2-1, \*NOP and Public Scoping Meeting Commenters\*](#), five agencies and three organizations responded to the NOP and/or provided comments during the public scoping meeting conducted by the City on June 17, 2024, at 6:00 p.m. at the Norma Hertzog Community Center, 1845 Park Avenue, Costa Mesa, California 92627.



## 2. Introduction

**Table 2-1 NOP and Public Scoping Meeting Commenters**

Commenter	Date
<b>Agencies</b>	
Native American Heritage Commission	June 5, 2024
City of Irvine – Community Development Department	June 20, 2024
Department of Toxic Substances Control	June 20, 2024
Southern California Association of Governments	June 20, 2024
California Department of Transportation – District 12	June 24, 2024
<b>Organizations</b>	
Lozeau Drury LLP (on behalf of the Supporters Alliance for Environmental Responsibility [SAFER])	June 7, 2024
Mitchell M. Tsai Law Firm (on behalf of the Western States Regional Council of Carpenters)	June 17, 2024 <sup>1</sup>
Costa Mesa First	July 5, 2024 and July 17, 2024 <sup>2</sup>
Notes:	
1. Comments received on June 17, 2024 were received via email and during the public scoping meeting.	
2. Comments received on July 5, 2024 were received during the public scoping meeting as well.	

A summary of the primary issue areas, and where in the Draft EIR the issues are addressed, are as follows:

- Aesthetic and lighting impacts related to the existing visual character and quality of the project area (refer to Section 5.1, *Aesthetics*);
- Impacts related to air quality and health risk (refer to Section 5.2, *Air Quality*);
- Impacts to biological resources (refer to Section 5.3, *Biological Resources*);
- Impacts to cultural and archaeological resources (refer to Section 5.4, *Cultural Resources*);
- Impacts related to energy use (refer to Section 5.5, *Energy*);
- Impacts related to geology and soils (refer to Section 5.6, *Geology and Soils*);
- Greenhouse gas emissions impacts associated with project construction and operations (refer to Section 5.7, *Greenhouse Gas Emissions*);
- Impacts related to hazardous materials in the project vicinity (refer to Section 5.8, *Hazards and Hazardous Materials*);
- Hydrology, water quality, and flooding impacts related to project operations (refer to Section 5.9, *Hydrology and Water Quality*);
- Consistency with local and regional planning documentation, goals, and policies (refer to Section 5.10, *Land Use and Planning*);
- Noise created by project construction and operations in the site vicinity (refer to Section 5.11, *Noise*);
- Impacts on population and housing (refer to Section 5.12, *Population and Housing*);
- Impacts on public services (refer to Section 5.13, *Public Services*);



## 2. Introduction

- Impacts on recreation (refer to [Section 5.14, \*Recreation\*](#));
- Traffic, circulation, and access impacts to local and regional roadway facilities, and impacts to pedestrians and bicyclists (refer to [Section 5.15, \*Transportation\*](#));
- Impacts to tribal cultural resources (refer to [Section 5.16, \*Tribal Cultural Resources\*](#));
- Impacts on existing water supply and infrastructure facilities (refer to [Section 5.17, \*Utilities and Service Systems\*](#));
- Cumulative environmental impacts of the proposed project in conjunction with other nearby planned projects (refer to [Sections 5.1 through 5.17](#));
- Irreversible and irretrievable commitment of resources associated with the project ([Section 9.0, \*Irreversible and Irretrievable Commitment of Resources\*](#));
- Growth-inducing effects of the project ([Section 10.0, \*Growth-Inducing Impacts of the Proposed Project\*](#)); and
- Consideration of other project alternatives (refer to [Section 7.0, \*Alternatives to the Proposed Project\*](#)).

### 2.4 SCOPE OF THIS DRAFT EIR

The scope of the Draft EIR was determined based on review of the current conditions of the project site and surrounding area, the scope of the proposed project, comments received in response to the NOP, and comments received at the public scoping meeting. The purpose of the public scoping meeting was to provide an open house forum for the public and other agencies to learn about the project and the CEQA process and to provide input on the environmental issues that should be addressed in the EIR. Attendees were instructed to provide written comments on the proposed project and EIR; comment letters received from attendees are included in [Appendix B](#); refer also to [Table 2-1](#). [Appendix B](#) summarizes the issues identified by commenting agencies or persons. Pursuant to Sections 15126.2 and 15126.4 of the CEQA Guidelines, the Draft EIR should identify any potentially significant adverse impacts and recommend mitigation that would reduce or eliminate these impacts to levels of insignificance.

The information in [Section 3.0, \*Project Description\*](#), establishes the basis for analyzing future, project-related environmental impacts.

#### 2.4.1 Potentially Significant Adverse Impacts

The City determined the following 17 environmental factors have potentially significant impacts if the proposed project is implemented:

- Aesthetics;
- Air Quality;
- Biological Resources;



## 2. Introduction

- Cultural Resources;
- Energy;
- Geology and Soils;
- Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services;
- Recreation;
- Transportation;
- Tribal Cultural Resources; and
- Utilities and Service Systems.

The City has determined that the project would result in no impact to the following topical areas as substantiated in Section 8.0, *Effects Found Not to Be Significant*:

- Agriculture and Forestry Resources;
- Mineral Resources; and
- Wildfire.

### 2.4.2 Significant Unavoidable Adverse Impacts

An EIR identifies significant and unavoidable adverse impacts, as defined by CEQA, that would result from implementation of the proposed project. Unavoidable adverse impacts may be considered significant on a project-specific basis, cumulatively significant, and/or potentially significant. The City must prepare a Statement of Overriding Considerations before it can approve the project, attesting that the decision-making body has balanced the benefits of the proposed project against its significant unavoidable environmental effects and has determined the benefits outweigh the adverse effects, and therefore the adverse effects are considered acceptable.

No impacts were found in the Draft EIR to be significant and unavoidable.

## 2.5 INCORPORATION BY REFERENCE

Several documents are incorporated by reference into this Draft EIR, consistent with CEQA Guidelines Section 15150, and are available for review at the City of Costa Mesa, Development Services Department, 77 Fair Drive, Costa Mesa, California 92626.

- City of Costa Mesa, *2015–2035 General Plan*, 2016 (herein referenced as the “General Plan”).



## 2. Introduction

- City of Costa Mesa, *Final Environmental Impact Report for the 2015–2035 General Plan*, State Clearinghouse No. 2015111053, prepared by MIG, Inc., June 26, 2016 (herein referenced as the “General Plan EIR”).
- City of Costa Mesa, *North Costa Mesa Specific Plan*, adopted July 1994 and most recently updated September 2016 (herein referenced as the “Specific Plan”).
- City of Costa Mesa, *Costa Mesa Municipal Code*, current through Ordinance 23-03 and the July 2023 code supplement, updated February 22, 2023 (herein referenced as the “Municipal Code”).

### 2.6 PUBLIC REVIEW OF THE DRAFT EIR

This Draft EIR is being circulated for a 45-day public review period. Interested agencies and members of the public are invited to provide written comments on the Draft EIR to:

City of Costa Mesa  
Development Services Department  
77 Fair Drive  
Costa Mesa, California 92626  
Attn: Chris Yeager, Senior Planner  
CHRISTOPHER.YEAGER@costamesaca.gov

Upon completion of the 45-day public review period, the City will review all written comment letters received and prepare written responses for each comment letter. A Final EIR will incorporate the received comment letters, respond to each of the comment letters received, as well as incorporate any changes to the Draft EIR that result from comments, if applicable. The Final EIR will be presented to the City for certification as the environmental document for the project. All persons who comment on the Draft EIR will be notified of the availability of the Final EIR and the date of the public hearing before the City.

The Draft EIR is available to the general public for review at the following locations:

- City of Costa Mesa, Economic & Development Services Department, 77 Fair Drive, Costa Mesa, California 92626;
- Costa Mesa-Donald Dungan Library, 1855 Park Avenue, Costa Mesa, California 92627;
- Mesa Verde Branch Library, 2969 Mesa Verde Drive East, Costa Mesa, California 92626; and
- City of Costa Mesa Website: <https://www.costamesaca.gov/government/departments-and-divisions/economic-and-development-services/planning/environmental-notices-and-reports>.



## 2. Introduction

### 2.7 MITIGATION MONITORING

Public Resources Code Section 21081.6 requires that agencies adopt a monitoring or reporting program for any project for which it has made findings pursuant to Public Resources Code Section 21081. Such a program is intended to ensure the implementation of all mitigation measures adopted through the preparation of an EIR.

The Mitigation Monitoring and Reporting Program for the Hive Live project will be completed as part of the Final EIR, prior to consideration of the project by the Costa Mesa City Council.



## 2. Introduction

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## Chapter 3.0 Project Description



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## 3. Project Description

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### 3.1 PURPOSE

CEQA Guidelines Section 15124 requires a project description for an Environmental Impact Report (EIR) to contain (1) the precise location and boundaries of a project site; (2) a statement of objectives sought by a project including the underlying purpose of the project; (3) a general description of a project's characteristics; and (4) a statement briefly describing the intended uses of the EIR, including a list of the agencies expected to use the EIR in decision making, a list of the permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements required by Federal, State, or local laws, regulations, or policies. An adequate project description need not be exhaustive but should supply the detail necessary for project evaluation.

### 3.2 PROJECT LOCATION AND SETTING

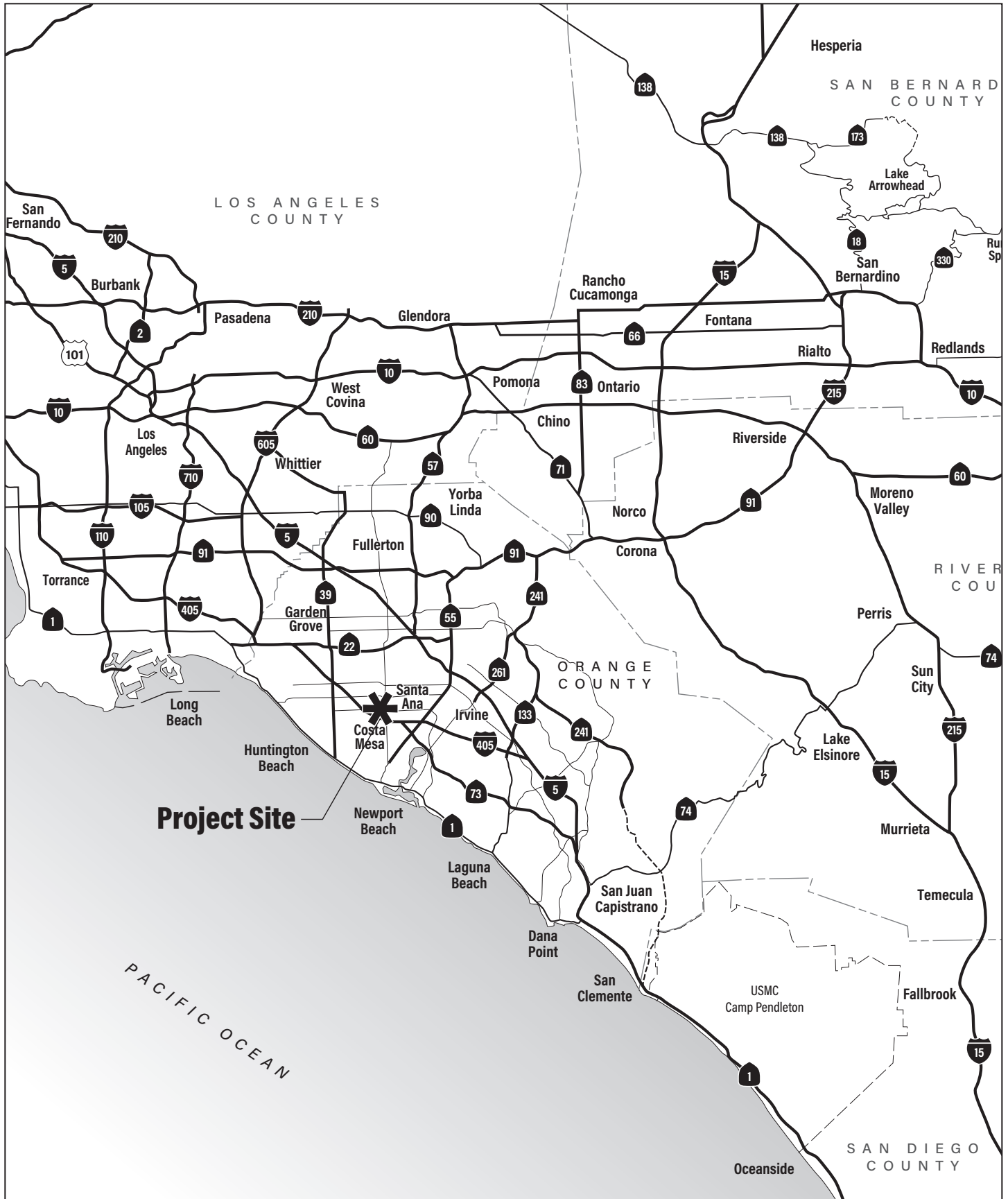
#### 3.2.1 Project Location

The City of Costa Mesa (City) encompasses approximately 16 square miles and is located in the western portion of Orange County; refer to [Exhibit 3-1, \*Regional Vicinity\*](#). Surrounding jurisdictions include Santa Ana to the north, Irvine and Newport Beach to the east, Newport Beach to the south, and Huntington Beach and Fountain Valley to the west.


The approximately 14.25-acre project site is located at 3333 Susan Street, Costa Mesa, 92626; refer to [Exhibit 3-2, \*Site Vicinity\*](#). The site is specifically bound by Sunflower Avenue to the north, Susan Street to the east, South Coast Drive to the south, and a public trail (the "Rail Trail"), a pump station (operated by Mesa Water District), and Anduril Industries to the west. Regional access to the project site from the west and east is available via Interstate 405 (I-405), from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, South Coast Drive, and Sunflower Avenue are the major roadways that provide local access to the project site.

#### 3.2.2 Project Setting (Existing Conditions)

The project site is currently developed with the 182,520-square foot Hive Creative Office Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot with access provided by two driveways on Susan Street and one driveway on Sunflower Avenue. The surface parking lot is shared between the office campus and the practice field.





 PROJECT SITE

Source: Google Earth Pro, April 2024



### 3. Project Description

#### 3.2.2.1 LAND USE DESIGNATION AND ZONING

The project site is located within and subject to the North Costa Mesa Specific Plan (Specific Plan). The project site currently has a General Plan Land Use designation of Industrial Park (IP) and a zoning designation of Planned Development Industrial (PDI) within a Special Area (North Costa Mesa Specific Plan). Exhibit 3-3, Existing and Proposed General Plan Land Use Designation, and Exhibit 3-4, Existing and Proposed Zoning Designation and Specific Plan Area, depict the existing General Plan designations, Zoning, and Specific Plan designations for the project site. The Specific Plan identifies the project site as Subarea 1 (Home Ranch) C (Industrial Park, which allows for a floor area ratio (FAR) of 0.40 and a maximum square footage of 252,648 square feet.

#### 3.2.2.2 SURROUNDING LAND USES

The project site is surrounded by commercial, residential, and public/institutional uses. Surrounding land uses in proximity to the project site include the following:

- North: Commercial/office uses (e.g., PHP Agency, TechMD, Lake Center, and United States Post Office) are located to the north and northeast;
- East: Single- and multi-family residential (single-family dwellings and townhomes) uses (i.e., The Laurels at Providence Park) and commercial/office uses (i.e., The Interinsurance Exchange of the Automobile Club [AAA]) are located to the east;
- South: Vacant land and commercial/retail uses (i.e., Ikea) are located to the south; and
- West: Public/institutional (i.e., Rail Trail and Mesa Water District pump station) as well as a corporate headquarters (i.e., Anduril Industries) are located to the west.

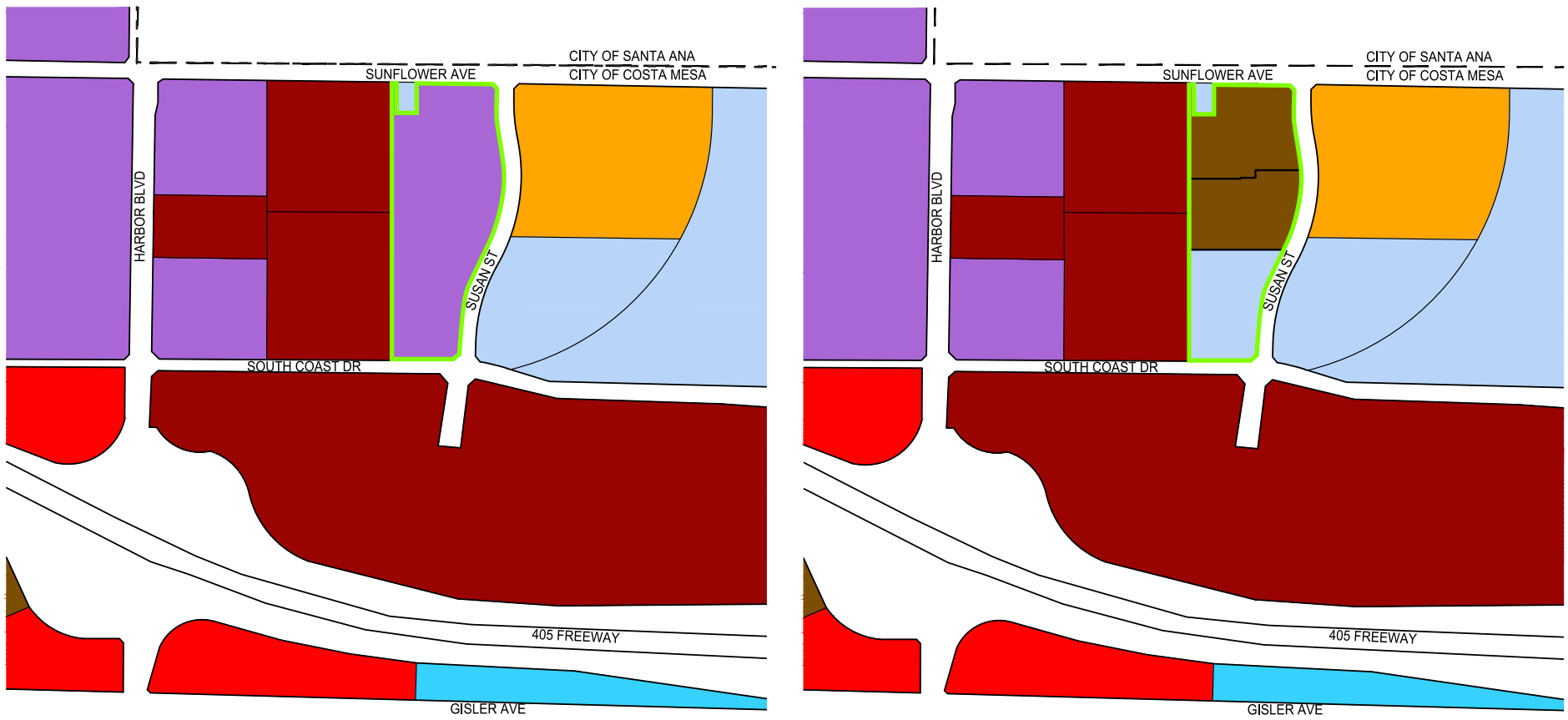
### 3.3 GOALS AND OBJECTIVES

Pursuant to CEQA Guidelines Section 15124(b), the EIR project description must include “[a] statement of objectives sought by the proposed project...The statement of objectives should include the underlying purpose of the project.” The proposed project objectives for Hive Live are to:

1. Redevelop the project site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting and in a manner that is fiscally neutral or fiscally positive for the City.
2. Increase the City’s housing stock, including affordable housing opportunities, by providing multi-family residential housing in areas with adequate public utilities and public services (i.e., fire protection and emergency services, police protection services, school services, and library services) and in close proximity to major employment centers.
3. Provide enhanced recreation and open space opportunities and opportunities for specialty retail and entertainment uses to serve future residents.

# EXISTING

# PROPOSED



PROJECT SITE

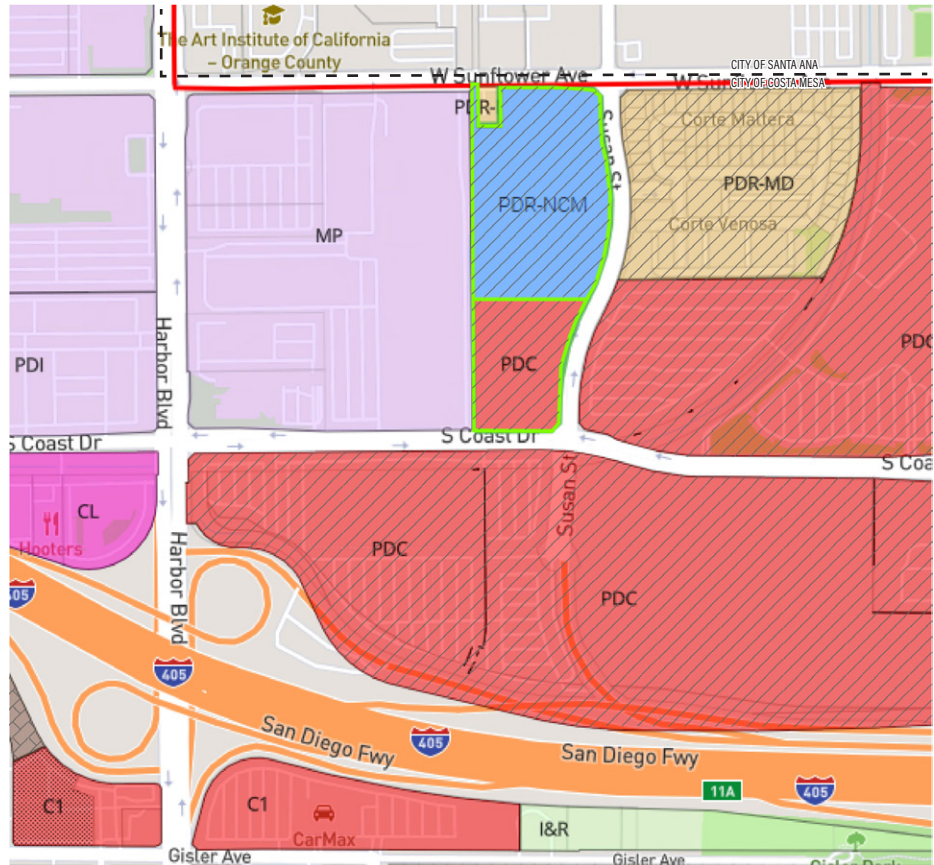
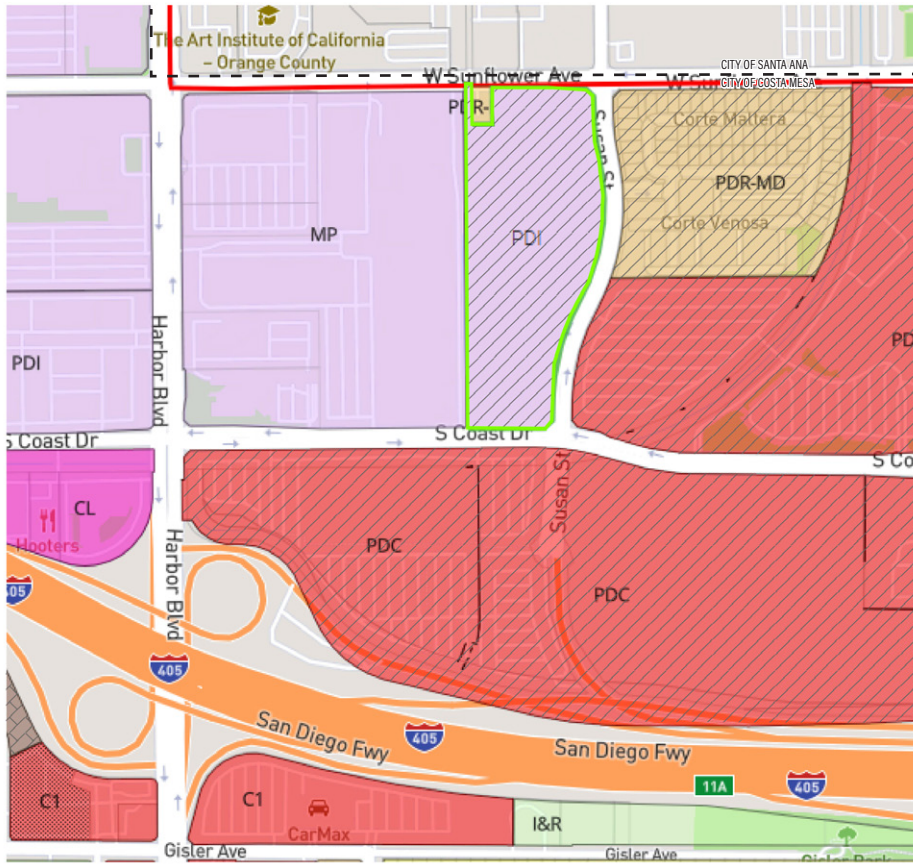
### GENERAL PLAN LAND USE DESIGNATIONS

- |  |  |   |   |
|--|--|---|---|
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #ffff00;"></span> Low Density Residential (8 du/ac)     | <span style="display: inline-block; width: 15px; height: 10px; background-color: #f08080;"></span> Neighborhood Commercial | <span style="display: inline-block; width: 15px; height: 10px; background-color: #0000ff;"></span> Multi-Use Center (6 to 40 du/ac) | <span style="display: inline-block; width: 15px; height: 10px; background-color: #800080;"></span> Industrial Park      |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #ffa500;"></span> Medium Density Residential (12 du/ac) | <span style="display: inline-block; width: 15px; height: 10px; background-color: #ff0000;"></span> General Commercial      | <span style="display: inline-block; width: 15px; height: 10px; background-color: #add8e6;"></span> Urban Center Commercial          | <span style="display: inline-block; width: 15px; height: 10px; background-color: #008000;"></span> Golf Course          |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #654321;"></span> High Density Residential (20 du/ac)   | <span style="display: inline-block; width: 15px; height: 10px; background-color: #800000;"></span> Commercial Center       | <span style="display: inline-block; width: 15px; height: 10px; background-color: #6495ed;"></span> Cultural Arts Center             | <span style="display: inline-block; width: 15px; height: 10px; background-color: #90ee90;"></span> Fairgrounds          |
| <span style="display: inline-block; width: 15px; height: 10px; background-color: #ff00ff;"></span> Commercial-Residential (174 du/ac)    | <span style="display: inline-block; width: 15px; height: 10px; background-color: #800080;"></span> Regional Commercial     | <span style="display: inline-block; width: 15px; height: 10px; background-color: #d8bfd8;"></span> Light Industrial                 | <span style="display: inline-block; width: 15px; height: 10px; background-color: #00bfff;"></span> Public/Institutional |

Source: City of Costa Mesa Zoning Map, September 2024

# EXISTING

# PROPOSED



PROJECT SITE

### ZONING DESIGNATIONS

AP	I&R-S
C1	MG
C1-S	MP
C2	P
CL	PDC
I&R	

PDI
PDR-HD
PDR-LD
PDR-MD
PDR-NCM
R1

### SPECIAL AREAS

- North Costa Mesa Specific Plan
- SoBECA Urban Plan
- Residential Incentive Overlay

Source: City of Costa Mesa Zoning Map, January 2025





### 3. Project Description

4. Facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and by bringing residents in closer proximity to existing and proposed resident-serving retail and adjacent employment centers, as well as existing pedestrian-scale transit improvements such as the Rail Trail.
5. Improve jobs-housing ratio and reduce vehicle miles traveled by placing housing in proximity to a major employment center in support of Statewide housing and transportation regulations (Senate Bill 375 and Senate Bill 743).
6. Incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards.
7. Enhance the visual attributes of the project site and surrounding area through implementation of a high quality design, creative facades, consistent development standards, and design guidelines for streetscape, landscape, site design, and signage.

### 3.4 BACKGROUND AND HISTORY

The Costa Mesa City Council adopted the North Costa Mesa Specific Plan (Specific Plan) in July 1994, which included the project site and surrounding area as Segerstrom Home Ranch (Area 1). Area 1 was amended on November 19, 2001 to increase the size and amend the land use designations, FAR, and trip budgets. In 2001, a Development Agreement (DA-00-01) was approved and authorized a maximum 0.40 FAR for the project site. In 2002, the current development was approved through Master Plan PA-02-34. On November 17, 2003, the Specific Plan was amended (SP-03-02) for acreage and building square footage allocation for Area 1 sub-areas. In 2008, Final Master Plan PA-08-09 was approved to allow for a new office building in the southern portion of the lot. The building was never constructed and Final Master Plan PA-08-09 approval has since expired. The Development Agreement (DA-00-01) expires on August 27, 2030. On September 6, 2016, the Specific Plan was amended (SP-16-01) to update the Area 1 sub-areas, 3350 Avenue of the Arts and Sakioka Lot 2 per the 2015-2035 General Plan Update.

The project site was used for agricultural purposes or undeveloped until 2002. In 2003, the project site was graded in preparation for the construction of the Hive Creative Office Campus. By 2004, the Hive Creative Office Campus had been built. In 2017, the southern, undeveloped, portion of the site was converted into the Los Angeles Chargers practice field. On November 1, 2023, the Los Angeles Chargers announced their intention to relocate their operations from the project site to the City of El Segundo. The applicant is seeking entitlements for redevelopment of the project site as a multi-phased master-planned residential community (the subject of this EIR).

### 3.5 PROJECT CHARACTERISTICS

“Project,” as defined by the CEQA Guidelines, means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.



### 3. Project Description

#### 3.5.1 Description of the Project

The project proposes to demolish the existing 182,520-square foot Hive Creative Office Campus and the Los Angeles Chargers practice field and construct a new multi-phased master-planned residential community (“Hive Live”). The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space (i.e., publicly accessible open space area, private common open space, and private balconies); refer to [Exhibit 3-5, \*Conceptual Site Plan\*](#).

The proposed project requires approval of a General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement, and Density Bonus Agreement.

##### 3.5.1.1 PROPOSED LAND USES AND BUILDOUT

The proposed project would construct three multi-family residential structures with up to a total of 1,050 units, 3,692 square feet of retail uses 335,958 square feet of open space, landscaping, streetscape improvements, as shown on [Exhibit 3-5](#).

##### Residential Community

The multi-family residential component would consist of up to 1,050 multi-family units (with 45 units reserved as affordable units) within three buildings: Building A (five stories; 315 units), Building B (five stories; 346 units), and Building C (five stories; 389 units). The unit breakdown would consist of 141 studio units (13 percent), 562 one-bedroom units (54 percent), and 347 two-bedroom units (33 percent), ranging from 778 square feet to 1,078 square feet.

##### Retail

The retail component of the project includes 3,692 square feet of retail uses, focused primarily on tenant-serving service uses. Such uses may include retail shops and service establishments (i.e., restaurants and health clubs). The retail uses would be located on the ground floor of Building A, fronting Susan Street.



Source: AO Architects, August 2024



### 3. Project Description

#### Open Space

The proposed project would include a total of 335,958 square feet of public and private open spaces. Public open space areas would include a rear paseo adjacent to the Rail Trail, landscaped perimeter, public plaza, general amenity space, bicycle storage space, and retail space; refer to [Exhibit 3-6, \*Conceptual Landscape Plan\*](#). In addition to the publicly accessible open space areas, the proposed project would include open space (i.e., indoor and outdoor amenities) throughout the project site available exclusively for residents. The indoor and outdoor amenities may include a leasing office, indoor and outdoor lounges, ground-level courtyards and pools, dog park, general amenity space, mail room, bicycle storage space, art exhibit, art work, co-work/flex space available to residents, move-in area, fitness room, and roof deck (including a fitness facility, roof lounge, and outdoor deck and pool). The project would also include photovoltaic systems as required by the California Building Code for each building.

#### Landscaping

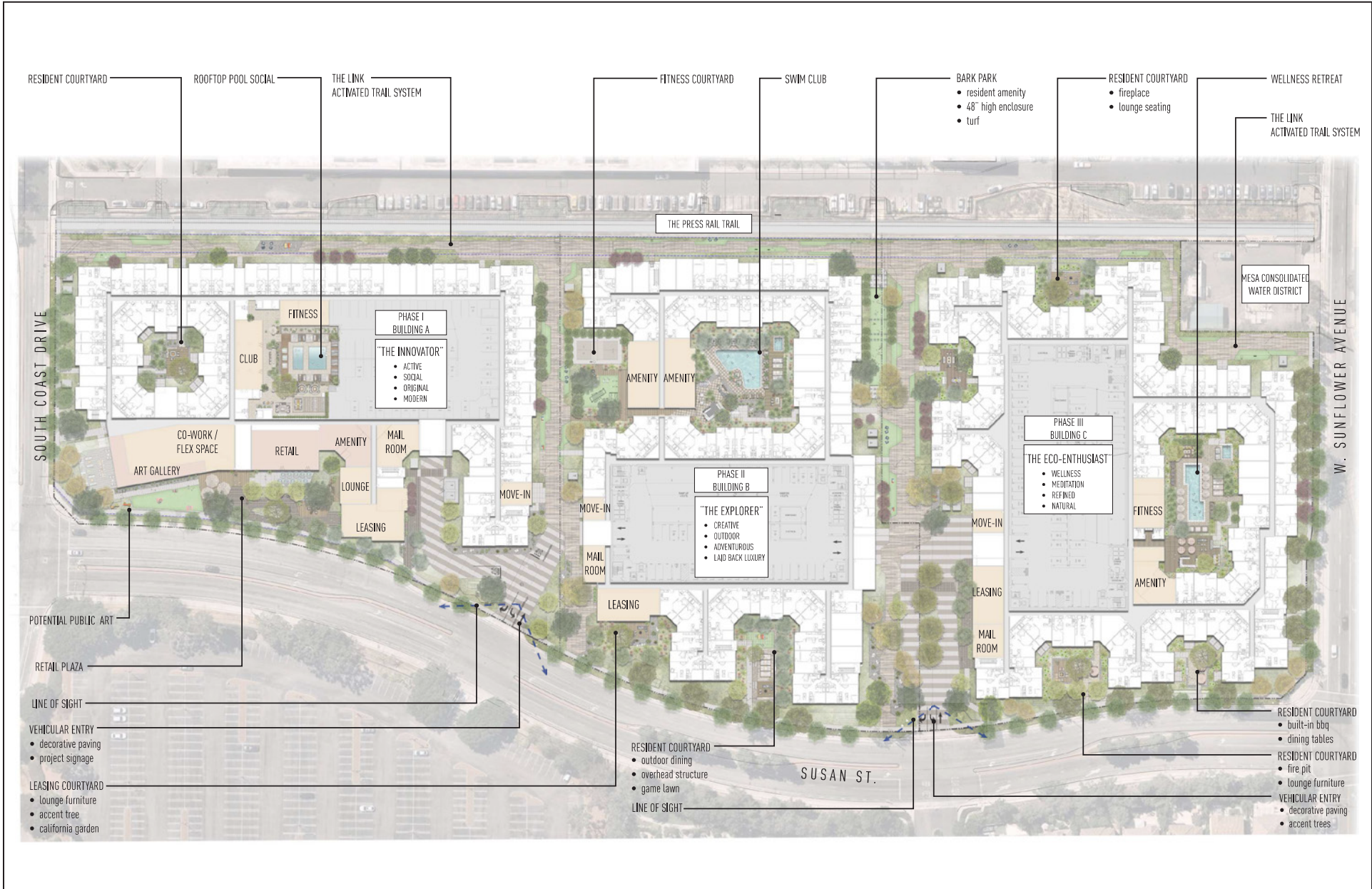
As shown on [Exhibit 3-6](#), landscaping consisting of trees, shrubs, and groundcover would be planted along the site perimeter, between the proposed buildings, and around the open space areas. California native or drought-tolerant and architecturally thematic plant material would be utilized to emphasize entry monuments, signage, walls, and hardscape elements. Proposed landscaping would be intended to soften hardscape features visible from a public street or from a residential property.

#### Lighting

Project lighting would be installed to illuminate driveways, public walkways, public and private amenity areas, public retail areas, pathways, stairways, entrances and exits, parking areas, recreation areas, pools, dumpster areas, and other locations required by the City to meet minimum safety requirements. A lighting plan is provided in the *Hive Live Master Plan* (Master Plan), which illustrates the potential light pole locations throughout the site. Light poles are proposed along the site perimeter, between the proposed buildings, and around the open space areas. All lighting on-site would be shielded and directed downward to avoid impacting adjacent uses.

#### Public Art

The proposed project would include the installation of public art within the proposed open space area. The Master Plan includes a public open space art plan detailing the location for the potential public art installation. As shown, public art installation may be located at the public plaza, located near the corner of Susan Street and South Coast Drive.



Source: MJS Landscape Architecture, September 2024



### 3. Project Description

#### Transportation Improvements and Parking

Vehicular access to the project site would be provided by the two existing driveways along Susan Street. The two driveways along Susan Street would be located between Building B and Building C (northernmost driveway) and Building A and Building B (southernmost driveway). The two driveways along Susan Street would connect to the project’s internal roadways and three wrap-around (aboveground) parking structures. Public right-of-way improvements including sidewalks, landscaping, and drive approaches would be constructed to City Standards.

In addition to project vehicular driveways, the existing driveway along Sunflower Avenue and a new driveway along South Coast Drive would be provided for emergency access only and, as such, fenced off with a six-foot in height metal louver fence and emergency vehicle access gate. The emergency access driveway along Sunflower Avenue would be located to the east of the adjacent Mesa Water District pump station and would also allow pedestrian and bicycle access to the Rail Trail. The new emergency access driveway along South Coast Drive would be located near the southwestern corner of Building A. Within the project site, four 20-foot-wide secondary emergency fire access roads would be afforded on-site. The two secondary emergency fire access roads along Susan Street (located between Building B and Building C [northernmost driveway] and Building A and Building B [southernmost driveway]) would provide access to “fire turnaround” areas adjacent to the Rail Trail. A third secondary emergency fire access road is accessible from the existing driveway along Sunflower Avenue and is adjacent to the Mesa Water pump station. A fourth secondary emergency fire access road would be accessible along South Coast Drive (near the southwestern corner of Building A).

#### Parking

The proposed project and would provide a total of 1,751 spaces; refer to *Table 3-1, Proposed Parking Plan*. Each wrap-around (aboveground) parking structure on the project site would include electric vehicle charging stations (at least five percent of the total parking spaces), electric vehicle capable spaces (at least ten percent of the total parking spaces), and electric vehicle ready spaces (at least 25 percent of the total parking spaces) as required by the California Building Code Standards and California Green Building Standards Code.

**Table 3-1 Proposed Parking Plan**

Area	Buildout	Parking Ratio	Parking Required <sup>1</sup>	Parking Provided
Building A				
Dwelling Units	315 du	1.65 per du	521 <sup>2,3</sup>	523 <sup>3</sup>
Retail	3,692 square feet	1.0 per 250 square feet	15	15
<i>Total Building A</i>			538	538
Building B				
Dwelling Units	346 du	1.65 per du	572 <sup>3</sup>	572 <sup>3</sup>
<i>Total Building B</i>			572 <sup>3</sup>	572 <sup>3</sup>
Building C				
Dwelling Units	389 du	1.65 per du	643 <sup>3</sup>	643 <sup>3</sup>
<i>Total Building C</i>			643 <sup>3</sup>	643 <sup>3</sup>
<b>Total Entire Site</b>			<b>1,751</b>	<b>1,751</b>

Source: Legacy Partners 2023.

Notes: du = dwelling units.

1 Pursuant to California Government Code Section 65915[f][2], the project’s required parking is reduced, compared to the City’s Municipal Code requirements.

2 Actual calculations may be slightly off due to rounding.

3 Total parking count includes one United States Postal Service space.



## 3. Project Description

### On-Site Infrastructure Improvements

All proposed infrastructure improvements would be located on-site with some lateral connections located in roadway right-of-way to connect to existing water, sewer, storm drain, and dry utility facilities in Sunflower Avenue, Susan Street, and South Coast Drive. Additional upgrades to ancillary utilities may occur within the public rights-of-way.

#### *Domestic Water*

The proposed project is served by an existing Mesa Water District domestic water line in Sunflower Avenue, Susan Street, and South Coast Drive. There is an existing 8-inch domestic water line connection in Susan Street. This Mesa Water District water line currently provides domestic water service to the project site. An existing 8-inch fire flow line connection is located within Susan Street as well.

The existing domestic water line and fire flow line connections would be capped and replaced with new water connections along Sunflower Avenue and Susan Street. Along Sunflower Avenue, one new domestic water line connection and one new fire flow line connection would be provided within the landscaped perimeter to the north of Building C. Along Susan Street, two new domestic water line connections and two new fire flow line connections would be installed.

#### *Sanitary Sewer*

The proposed project is served by an existing Costa Mesa Sanitary District sewer system in Susan Street. Specifically, the proposed project is served by four existing 8-inch vitrified concrete pipe sanitary sewer lines in Susan Street that collect and convey sewer flows to an existing 15-inch Orange County Sanitation District (OCSD) mainline sewer, which flows from north to south in Susan Street. It is acknowledged that an existing 12-inch OCSD vitrified concrete pipe sanitary sewer line is located along the eastern site perimeter (parallel to the Rail Trail); however, the project does not propose connection to this sanitary sewer line.

The project proposes an on-site sanitary sewer system comprised of public and private sewer components. The proposed sewer system would maintain existing connections to the existing 15-inch OCSD mainline sewer in Susan Street. Additionally, the proposed project would connect a fifth 8-inch vitrified concrete pipe sanitary sewer line from the project site to the 15-inch OCSD mainline sewer located in Susan Street. Final sewer connection locations, hydraulics, and capacities would be confirmed during the construction plan review process, including the preparation of the project's sewer improvement plans, and would require approval by Costa Mesa Sanitary District.

#### *Storm Drain*

The project site is served by the following existing storm drains in Sunflower Avenue, Susan Street, and South Coast Drive:

- To the east of the northeastern corner of the Mesa Water District pump station, catch basins connect the project site to an existing 51-inch storm drain along the northern boundary, which flows from west to east in Sunflower Avenue;



### 3. Project Description

- Catch basins connect the project site to three existing 30-inch storm drains along the eastern boundary. The existing 30-inch storm drains connect to an existing 51-inch main storm drain line which flows from north to south in Susan Street;
- A catch basin connects the project site to an existing storm drain near the southeastern corner of the project site, adjacent to the intersection of Susan Street and South Coast Drive. The storm drain flows from north to south, connecting the northern and southern rights-of-way along South Coast Drive; and
- A catch basin (near the existing parking lot), located to the south of the Mesa Water District pump station, connects the project site to an existing storm drain near the southwestern corner of the project site. The storm drain flows from north to south along the western site perimeter (running parallel to the Rail Trail).

Similar to existing conditions, the proposed project would maintain existing storm drain connections in Susan Street and South Coast Drive. However, the proposed project would relocate the existing storm drain connection adjoining the northeast corner of the Mesa Water District pump station. This storm drain connection would be shifted slightly to the west and would connect to the existing 51-inch storm drain in Sunflower Avenue. On-site storm drains would be located along the site perimeter, between the proposed buildings, and around the open space areas.

#### *Dry Utilities*

Within the project site, Southern California Gas Company and Southern California Edison would continue to provide natural gas and electrical services, respectively. In addition, existing telephone and cable television utility connections on-site would be utilized by the project.

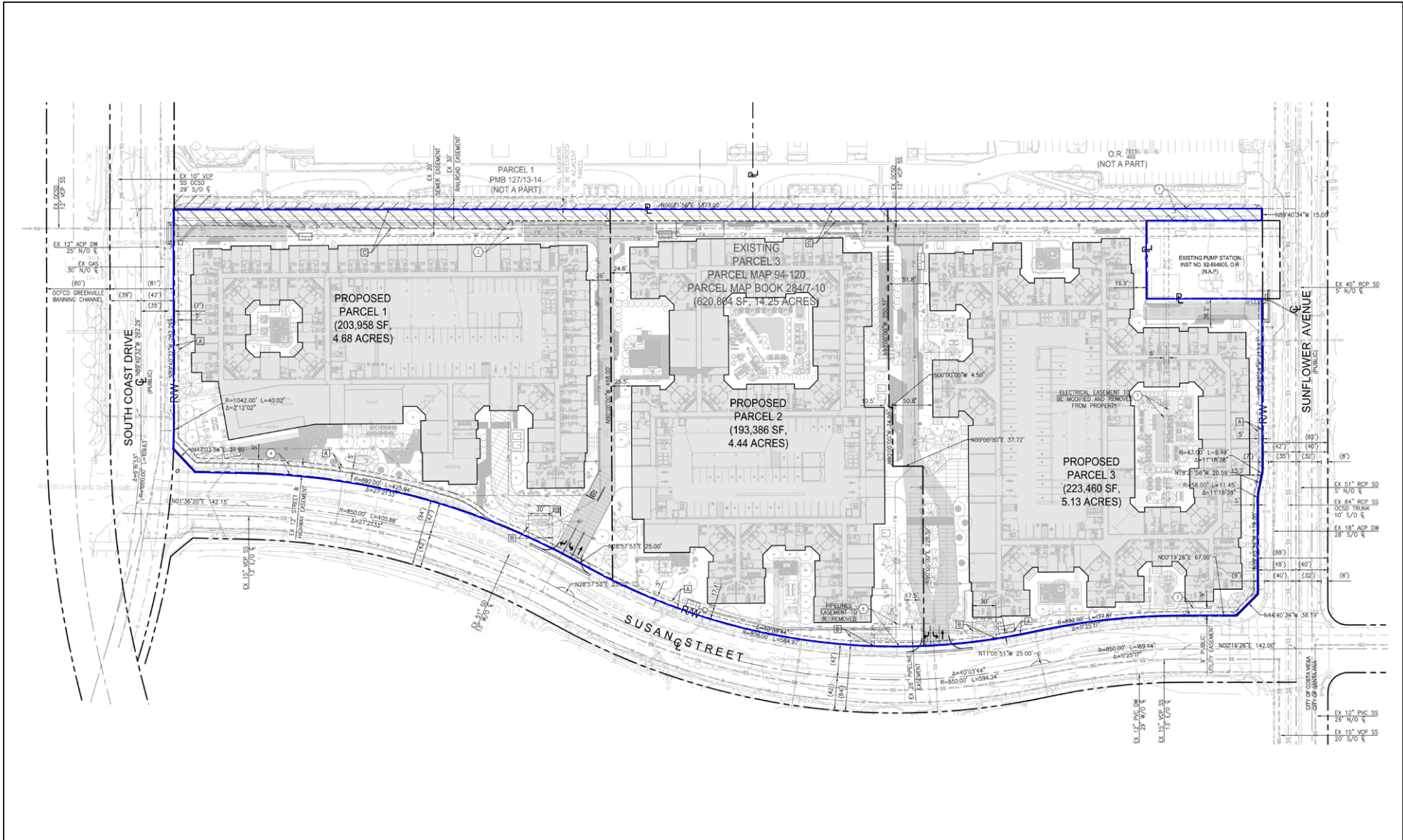
#### **3.5.1.2 TENTATIVE PARCEL MAP**

A tentative parcel map is proposed to divide the site into three parcels with one building on each parcel. The tentative parcel map would establish necessary public right-of-way and access improvements and modification of existing easements (i.e., utility, access, among others) to support the proposed mixed-use development; refer to [Exhibit 3-7, \*Vesting Tentative Map\*](#).

#### **3.5.1.3 GENERAL PLAN AMENDMENT**

The Land Use Element would be amended to change the site's existing Industrial Park land use designation to Urban Center Commercial on the southern parcel and High Density Residential on the two northern parcels; refer to [Exhibit 3-3](#). Sitewide, this amendment would allow for a site-specific density up to 62.3 dwelling units per acre.





Source: Fuscoc Engineering, September 2024



### 3. Project Description

#### 3.5.1.4 ZONING AMENDMENT

The proposed Zone Amendment would replace the site’s current “PDI (Planned Development Industrial)” zoning district with “PDC (Planned Development Commercial)” on the southern parcel and “PDR-NCM (Planned Development Residential – North Costa Mesa)” on the two northern parcels to allow a mixed-use development with residential and commercial (retail) uses; refer to [Exhibit 3-4](#). According to Municipal Code Section 13-20, *Zoning Districts*, PDC districts are intended for retail shops, offices and service establishments, including but not limited to, hotels, restaurants, theaters, museums, financial institutions, and health clubs. These uses are intended to serve adjacent residential areas, as well as the entire community and region. Complementary residential uses could also be included in the planned development. PDR-NCM districts are intended for multi-family residential developments containing any type or mixture of housing units, either attached or detached, including but not limited to clustered development, townhouses, patio houses, detached houses, duplexes, garden apartments, high rise apartments, or common interest developments at a density of twenty-five to thirty-five (25-35) dwelling units per acre or higher pursuant to an adopted specific plan. Complementary non-residential uses could also be included in the planned development. As such, the proposed PDR-NCM district would allow a mix of residential and non-residential uses.

#### 3.5.1.5 SPECIFIC PLAN AMENDMENT

The existing Specific Plan acts as a bridge between the General Plan and project development. The Specific Plan Amendment would modify the existing Specific Plan development standards, regulations, design guidelines, infrastructure systems, and implementation strategies on which project-related development activities would be founded. Specifically, the Specific Plan Amendment would update Specific Plan Table 4A, *Segerstrom Home Ranch Sub-Areas* and Figure 2, *Existing Land Uses*, through Figure 4, *Zoning*, and Figure 11, *Area 1 – Segerstrom Home Ranch*, to be consistent with the proposed project’s anticipated development potential, zoning, and land uses; refer to [Exhibit 3-3](#) and [Exhibit 3-4](#) as well as [Table 3-2](#), *Segerstrom Home Ranch Sub-Area Development Potential*. [Table 3-2](#) illustrates the proposed updates to Specific Plan Table 4A as they related to the proposed project (i.e., Subarea 1 [Home Ranch] C [Industrial Park])

**Table 3-2 Segerstrom Home Ranch Sub-Area Development Potential**

Land Use	Acreage	Floor Area Ratio/Density	Maximum Units/Square Footage	Maximum Stories/Height	A.M. Peak Hour Trips	P.M. Peak Hour Trips
<b>Existing Specific Plan Development Potential</b>						
C. Industrial Park	14.25	0.40 FAR	252,648 sf	1-5 stories/45-60 feet	376 <sup>3</sup>	362 <sup>3</sup>
<b>Proposed Specific Plan Development Potential</b>						
C. HIVE LIVE	14.25	0.40 FAR Up to 62 units/acre <sup>1</sup>				
Parcel A <sup>2</sup>	4.68	67.3 du per acre 0.02 FAR	315 units 3,692 sf	5 stories/73 feet, 3 inches	397 <sup>4</sup> , 9 <sup>5</sup>	443 <sup>4</sup> , 24 <sup>5</sup>
		0.40 FAR	252,648 sf	1-5 stories/45-60 feet	376	362
Parcel B	4.44	77.9 du per acre	346 units	5 stories/77 feet, 6 inches	397 <sup>4</sup>	443 <sup>4</sup>
Parcel C	5.13	75.8 du per acre	389 units	5 stories/77 feet, 6 inches	397 <sup>4</sup>	443 <sup>4</sup>

Sources: Legacy Partners 2023.

City of Costa Mesa, *North Costa Mesa Specific Plan*, September 2016.

Linscott, Law & Greenspan, Engineers, *Traffic Impact Analysis for Hive Apartments Costa Mesa, California*, November 21, 2024.

Notes: du = dwelling units.



## 3. Project Description

1. The permitted multi-family units reflects the total number of base units permitted across the 14.25-acre property, which is approximately 62 units/acre. However, individual projects within the HIVE LIVE may exceed 62 units/acre up to a maximum of 85 units/acre, provided that the average density across the HIVE LIVE property does not exceed 62 units/acre base density, exclusive of any increase in units/density permitted pursuant to the Density Bonus Law (Government Code Section 65915).
2. Parcel A may be developed with two options: (1) a mixed-use option with 315 residential units and 3,692 square feet of retail or (2) an office use with up to 252,648 square feet (at a 0.40 FAR). The 70,128 square feet of non-residential development is only available to Parcel 1 of HIVE LIVE, which has a General Plan designation of Urban Center Commercial and is zoned Planned Development Commercial (PDC).
3. See partial Assignment and Assumption of Development Agreement recorded on 02/05/2004 as Instrument No. 2004000089554 in official records Orange County. Peak hour trips are related to the maximum non-residential square footage only.
4. This value depicts the total peak hours trips for the total 1,050 dwelling units.
5. This value depicts the total peak hours trips for the total 3,692 retail square footage.

### 3.5.1.6 MASTER PLAN

The City adopts specific plans to provide guidance for the development of a specific area by outlining the allowed land uses, development standards, and general design guidelines. Master plans are provided to implement the specific plan and detail the specific architecture, landscape architecture, and civil engineering attributes of a project.

The Master Plan is required for any development within the Planned Development zoning districts. The Master Plan serves as a plan of development for the project site and includes schematic designs of the various project components (e.g., residential, commercial, public and private open space, pedestrian and vehicular access and pathways, trails, and public art). In addition, the Master Plan provides more details regarding the project's structural setbacks and distances between buildings; required right-of-way dedications and easements; property lines and dimensions; pedestrian access and circulation; landscape and open space areas; floor plans; roof plans; conceptual landscape plan; and renderings/streetscape views, among others. Overall, the Master Plan depicts the development plans that implement the amended Specific Plan's development standards and design guidelines. The Master Plan would include the overall site plan, floor plan, architectural design and elevations, site landscape/hardscape, site lighting design, and construction phasing. A description of the proposed buildings identified per the Master Plan is provided below.

#### Building A

As shown on [Exhibit 3-5](#), Building A is proposed along the southernmost portion of the project site adjacent to South Coast Drive and would be five stories with a maximum height of 73 feet, 3 inches. Building elevations are shown on [Exhibit 3-8a, Building A Elevations](#). The approximately 386,309-square foot building would consist of 315 residential units and amenities, including a leasing office, indoor and outdoor lounges, a ground-level internal courtyard, public plaza, general amenity space, mail room, bicycle storage space, art work/co-work/flex space, art exhibit, move-in area, and retail space. Additionally, a roof deck is proposed, above the wrap-around (aboveground) parking structure, featuring a 1,521-square-foot fitness facility, 2,215 square foot roof lounge, and outdoor deck and pool. In total, Building A would provide 382,617 square feet of residential square footage and 3,692 square feet of non-residential square footage (i.e., retail space). Approximately 538 parking spaces (523 parking spaces for residential uses and 15 for non-residential uses) would be provided for Building A within the 210,020-square foot southernmost wrap-around parking structure.



NORTH ELEVATION



EAST ELEVATION - SUSAN STREET



SOUTH ELEVATION - SOUTH COAST DRIVE



WEST ELEVATION

Source: AO Architects, August 2024



## 3. Project Description

### Building B

Building B would be located in the central portion of the project site adjacent to Susan Street and would be five stories with a maximum height of 77 feet, 6 inches; refer to [Exhibit 3-5](#) and [Exhibit 3-8b](#), *Building B Elevations*. The approximately 388,293-square foot building would consist of 346 residential units and amenities, including a leasing office, ground-level courtyards, general amenity space, dog park, mail room, move-in area, and bicycle storage space. Approximately 572 parking spaces would be provided for Building B within the 216,794-square foot central wrap-around (aboveground) parking structure.

### Building C

Building C is proposed along the northernmost portion of the project site adjacent to Sunflower Avenue and would be five stories with a maximum height of 77 feet, 6 inches; refer to [Exhibit 3-5](#) and [Exhibit 3-8c](#), *Building C Elevations*. The approximately 441,005-square foot building would consist of 389 residential units and amenities, including a leasing office, ground-level courtyards, fitness room, general amenity space, mail room, move-in area, and bicycle storage space. Approximately 643 parking spaces would be provided for Building C within the 232,496-square foot northernmost wrap-around (aboveground) parking structure.

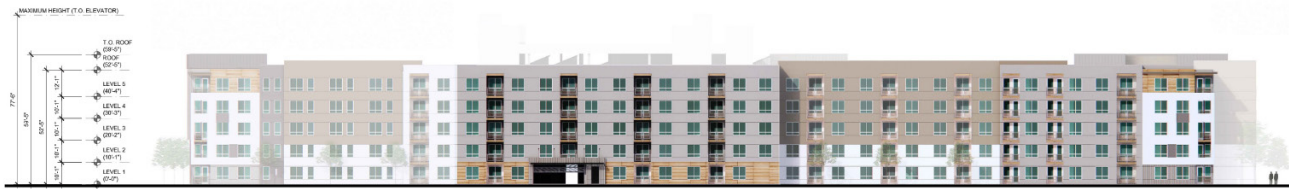
#### 3.5.1.7 DEVELOPMENT AGREEMENT

The applicant is requesting a Development Agreement with the City pursuant to California Government Code Sections 65864 et seq. Pursuant to California Government Code Section 65864(b) and upon approval of the proposed project, the Development Agreement would vest the applicant's right to proceed with on-site development subject to the terms and conditions of the Development Agreement and consistency with the Master Plan and Specific Plan. Physical improvements identified in the Development Agreement are identified and evaluated in this EIR.

#### 3.5.1.8 DENSITY BONUS AGREEMENT

The applicant is requesting a Density Bonus Agreement to allow a 20 percent density bonus for projects that include an amount of very low income units equal to five percent of the total base density (pursuant to California Government Code Section 65915[f][2]).

Upon approval of the General Plan Amendment, the project site would allow for a site-specific density up to 62.3 dwelling units per acre. The proposed project would include a base density of 844 units. With the inclusion of 45 affordable units (i.e., very low income units), the proposed project qualifies for a 20 percent density bonus (pursuant to California Government Code Section 65915[f][2]) resulting in a maximum of 1,060 total residential units on-site. Thus, the proposed 1,050 units would be within the allowed total residential units on-site.



NORTH ELEVATION



EAST ELEVATION - SUSAN STREET



SOUTH ELEVATION



WEST ELEVATION

Source: AO Architects, August 2024



NORTH ELEVATION - SUNFLOWER AVENUE



EAST ELEVATION - SUSAN STREET



SOUTH ELEVATION



WEST ELEVATION

Source: AO Architects, August 2024



### 3. Project Description

#### 3.5.2 Project Construction Timeline

As depicted in Table 3-4, Construction Assumptions, construction is expected to occur in three phases, over a period of eight years, from January 2026 to January 2034.

**Table 3-4 Construction Assumptions**

Phase	Construction Activities	Start Month/Year	Duration	Total Construction Area	Soil Export Volume
1	Demolition	January 2026	1	4.68 Acreages	12,100 Cubic Yards
	Grading	February 2026	3		
	Paving	May 2026	2		
	Building Construction	July 2026	23		
	Architectural Coating	July 2028	3		
2	Demolition	July 2028	2	4.44 Acreages	7,800 Cubic Yards
	Grading	September 2028	3		
	Paving	December 2028	2		
	Building Construction	February 2029	23		
	Architectural Coating	March 2031	3		
3	Demolition	February 2031	2	5.13 Acreages	6,100 Cubic Yards
	Grading	April 2031	3		
	Paving	July 2031	2		
	Building Construction	September 2031	25		
	Architectural Coating	January 2034	4		

Construction of the on-site buildings and parking structures would likely occur in the following order: Building A and associated parking structure (32 months), Building B and associated parking structure (33 months), and Building C and associated parking structure (36 months). First occupancy is anticipated in 2028, with final construction completed by 2034. It should be noted that construction duration values may vary due to overlaps between architectural coating, demolition, and grading activities.

Pursuant to Municipal Code Section 13-279, *Exceptions for Construction*, construction activities would occur within the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturdays. Construction is not permitted outside of these hours or on Sundays or Federal holidays unless a temporary waiver is granted by the City.





### 3. Project Description

## 3.6 PERMITS AND APPROVALS

This Draft EIR is a project-level EIR that examines the environmental impacts of the proposed project. This Draft EIR also addresses various actions by the City and others to adopt and implement the proposed project. It is the intent of this Draft EIR to evaluate the environmental impacts of the proposed project, thereby enabling the City, responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated discretionary approvals (in addition to ministerial actions such as demolition permit, grading permit, building permits, encroachment permits, certificates of occupancy, etc.) requested by the applicant for this project include, but are not limited to:

Agency	Action
City of Costa Mesa	<ul style="list-style-type: none"><li>▪ Certification of the EIR</li><li>▪ Approval of the General Plan Amendment</li><li>▪ Approval of the Zoning Amendment</li><li>▪ Approval of the Specific Plan Amendment</li><li>▪ Approval of the Tentative Parcel Map</li><li>▪ Adoption of the Master Plan</li><li>▪ Approval of the Development Agreement</li><li>▪ Approval of the Density Bonus Agreement</li></ul>
Orange County Flood Control District (OCFCD)	<ul style="list-style-type: none"><li>▪ Issuance of an Encroachment Permit within OCFCD right-of-way</li></ul>
Santa Ana Regional Water Quality Control Board	<ul style="list-style-type: none"><li>▪ Issuance of a National Pollution Discharge Elimination System (NPDES) Permit</li></ul>
Southern California Edison (SCE)	<ul style="list-style-type: none"><li>▪ Approval of proposed easement modifications/encroachment</li></ul>
Costa Mesa Sanitary District	<ul style="list-style-type: none"><li>▪ Approval of proposed sewer improvements</li></ul>
Orange County Airport Land Use Commission	<ul style="list-style-type: none"><li>▪ Determination of Consistency with Airport Environs Land Use Plan for John Wayne Airport</li></ul>



### 3. Project Description

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## Chapter 4.0 Environmental Setting



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# 4. Environmental Setting

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## 4.1 INTRODUCTION

Pursuant to provisions of CEQA and the CEQA Guidelines, this section provides a “description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published... from both a local and a regional perspective” (CEQA Guidelines Section 15125[a][i]). The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

## 4.2 REGIONAL ENVIRONMENTAL SETTING

### 4.2.1 Regional Location

The City of Costa Mesa (City) encompasses approximately 16 square miles and is located in the western portion of Orange County (County); refer to Exhibit 3-1, *Regional Vicinity*. Surrounding jurisdictions include Santa Ana to the north, Irvine and Newport Beach to the east, Newport Beach to the south, and Huntington Beach and Fountain Valley to the west.

### 4.2.2 Regional Planning Considerations

#### 4.2.2.1 SCAG REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

The Southern California Association of Governments (SCAG) is a council of governments representing the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG is the Federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under Federal and State law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

SCAG formally adopted the *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS) on September 3, 2020, to provide a roadmap for sensible ways to expand transportation options, improve air quality, and bolster Southern California’s long-term economic viability. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. These performance goals were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecast to help California reach its



## 4. Environmental Setting

greenhouse gas (GHG) reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent California Air Resources Board (CARB) targets adopted in March 2018. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation to help the region meet its regional VMT and GHG reduction goals, as required by the State.

The most recent 2024-2050 RTP/SCS (Connect SoCal 2024) was adopted by SCAG's Regional Council in April 2024. The Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. The Connect SoCal 2024 sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce GHG emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the CARB. In addition, the Connect SoCal 2024 is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG-emission-reduction goals and federal Clean Air Act requirements. These are articulated in a set of Regional Strategic Investments, Regional Planning Policies, and Implementation Strategies. The Regional Planning Policies are a resource for County Transportation Commissions (CTCs) and local jurisdictions, who can refer to specific policies to demonstrate alignment with the Connect SoCal 2024 when seeking resources from State or federal programs. The Implementation Strategies articulate priorities for SCAG efforts in fulfilling or going beyond the Regional Planning Policies.

The proposed project's consistency with applicable RTP/SCS policies is analyzed in detail in [Section 5.7, Greenhouse Gas Emissions](#).

### 4.2.2.2 SOUTH COAST AIR BASIN AIR QUALITY MANAGEMENT PLAN

The City is in the South Coast Air Basin, which is managed by the South Coast Air Quality Management District (SCAQMD). Pollutants emitted into the ambient air by stationary and mobile sources are regulated by Federal and State law, and standards are detailed in the most recent Air Quality Management Plan. The most recent plan is the *2022 Air Quality Management Plan (2022 AQMP)*, which incorporates the latest scientific and technological information and planning assumptions, including SCAG's 2020-2045 RTP/SCS (the most recent RTP available at the time) and updated emission inventory methodologies for various source categories. Air pollutants for which ambient air quality standards have been developed are known as criteria air pollutants, including ozone (O<sub>3</sub>), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide, coarse particulate matter (PM<sub>10</sub>), fine particulate matter (PM<sub>2.5</sub>), and lead. VOC and NO<sub>x</sub> are criteria pollutant precursors and go on to form secondary criteria pollutants, such as O<sub>3</sub>, through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants depending on whether they meet ambient air quality standards for that pollutant. In August 2018, the Environmental Protection Agency (EPA) designated the Basin as "extreme" nonattainment for the 2015 8-hour ozone standard. The primary purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 eight-hour ozone National Ambient Air Quality Standards



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(NAAQs) 70 parts per billion (ppb) as expeditiously as practicable, but no later than the statutory attainment deadline of August 3, 2038, for the Basin and August 3, 2033, for the Riverside County portion of the Salton Sea Air Basin. The proposed project's consistency with the applicable ambient air quality standards is discussed in [Section 5.2, \*Air Quality\*](#).

### 4.2.2.3 GREENHOUSE GAS EMISSIONS REDUCTION LEGISLATION

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term. Several of the most relevant regulations and planning documents applicable to the proposed project are described below:

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

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

#### **Executive Order B-55-18**

Executive Order B-55-18 (EO B-55-18) adopted in 2018 establishes a statewide policy for the State to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB will work with relevant State agencies to ensure that future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

#### **Senate Bill 32 (SB 32)**

Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (EO B-30-15) (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. AB 197 also added two members of the legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.



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### CARB Scoping Plan

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce carbon dioxide equivalent (CO<sub>2</sub>e) emissions by 174 million metric tons of CO<sub>2</sub>e (MTCO<sub>2</sub>e). This reduction of almost ten percent from 2002 to 2004 average emissions would be required despite the population and economic growth forecasted through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.) CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in EO S-3-05, and observes that "a mid-term Statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan Update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017, and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by EO B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 million MTCO<sub>2</sub>e for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO<sub>2</sub> capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum





## 4. Environmental Setting

by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands (NWL) to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

### **Assembly Bill 1279**

The California Global Warming Solutions Act of 2006 designates the CARB as the state agency charged with monitoring and regulating sources of emissions of GHGs. The state board is required to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030. The act requires the state board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions and to update the scoping plan at least once every 5 years.

AB 1279 would declare the policy of the state both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB 1279 would require the state board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California, as specified. AB 1279 would require the state board to submit an annual report, as specified.



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### 4.2.2.4 SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD BASIN PLAN

Under the Porter-Cologne Water Quality Act, the State Water Resources Control Board (SWRCB) has ultimate control over water quality policy and allocation of State water resources. The SWRCB, through its nine regional water quality control boards (RWQCBs), carries out the regulation, protection, and administration of water quality in each region. Each RWQCB is required to adopt a water quality control plan or basin plan. The City is in the Santa Ana River Basin, Region 8 and is regulated by the Santa Ana RWQCB. The *Water Quality Control Plan for the Santa Ana River Basin (Region 8)* (Basin Plan) was last updated by the Santa Ana RWQCB in June 2019. The Basin Plan gives direction on the beneficial uses of the State waters in Region 8 (Chapter 3); describes the water quality that must be maintained to support such uses (Chapter 4); and provides programs, projects, and other actions necessary to achieve the standards established by the Santa Ana RWQCB.

### 4.2.2.5 VEHICLE MILES TRAVELED

#### Senate Bill 743

On September 27, 2013, SB 743 was signed into law, starting a process that fundamentally changed the way transportation impact analysis is conducted under CEQA. The legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce Vehicle Miles Traveled (VMT) and thereby contribute to the reduction of greenhouse gas emissions, as required by AB 32.

SB 743 identifies VMT as the most appropriate CEQA transportation metric and eliminates auto delay, or level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. In December 2018, the California Natural Resource Agency integrated VMT into the CEQA Guidelines (14 California Code of Regulations Section 15064.3) pursuant to the provisions of SB 743. The VMT guidelines became effective Statewide beginning July 1, 2020. These new guidelines are contained within the *City of Costa Mesa Transportation Impact Analysis Guidelines* (TIA Guidelines), dated, October 2020, and provide screening criteria and methodology for VMT analysis.

## 4.3 LOCAL ENVIRONMENTAL SETTING

### 4.3.1 Location and Land Use

#### 4.3.1.1 PROJECT LOCATION

The approximately 14.25-acre project site is located at 3333 Susan Street, Costa Mesa, 92626; refer to [Exhibit 3-2, Site Vicinity](#). The site is specifically bound by Sunflower Avenue to the north, Susan Street to the east, South Coast Drive to the south, and a public trail (the “Rail Trail”), a pump station (operated by Mesa Water District), and Anduril Industries to the west. Regional access to the project site from the west and east is available via Interstate 405 (I-405), from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, and Sunflower Avenue are the major roadways that provide local access to the project site.



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### 4.3.1.2 EXISTING LAND USE

#### On-Site Land Uses

The project site is currently developed with the 182,520-square foot Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot with access provided by two driveways on Susan Street and one driveway on Sunflower Avenue. Not all tenant spaces in the office buildings are in full operations. The surface parking lot is shared between the office campus and the practice field. Existing landscaped areas are provided along the site boundary and surface parking lot.

The Hive Creative Office Campus with three existing two-story office buildings and the former Los Angeles Chargers practice field represent the baseline conditions for purposes of this Draft EIR.

#### Surrounding Land Uses

The site is bound by Sunflower Avenue to the north, Susan Street to the east, South Coast Drive to the south, and a public trail (the “Rail Trail”), a pump station (operated by Mesa Water District), and Anduril Industries to the west. Surrounding land uses in proximity to the project site include commercial, residential, and public/institutional uses. Specifically, they consist of the following uses:

- North: Commercial/office uses (e.g., PHP Agency, TechMD, Lake Center, and United States Post Office) are located to the north and northeast;
- East: Single- and multi-family residential (single-family dwellings and townhomes) uses (i.e., The Laurels at Providence Park) and commercial/office uses (i.e., The Interinsurance Exchange of the Automobile Club [AAA]) are located to the east;
- South: Vacant land and commercial/retail uses (i.e., Ikea) are located to the south; and
- West: Public/institutional (i.e., Rail Trail and Mesa Water District pump station) as well as a corporate headquarters (i.e., Anduril Industries) are located to the west.

### 4.3.2 Aesthetics

Costa Mesa is situated on a plateau approximately one mile from the Pacific Ocean and is almost completely urbanized. The urban environment consists primarily of residential neighborhoods, with several commercial districts and concentrations of light industrial businesses. Overall, the aesthetic environment of the project area is urban and developed and is characterized by relatively flat terrain. The project area is generally dominated by transportation uses (Susan Street, Sunflower Avenue, and South Coast Drive), and a mixture of retail, residential, industrial, and logistic uses.

The project site is located over five miles inland of the Pacific Ocean and over ten miles southwest of the Santa Ana Mountains. Views of the Pacific Ocean and Santa Ana Mountains are not afforded from the project site under existing conditions due to intervening topography, existing structures, and vegetation. Although the



## 4. Environmental Setting

project site is located approximately one mile east of the Santa Ana River, there are no visible visual resources of the river under existing conditions.

The proposed project is not adjacent to or near a State-designated scenic highway (Caltrans 2017). The closest officially designated State scenic highway is a portion of State Route 91 (SR-91), located over ten miles northeast of the site. Views of the project site are not afforded from SR-91 due to intervening topography, structures, and vegetation.

According to the General Plan EIR, the City is divided into sub-areas, or “districts,” each with its own visual pattern. Distinguishing features may include building type, use, activity, inhabitants, and/or topography. A district is defined as an integral part of a larger urban area with common characteristics that make it unique from other areas of the community.

According to the General Plan Community Design Element, the project site is located within the North Costa Mesa District. The North Costa Mesa District is described by the General Plan as the major economic heart of the City with commercial uses providing retail entertainment and office uses serving local, regional, national, and international markets. Residential development in this district includes single- and multi-family residential developments. The project site is near the Segerstrom Home, a location identified as a landmark in the General Plan. According to the General Plan, a “landmark” is a physical element that provides a point of reference or serves as a community identity marker. Most landmarks are also main destination locations within the City as well. Additionally, the site is adjacent to Ikea, a location identified as a destination in the General Plan. According to the General Plan, a “destination” is a particular use that generates special purpose trips and increase regional attraction.

As shown in Exhibit 5.1-1, *Existing Conditions Photographs*, the visual character of the site and its surroundings is dominated by existing commercial/office uses (i.e., Lake Center, United States Post Office, Ikea, and Anduril Industries) on all sides, residential uses (single family and townhomes) to the east, vacant land to the south, and public/institutional use (Rail Trail and Mesa Water District pump station) to the west. The I-405 Freeway is located further south of the project site.

The project site is developed with 182,520-square foot Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). On-site lighting associated with the existing structures includes parking lot lighting, building illumination, and security lighting. Lighting caused by car headlights and street lighting Sunflower Avenue, Susan Street, South Coast Drive, and existing driveway locations further influence lighting in the project area. Adjacent sources of reflective materials, and lighting, for existing development also exists.

Currently, daytime glare is not readily apparent on-site. In the project area, existing nighttime glare sources include vehicle headlights along surrounding roadways and neighboring parking lots, as well as exterior security lighting in the area. Reflective materials, and lighting for existing developments also contribute to nighttime glare.

Section 5.1, *Aesthetics*, provides a detailed analysis of the proposed project’s impact to scenic vistas, visual character, shade/shadow, and lighting.



## 4. Environmental Setting

### 4.3.3 Air Quality and Greenhouse Gas Emissions

The project site is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of Los Angeles and all of Orange County, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of air pollutants throughout the Basin.

The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. The annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically 9 to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall are greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal Basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O<sub>3</sub>) observed during the summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

The area in which the project is located offers clear skies and sunshine yet is still susceptible to air inversions. These inversions trap a layer of stagnant air near the ground, where it is then further loaded with pollutants.



## 4. Environmental Setting

These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

The City experiences a mild Southern California coastal climate with average high temperatures between 66°F and 78°F, and average low temperatures between 48°F to 66°F. The area also experiences an average of up to 3.0 inches of precipitation per month, with the most precipitation occurring in the month of February.<sup>1</sup>

The Basin is designated nonattainment for ozone, two of the PM<sub>2.5</sub> standards, and lead (Los Angeles County only) under the National and California ambient air quality standards. An air quality and greenhouse gas analysis was performed for the project and the results are discussed in Section 5.2, *Air Quality* and Section 5.7, *Greenhouse Gas Emissions*.

### 4.3.4 Cultural and Tribal Cultural Resources

A cultural resources assessment and tribal consultation were conducted pursuant to AB 52 and SB 18. No cultural resources were identified in the project area as a result of the record search, background research, or field surveys. The project area was used for agricultural purposes or undeveloped. In 2003, the current Hive Creative Office Campus and Los Angeles Chargers practice field had been built.

This project site is located in a region traditionally important to multiple Native American groups. In particular, these include the Gabrieliño (including the Tongva and Kizh), the Juaneño or Acjachemen, and the Luiseño. On May 7, 2024, the City sent notification letters to each of the applicable NAHC individuals and tribal organizations to consult in accordance with SB 18 and AB 52. The Santa Rosa Band of Cahuilla Indians responded to the notification letters on May 8, 2024 within the response period indicating the tribe did not have any comments regarding the proposed project. The Gabrieliño Band of Mission Indians – Kizh Nation responded to the notification letters on May 20, 2024 within the response period requesting formal consultation with the City. A consultation meeting was held on July 16, 2024 between the City and Gabrieliño Band of Mission Indians – Kizh Nation; a follow up consultation meeting was held on October 2, 2024

Refer to Section 5.4, *Cultural Resources*, and Section 5.16, *Tribal Cultural Resources*, for an analysis of project impacts on cultural and tribal cultural resources, respectively.

### 4.3.5 Energy

The project site is currently served by Southern California Edison (SCE), which has a service area that spans much of southern California – from Mono County to the north, to Orange and Riverside counties to the south, and Santa Barbara County on the west. Natural gas services on-site are provided by the Southern California Gas Company (SoCalGas), which has a service area that spans most of southern California, from San Luis Obispo in the north to the Mexico border in the south.

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<sup>1</sup> Weather Spark, Average Weather in Costa Mesa, California, United States <https://weatherspark.com/y/1836/Average-Weather-in-Costa-Mesa-California-United-States-Year-Round>, accessed on July 22, 2024.



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An analysis of project-related energy usage was conducted for the project, and the results are discussed in [Section 5.5, \*Energy\*](#).

### 4.3.6 Geology and Soils

The project site is located within the Peninsular Ranges Geomorphic Province of California, which stretches from the Los Angeles basin to the tip of Baja California in Mexico. This province is characterized as a series of northwest-trending mountain ranges separated by subparallel fault zones and a coastal plain of subdued landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by plutonic rocks of the western Peninsular Ranges batholith, while the coastal plain is underlain by subsequently deposited marine and nonmarine sedimentary formations. The site is located within the coastal plain portion of the province and is underlain by Quaternary, Late Holocene to Late Pleistocene alluvial deposits. Results of an on-site subsurface investigation indicates that the site is underlain by minor fill and alluvial deposits.

A geotechnical report was prepared to analyze project impacts related to geology and soils, and paleontological resources were assessed as part of the Cultural and Paleo Resources Memo; refer to [Section 5.6, \*Geology and Soils\*](#), for an analysis of project impacts on geology, soils, and paleontological resources.

### 4.3.7 Hazards and Hazardous Materials

The project site has historically been used for agricultural purposes from prior to 1938 through the 1990s. In 2003, construction of the Hive Creative Office Campus and former Los Angeles Chargers practice field was completed, with additional renovations occurred in 2015 and 2016.

A Phase I Environmental Site Assessment was prepared to evaluate potential hazards and hazardous materials associated with past and existing uses on-site; refer to [Section 5.8, \*Hazards and Hazardous Materials\*](#).

### 4.3.8 Hydrology

The City is located within the Santa Ana River Hydrologic Unit. This unit covers an area of approximately 2,700 square miles, which is within most of the Santa Ana RWQCB's jurisdictional area and includes portions of Orange, Los Angeles, Riverside, and San Bernardino counties. Within this hydrologic unit, the City encompasses both the Santa Ana River Watershed (northern portion) and the Newport Bay Watershed (southern portion). The project site is in the Santa Ana River Watershed, which covers approximately 210 square miles within the County. This watershed contains the Santa Ana River and Santiago Creek. The Santa Ana River passes about one mile west of the project site.

The existing site consists of commercial structures, a football field, and associated surface parking. Approximately 10 percent of the site is pervious (62,327 square feet), and the remaining 90 percent is impervious (560,947 square feet). As shown in [Exhibit 5.9-1, \*Drainage Management Areas\*](#), the site is currently divided into six drainage management areas (DMA):



## 4. Environmental Setting

- DMA A (approximately 4.49 acres) refers to the northeast on-site area, which consists of the existing office building, the eastern portion of the commercial building, parking lot, curbs, gutters, and landscaping. Runoff is currently conveyed through existing curbs and gutters which would be captured by on-site storm drain inlets and bioswales. These storm drain inlets and bioswales connect to the existing storm drain system (30-inch storm drain at Susan Street) which connects to the existing 51-inch storm drain main along Susan Street.
- DMA B (approximately 6.58 acres) refers to the western on-site area, which consists of the existing buildings at the center of the site, the western half of the existing football field, parking lots, and landscaping. Runoff is currently conveyed through existing curbs and gutters and are captured on-site through drain inlets or bioswales. Runoff is then conveyed to an existing storm drain lateral on the western portion of the site which ties to the existing 48-inch storm drain at the right of way. This storm drain eventually connects to the Greenville banning channel downstream.
- DMA C (approximately 2.45 acres) refers to the southeast on-site area, which consists of the eastern half of the football field, sidewalk, and landscaping. Runoff is currently captured on-site through storm drain systems which connects to existing public catch basins along Susan Street. This catch basin has an existing 18-inch storm drain lateral which connects to the 51-inch storm drain main along Susan Street. This 51-inch storm drain main connects to the Greenville banning channel downstream.
- DMA D (approximately 0.22 acre) refers to the northern on-site area, which includes private drive aisles and landscaping. Runoff currently flows towards Sunflower Avenue and is captured by an existing catch basin located next to the existing driveway at Sunflower. This catch basin has a storm drain lateral that connects to the existing 51-inch storm drain main along Sunflower Avenue.
- DMA E (approximately 0.47 acre) refers to the western on-site area which includes half of the recently paved pathway and landscaping. The proposed project would have emergency fire access roads on DMA E. Runoff currently flows towards The Rail Trail to the west.
- DMA F (approximately 0.04 acre) refers to the southern on-site area which includes the proposed sidewalk easement towards Soth Coast Drive. Runoff currently flows into the existing catch basin at South Coast Drive which has an existing 18-inch storm drain lateral that eventually connects to the Greenville banning channel downstream.

Groundwater for Costa Mesa is withdrawn from the Orange County Groundwater Basin (OC Basin). The Orange County Water District (OCWD) manages the amount and quality of groundwater in the OC Basin. The Mesa Water District (MWD) supplies water to the City. Groundwater was encountered at the site at a depth of 23 feet below ground surface (bgs). Historic high perched groundwater depth is recorded at approximately 10 feet bgs.

A hydrology report, water quality management plan, water supply assessment, and a questionnaire completed by the service provider were prepared for the project to evaluate impacts on hydrology and water quality; refer to [Section 5.2, \*Hydrology and Water Quality\*](#).





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### 4.3.9 Land Use and Planning

As detailed above, the project site is currently developed with the 182,520-square foot Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot with access provided by two driveways on Susan Street and one driveway on Sunflower Avenue. The nearest residential uses include the single- and multi-family residential (single-family dwellings and townhomes) uses (i.e., The Laurels at Providence Park) located to the east across Susan Street.

The project site is located within and subject to the North Costa Mesa Specific Plan (Specific Plan) and currently has a General Plan Land Use designation of Industrial Park (IP) and a zoning designation of Planned Development Industrial (PDI) within a Special Area (North Costa Mesa Specific Plan); refer to [Exhibit 3-3, \*Existing and Proposed General Plan Land Use Designation\*](#), and [Exhibit 3-4, \*Existing and Proposed Zoning Designation and Specific Plan Area\*](#). The Specific Plan identifies the project site as Subarea 1 (Home Ranch) C (Industrial Park).

The Industrial Park land use designation allows for a floor area ratio (FAR) of 0.40 and a maximum square footage of 252,648 square feet. The Industrial Park designation applies to large districts that contain a variety of industrial and compatible office and support commercial uses. They are characterized by large parcels and landscaped setbacks and are situated within proximity to freeways and other major transportation routes. Implementation of the proposed project would require a General Plan Amendment to change the site's existing Industrial Park land use designation to Urban Center Commercial on the southern parcel and High Density Residential on the two northern parcels. This amendment would allow for a sitewide density up to 62.3 dwelling units per acre.

The PDI district is intended for large, concentrated industrial areas where the aim of development is to create a spacious environment in a park-like setting. Implementation of the proposed project requires a Zone Amendment from PDI to "PDC (Planned Development Commercial)" and "PDR-NCM (Planned Development Residential – North Costa Mesa)."

The proposed project requires approval of a General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement and Density Bonus Agreement. Refer to [Section 5.10, \*Land Use and Planning\*](#), for an analysis of project impacts related to land use and planning.

### 4.3.10 Noise

The primary existing noise source on and near the site is vehicular traffic noise along the surrounding roadways including the I-405, Sunflower Avenue, Susan Street, and South Coast Drive. The project site is surrounded by commercial, residential, and public/institutional uses. Other noise sources in the area include aircraft and stationary sources. Land uses in the project area are mostly residential, commercial, and light industrial uses; as such, the primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment and parking areas).



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The nearest sensitive receptors are the existing single-family residential uses located approximately 105 feet east of the project site.

A noise analysis was conducted to evaluate short- and long-term noise impacts associated with the project; refer to [Section 5.11, \*Noise\*](#).

### 4.3.11 Population and Housing

There are no existing residents or housing on the project site. The existing 182,520 square feet of office building space on-site currently employs 175 people; the project is anticipated to generate approximately 95 jobs. Refer to [Section 5.12, \*Population and Housing\*](#), for an analysis of project impacts related to population and housing growth, employment, and jobs-housing balance.

### 4.3.12 Public Services

The following public service providers serve the project site:

- Fire Protection and Emergency Medical Services: Costa Mesa Fire & Rescue Department (CMFD);
- Police Protection: Costa Mesa Police Department (CMPD);
- Schools: Newport-Mesa Unified School District (NMUSD);
- Libraries: Orange County Public Library (OCPL); and
- Parks Maintenance: City of Costa Mesa Public Services Department.

Questionnaires were sent to each public service provider to obtain additional information on these services. Responses received were incorporated into this EIR; refer to [Section 5.13, \*Public Services\*](#), for additional information and analyses of project impacts on public services.

### 4.3.13 Recreation

The following recreation service providers serve the project site:

- Parks Maintenance: City of Costa Mesa Public Services Department; and
- Recreation Services: City of Costa Mesa Parks and Community Services Department.

Questionnaires were sent to each recreation service provider to obtain additional information on these services. Responses received were incorporated into this EIR; refer to [Section 5.13, \*Public Services\*](#), for additional information and analyses of project impacts on recreational services.



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### 4.3.14 Utilities and Service Systems

The following utility providers serve the project site:

- Water: Mesa Water District (MWD);
- Sewers: Costa Mesa Sanitary District (CMSD);
- Wastewater Treatment: Orange County Sanitation District (OCSD);
- Storm Drainage: City of Costa Mesa and OC Public Works;
- Electricity: Southern California Edison (SCE); and
- Natural Gas: Southern California Gas Company (SoCalGas).

A hydrology report, water quality management plan, water supply assessment, and a questionnaire completed by the service provider were prepared for the project to evaluate impacts on storm drainage infrastructure and water services. Additionally, questionnaires were sent to each utility provider to obtain additional information on these services. Responses received were incorporated into this EIR; refer to [Section 5.17, \*Utilities and Service Systems\*](#), for additional information and analyses of project impacts on utilities and service systems.

### 4.3.15 Transportation

Regional access to the project site from the west and east is available via I-405 Freeway, from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, and Sunflower Avenue are the major roadways that provide local access to the project site. Public transit bus service for the project site is provided in the project area by the OCTA. OCTA provides transit services throughout Orange County and offers a wide range of fixed-route bus services. OCTA has developed an extensive network of transit routes to connect residents and commuters of Costa Mesa to key destinations. Three OCTA bus routes operate within the vicinity of the project site. Existing pedestrian facilities include sidewalks along Sunflower Avenue, Susan Street, and South Coast Drive bordering the project site. Additionally, the project site is bound by a public trail (the "Rail Trail") to west. The Rail Trail provides both bicycle and pedestrian access.

As discussed above, SB 743 identifies VMT as the most appropriate CEQA transportation metric and eliminates auto delay, or LOS, and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts. The VMT guidelines became effective Statewide beginning July 1, 2020. Refer to [Section 5.15, \*Transportation\*](#), for a summary of the findings.



## 4. Environmental Setting

### 4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

CEQA Guidelines Section 15130 states that cumulative impacts shall be discussed where they are significant. It further states this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as is necessary for the project alone. Section 15355 of the CEQA Guidelines defines cumulative impacts as “...two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

Section 15130 (b)(1) of the CEQA Guidelines states the information used in analysis of cumulative impacts should come from one of two sources:

- A. A list of past, present, and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; and/or
- B. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impact analyses in this Draft EIR use both Methods A and B and are, therefore, highly conservative. The analysis uses the adopted Citywide and regional growth forecasts from most recent SCAG’s RTP/SCS (2024-2050 RTP/SCS; Connect SoCal 2024) for land use and planning impacts, or other long-range planning documents, such as the General Plan and the Specific Plan; refer to [Table 4-1, SCAG Growth Forecasts](#). This information was supplemented with analyses of related projects as described below.

**Table 4-1 Growth Forecasts – SCAG Population, Housing, and Employment Projections**

		2019	2050	Change, 2019-2050	Percent Change, 2019-2050
City of Costa Mesa	Population (persons)	112,300	134,300 <sup>1</sup>	22,000	19.59
	Housing (units)	42,100	54,400	12,300	29.22
	Employment (jobs)	101,600	104,900	3,300	3.25
County of Orange	Population (persons)	3,191,000	3,439,000	248,000	7.77
	Housing (units)	1,069,000	1,253,000	184,000	17.21
	Employment (jobs)	1,805,000	2,019,000	214,000	11.86

Source: SCAG, Connect SoCal 2024, Demographics and Growth Forecast Technical Report, adopted April 4, 2024.

Notes:

1. For *Connect SoCal 2024*, SCAG population projections below the county-level are developed for required modeling purposes only; as such this value was provided in a written letter from SCAG, dated June 20, 2024, in response to the Notice of Preparation published for the proposed project; refer to [Appendix B, NOP Comments](#).

Growth projections were supplemented with a list of related projects, based on data from the cities of Costa Mesa, Fountain Valley, and Santa Ana. A total of 21 related projects were identified; refer to [Table 4-2, Related Projects](#), and [Exhibit 4-1, Cumulative Projects](#). These projects are expected to be implemented in the vicinity of the project site at the time of project buildout.



## 4. Environmental Setting

**Table 4-2 Related Projects**

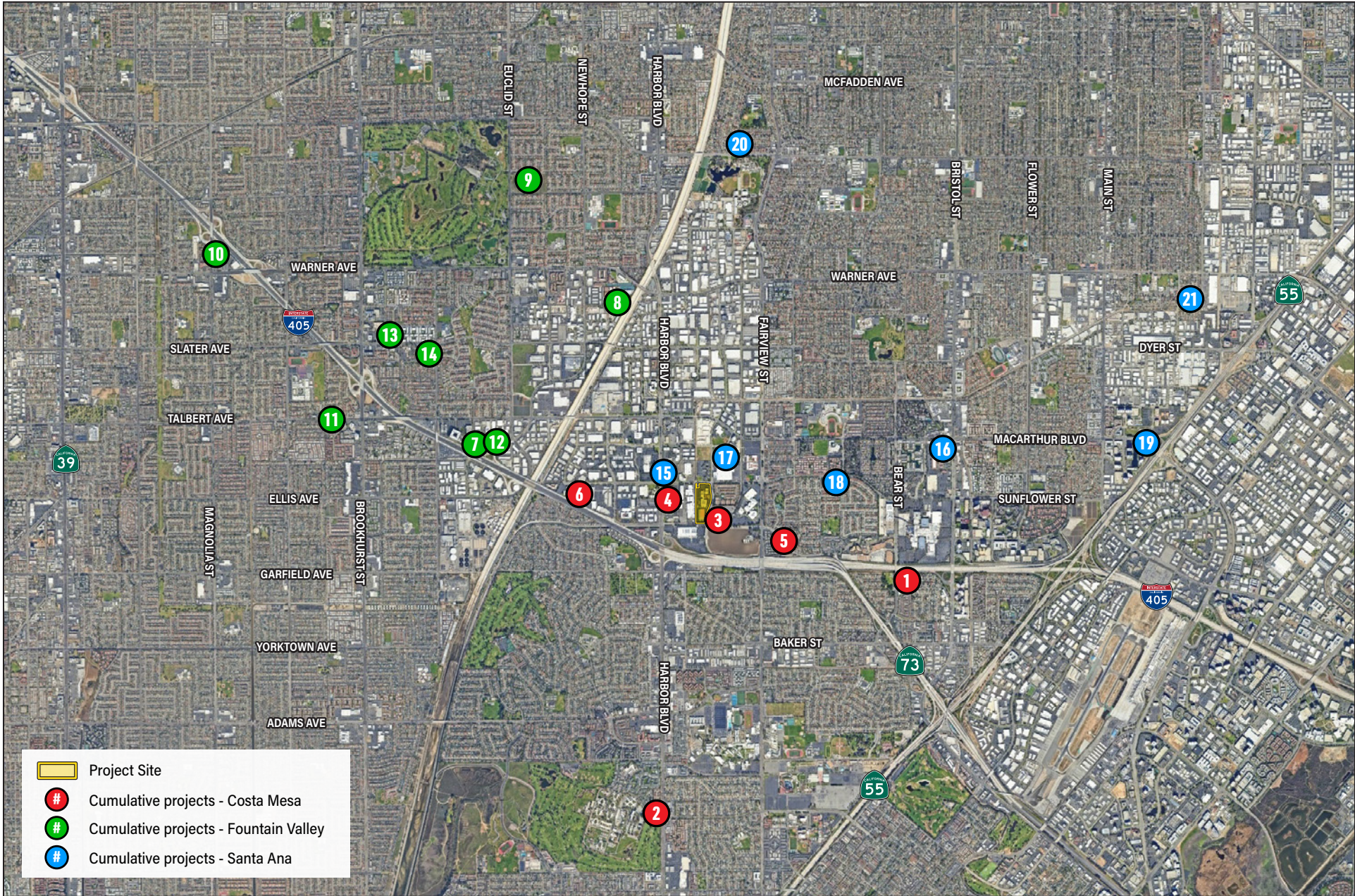
No.	Project/Land Use	Location	Quantity
1	146 Unit Development	3150 Bear Street, Costa Mesa	146 DU
2	Fairview Development Center	2476 Mark Street, Costa Mesa	2,300 DU
3	AAA Development Agreement	1498 South Coast Drive, Costa Mesa	250,000 square feet of office use
4	Anduril	3370 Harbor Boulevard, Costa Mesa	64,195 square feet of office use
5	Home Ranch	1201 South Coast Drive and 3315 Fairview Road, Costa Mesa	1,200,000 square feet of office and office-related use
6	One Metro West	1683 Sunflower Avenue, Costa Mesa	1,057 DU and 31,000 square feet of specialty retail and commercial (creative office) uses
7	Kalama	10800 Kalama River, Fountain Valley	38,000 square feet of commercial use
8	Los Caballeros	17272 Newhope Street, Fountain Valley	7,004 square feet of commercial use
9	Euclid & Heil	16300 Euclid Street, Fountain Valley	626 DU
10	16800 Magnolia	16800 Magnolia Street, Fountain Valley	682 DU and 4,364 square feet of retail space
11	Memorial Care Parking Structure	9780 Talbert Avenue, Fountain Valley	5-story parking structure
12	Fam Vans Project	10870 Kalama River, Fountain Valley	287,240 square feet of commercial use
13	Slater Avenue Mixed-Use Project	10201 Slater Avenue, Fountain Valley	270 DU and 7,000 square feet of commercial use
14	Single-Family Homes	10460 Slater Avenue, Fountain Valley	12 DU
15	The Village Santa Ana Specific Plan	1561 West Sunflower Avenue, Santa Ana	1,583 DU, 380,000 square feet of retail and office space
16	Related Bristol Specific Plan	3600 South Bristol Street, Santa Ana	3,750 DU, 350,000 square feet of commercial space, 250 hotel rooms, 200 senior care units
17	South Coast Technology Center	3100, 3110, and 3120 West Lake Center Drive, Santa Ana	313,244 square feet of office, manufacturing, and/or warehouse uses
18	Legacy Sunflower	651 West Sunflower Avenue, Santa Ana	226 DU
19	Legado at the Met	200 East First American Way, Santa Ana	278 DU
20	Haphan Housing	3025 West Edinger Avenue, Santa Ana	18 DU
21	Our Lady of Guadalupe Office	542 East Central Avenue, Santa Ana	6,370 square feet of mixed-use

Sources:

1. City of Costa Mesa, *Environmental Notices and Reports*, <https://www.costamesa.gov/government/departments-and-divisions/economic-and-development-services/planning/environmental-notices-and-reports>, accessed June 3, 2024.
2. Written Communication: Yeager, Chris, Associate Planner, City of Costa Mesa, Development Services Department, May 14, 2024.
3. City of Fountain Valley, *Current Projects*, <https://www.fountainvalley.gov/409/Current-Projects>, accessed June 3, 2024.
4. Written Communication: Ayers, Steven, Principal Planner, City of Fountain Valley, Community Development Department, May 20, 2024.
5. City of Santa Ana, *Major planning projects and monthly development reports*, <https://www.santa-ana.org/major-planning-projects-and-monthly-development-project-reports/>, accessed June 3, 2024.

Notes: DU = dwelling units

Refer to Section 5.0, *Environmental Analysis* for a discussion of the cumulative impacts associated with development and growth in the City and region for each environmental resource area.



Source: Google Earth Pro, June 2024



## Chapter 5.0 Environmental Analysis



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## 5. Environmental Analysis

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Section 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This section has a separate section for each environmental issue area that was determined to need further study in this Draft EIR. This scope was determined, in part, by public and agency comments received on the Notice of Preparation (NOP), which was published on June 6, 2024, for a public review period from June 6, 2024 to July 5, 2024 (refer to [Appendix A, \*Notice of Preparation \[NOP\]\*](#)), as well as comments received during the scoping meeting held on June 17, 2024; refer to [Appendix B, \*NOP Comments\*](#). Environmental issues analyzed in this Draft EIR and their corresponding sections include:

- 5.1 Aesthetics;
- 5.2 Air Quality;
- 5.3 Biological Resources;
- 5.4 Cultural Resources;
- 5.5 Energy;
- 5.6 Geology and Soils;
- 5.7 Greenhouse Gas Emissions;
- 5.8 Hazards and Hazardous Materials;
- 5.9 Hydrology and Water Quality;
- 5.10 Land Use and Planning;
- 5.11 Noise;
- 5.12 Population and Housing;
- 5.13 Public Services
- 5.14 Recreation;
- 5.15 Transportation;
- 5.16 Tribal Cultural Resources; and
- 5.17 Utilities and Service Systems.

[Section 5.1, \*Aesthetics\*](#), through [Section 5.17, \*Utilities and Service Systems\*](#), provide a detailed discussion of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. Further, existing regulatory requirements; plans, policies, or programs (PPP); and/or standard conditions of approval (SCA), that apply each impact threshold discussion, are provided before mitigation measures are considered. These regulatory requirements, PPPs, and SCAs are based on Federal, State, or local laws currently in place, and which effectively reduce impacts that are being considered.

The residual impacts following the implementation of any mitigation measure are also discussed.



## 5. Environmental Analysis

Issues under an environmental topic determined by the City to not be significantly affected by implementation of the project are not discussed further in this section, but are presented in Section 8.0, *Effects Found Not to be Significant*.

### Organization of Environmental Analysis

To assist the reader with comparing information between environmental issues, each section is organized under five major headings:

- Environmental Setting;
- Thresholds of Significance;
- Environmental Impacts;
- Cumulative Impacts;
- Significant Unavoidable Impacts.

In addition, Section 1.0, *Executive Summary*, includes a table summarizing all impacts by environmental issue.

### Terminology Used in This Draft EIR

The level of significance is identified for each impact in this Draft EIR. Although the criteria for determining significance are different for each topic area, the environmental analysis applies a uniform classification of the impacts based on the following definitions consistent with CEQA and the CEQA Guidelines:

- **No Impact.** The project would not change the environment.
- **Less Than Significant Impact.** The project would not cause any substantial, adverse change in the environment.
- **Less Than Significant Impact With Mitigation Incorporated.** The Draft EIR includes mitigation measures that avoid substantial adverse impacts on the environment.
- **Significant and Unavoidable Impact.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.



## Chapter 5.1 Aesthetics



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## 5. Environmental Analysis

### 5.1 AESTHETICS

This section of the Draft EIR discusses the potential for the project to impact scenic vistas and resources, visual character, and result in light and glare. The information presented in this section is based on field reconnaissance, aerial photographs, and applicant-provided information.

#### 5.1.1 Environmental Setting

##### 5.1.1.1 REGULATORY BACKGROUND

###### Local

###### *General Plan*

The Community Design Element includes the following goals, objectives, and policies pertaining to scenic quality:

- **Goal CD-1:** Vehicular and Pedestrian Corridors. Strengthen the image of the City as experienced from sidewalks and roadways.
  - **Objective CD-1A:** Contribute to City beautification by enhancing the visual environment of Costa Mesa's vehicular and pedestrian paths and corridors.
    - **Policy CD-1.3:** Promote treatments for walls and fences and utility cabinets along public rights-of-way that contribute to an attractive street and sidewalk environment. Require that new walls and fences complement the style and character of the local district and adjacent buildings. Newly constructed or reconstructed walls and fences adjacent to sidewalks and roadways should incorporate architectural treatments such as pilasters, masonry, or wrought iron, and should integrate tiered plantings to soften their appearance.
    - **Policy CD-1.4:** Promote a consistent landscape character along City streets to reinforce the unique qualities of each corridor and district, including the development of landscaped medians. Support implementation of the recommended street tree palette for each City street, as identified in the City of Costa Mesa Streetscape and Median Development Guidelines.
    - **Policy CD-1.5:** Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.
- **Goal CD-2:** Cohesive and Identifiable Districts. Enhance the existing character and strengthen the identity of Costa Mesa's districts.
  - **Objective CD-2A:** Encourage future development and redevelopment to reinforce district scale, identity, and urban form.



## 5. Environmental Analysis

### AESTHETICS

- **Policy CD-2.2:** Support and seek land uses and development that correspond or enrich our existing districts.
- **Goal CD-4:** Identifiable and Protected City Landmarks.
  - **Objective CD-4A:** Promote the maintenance, use, and improvement of landmarks to enhance the visual image and identity of Costa Mesa.
    - **Policy CD-4.1:** Support efforts to introduce new monuments and landmarks, and preserve, maintain, and improve the condition of Costa Mesa landmarks.
- **Goal CD-5:** Utilize Costa Mesa's edges as opportunities to enhance the City's image along its boundaries.
  - **Objective CD-5A:** Develop and implement programs that preserve and enhance City edges.
    - **Policy CD-5.1:** Preserve and optimize natural views and open spaces in Costa Mesa.
- **Goal CD-6:** Enhance opportunities for new development and redevelopment to contribute to a positive visual image for the City of Costa Mesa that is consistent with the district image.
  - **Objective CD-6A:** Establish development policies and design guidelines that create an aesthetically pleasing and functional environment.
    - **Policy CD-6.1:** Encourage the inclusion of public art and attractive, functional architecture into new development that will have the effect of promoting Costa Mesa as the "City of the Arts."
    - **Policy CD-6.2:** Encourage the use of creative and well-designed signs that establish a distinctive image for the City.
- **Goal CD-7:** Quality Residential. Promote and protect the unique identity of Costa Mesa's residential neighborhoods.
  - **Objective CD-7A:** Encourage excellence in architectural design.
    - **Policy CD-7.2:** Ensure that new and remodeled structures are designed in architectural styles that reflect the City's eclectic quality, yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods. Continue to update and maintain the Costa Mesa Residential Guidelines.
    - **Policy CD-7.2:** Preserve the character and scale of Costa Mesa's established residential neighborhoods where possible; when new residential development is proposed, encourage that the new structures are consistent with the prevailing character of existing development in the immediate vicinity, and that new development does not have a substantial adverse impact on adjacent areas.



## 5. Environmental Analysis AESTHETICS

### *Municipal Code*

Municipal Code Title 13, *Planning, Zoning, and Development*, identifies land use categories, development standards, and other provisions that ensure consistency between the General Plan and proposed development and redevelopment projects.

Municipal Code Chapter V, *Development Standards*, addresses floor area ratios, the siting and height of structures, landscaping, signs, parking, and other requirements.

Municipal Code Chapter III, Section 13-29, *Planning Application Review Process*, includes information regarding the City's Design Review process.

Pursuant to Municipal Code Chapter V, Article 6, *Planned Development*, planned developments can be created in appropriate locations with innovative planning and zoning concepts as long as the project meets the broader goals of the General Plan and Zoning Code by exhibiting high quality planning, design, and integration of uses, and protecting the integrity of neighboring development.

The City's landscaping standards are included in Municipal Code Chapter VII, *Landscaping Standards*. This chapter is intended to enhance the aesthetic appearance of the City by providing standards relating to quality, quantity, and functional aspects of landscaping. Chapter VII establishes minimum landscape standards to conserve water, control soil erosion, buffer and/or screen various uses, deter graffiti, and ensure ongoing maintenance of landscape areas.

Municipal Code Chapter VIII, *Signs*, regulates the type, size, and placement of signs on properties to balance the identification and communication needs with an aesthetically pleasing and safe environment.

### *North Costa Mesa Specific Plan*

The North Costa Mesa Specific Plans has development standards that govern the visual quality of developments within its plan area. The following are applicable to the proposed project:

#### ■ All Properties

- **Development Standard 3:** Shade/shadow impacts of buildings in excess of two stories to surrounding land uses shall be considered during the project review.
- **Development Standard 4:** Planned development projects that include a residential component shall analyze the interface and compatibility between residential and nonresidential uses that are included as part of the project or on separate properties.
- **Development Standard 9:** Parking structures that are visible from public streets and/or residential areas shall be landscaped in such a manner as to provide visual relief to surrounding areas without compromising the security of the parking structure.
- **Development Standard 10:** Lighting for parking structures and lots shall be directed away and/or shielded from adjacent residential areas where applicable.



## 5. Environmental Analysis

### AESTHETICS

#### 5.1.1.2 EXISTING CONDITIONS

Costa Mesa is situated on a plateau approximately one mile from the Pacific Ocean and is almost completely urbanized. The urban environment consists primarily of residential neighborhoods, with several commercial districts and concentrations of light industrial businesses. Overall, the aesthetic environment of the project area is urban and developed and is characterized by relatively flat terrain. The project area is generally dominated by transportation uses (Susan Street, Sunflower Avenue, and South Coast Drive), and a mixture of retail, residential, industrial, and logistic uses.

As discussed in [Section 4.0, \*Environmental Setting\*](#), the project site is currently developed with the Hive Creative Office Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot; refer to [Exhibit 5.1-1, \*Existing Conditions Photographs\*](#). Two paved surface parking lots with landscaped are located along the northern, eastern, and western portions of the project site. Landscaping on the existing site comprises of trees and shrubs. Views of the existing office building are available from Sunflower Avenue, Susan Street, and neighboring properties. The southern portion of the project site comprises of the Los Angeles Charger practice field. The existing practice field is screened by an eight-foot-tall solid wall along its perimeter with a wire chain-link fence that extends upwards. The perimeter wall is fully visible from the residential properties east of the project site.

#### Scenic Resources

The City's physical setting allows for views of scenic resources including the Pacific Ocean, Santa Ana River, Upper Newport Bay, and Santa Ana Mountains. Views of these resources are afforded at specific public locations within the City that provide uninterrupted, large expanse views of undeveloped land and these resources. According to the General Plan EIR, such locations include Fairview Park, Talbert Regional Park and its adjacent wildlife refuge, and the golf courses, parks, and ballfields in the City. These specific locations do not include views of the project site.

The project site is located over five miles inland of the Pacific Ocean and over ten miles southwest of the Santa Ana Mountains. Views of the Pacific Ocean and Santa Ana Mountains are not afforded from the project site under existing conditions due to intervening topography, existing structures, and vegetation. Although the project site is located approximately one mile east of the Santa Ana River, there are no visible visual resources of the river under existing conditions.

The proposed project is not adjacent to or near a State-designated scenic highway (Caltrans 2017). The closest officially designated State scenic highway is a portion of State Route 91 (SR-91), located over ten miles northeast of the site. Views of the project site are not afforded from SR-91 due to intervening topography, structures, and vegetation.





## 5. Environmental Analysis AESTHETICS

### Visual Character/Quality

According to the General Plan EIR, the City is divided into sub-areas, or “districts,” each with its own visual pattern. Distinguishing features may include building type, use, activity, inhabitants, and/or topography. A district is defined as an integral part of a larger urban area with common characteristics that make it unique from other areas of the community.

According to the General Plan Community Design Element, the project site is located within the North Costa Mesa District. The North Costa Mesa District is described by the General Plan as the major economic heart of the City with commercial uses providing retail entertainment and office uses serving local, regional, national, and international markets. Residential development in this district include single- and multi-family residential developments. The project site is near the Segerstrom Home, a location identified as a landmark in the General Plan. According to the General Plan, a “landmark” is a physical element that provides a point of reference or serves as a community identity marker. Most landmarks are also main destination locations within the City as well. Additionally, the site is adjacent to Ikea, a location identified as a destination in the General Plan. According to the General Plan, a “destination” is a particular use that generates special purpose trips and increase regional attraction.

As shown in [Exhibit 5.1-1, \*Existing Conditions Photographs\*](#), the visual character of the site and its surroundings is dominated by existing commercial/office uses (i.e., Lake Center, United States Post Office, Ikea, and Anduril Industries) on all sides, residential uses (single family and townhomes) to the east, vacant land to the south, and public/institutional use (Rail Trail and Mesa Water District pump station) to the west. The I-405 Freeway is located further south of the project site.

### Light and Glare

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows, and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, and landscape lighting). Light introduction can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled, can cause disturbances. Uses such as residences are considered light sensitive since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Residential uses to the east of the project site represent the closest light-sensitive uses to the project. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source, and weather conditions.



Adjacent commercial/office uses to the north.



On-site Los Angeles Chargers practice field.



On-site surface parking lot and adjacent office use (i.e., Anduril Industries).



Entrance signage and landscape perimeter along Susan Street.



View of on-site office buildings from Susan Street.



View of on-site northernmost office building from Susan Street.



## 5. Environmental Analysis AESTHETICS

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare-sensitive uses include residences, transportation corridors, and aircraft landing corridors.

The project site is developed with 182,520-square foot Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). On-site lighting associated with the existing uses includes parking lot lighting, building illumination, and security lighting. Lighting caused by car headlights and street lighting Sunflower Avenue, Susan Street, South Coast Drive, and existing driveway locations further influence lighting in the project area. Adjacent sources of reflective materials, and lighting, for existing development also exist.

Currently, daytime glare is not readily apparent on-site. In the project area, existing nighttime glare sources include vehicle headlights along surrounding roadways and neighboring parking lots, as well as exterior security lighting in the area. Reflective materials, and lighting for existing developments also contribute to nighttime glare.

### **Shade/Shadow**

Shading refers to the effect of shadows cast upon adjacent areas by proposed structures. Consequences of shadows upon land uses may be positive, including cooling effects during warm weather, or negative, such as the loss of natural light necessary for solar energy purposes or the loss of warming influences during cool weather. Shadow effects are dependent upon several factors, including the local topography, height and bulk of the project's structural elements, sensitivity of adjacent land uses, season, and duration of shadow projection. Facilities and operations sensitive to the effects of shading include: routinely usable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors. These uses are considered sensitive because sunlight is important to their function, physical comfort, or commerce.

The existing Hive Creative Office Campus comprises of three two-story office building surrounded by surface parking lots to the north, east, and west. The former Los Angeles Chargers is located on the southern portion of the site. Existing shadow-sensitive uses in the vicinity of the project site include residences to the east of the project site, approximately 150 feet from the project boundary. The shadow pattern from the existing on-site three two-story office buildings would move from the northeast, north, and then the northwest as the sun moves along the sky. The existing on-site buildings has the potential to cast shadow on the shadow-sensitive uses to the east as the sun sets however, due to the low height and distance, shadows casted by existing buildings does not reach these shadow-sensitive uses.



## 5. Environmental Analysis

### AESTHETICS

#### 5.1.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- AE-1 Have a substantial adverse effect on a scenic vista.
- AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.
- AE-3 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.
- AE-4 Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

No impacts relating to thresholds AE-2 and AE-3 were identified, as substantiated in Chapter 8, *Impacts Found Not to be Significant*, of this Draft EIR. These thresholds are not addressed in the following analysis.

#### 5.1.3 Environmental Impacts

##### 5.1.3.1 METHODOLOGY

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refer to the identification of visual resources and the quality of what can be seen, as well as an overall visual perception of the environment. The purpose of this analysis is to identify and objectively examine factors that contribute to the perception of aesthetic impacts. Potential aesthetic impacts can be evaluated by considering proposed grade separations, landform alteration, building setbacks, scale, massing, and landscaping features associated with the design of a project. This section includes an analysis of the consistency of the project with established visual resources policies and regulations.

##### 5.1.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.1-1: In an urbanized area, the proposed project would not conflict with applicable zoning and other regulations governing scenic quality. [Threshold AE-3]**

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*Level of Significance Before Mitigation:* Less than Significant.

*Impact Analysis:* As discussed in Section 5.1.1.2, *Existing Conditions*, the project site is currently developed with the 182,520-square foot Hive Creative Office Campus and former Los Angeles Chargers practice field and



## 5. Environmental Analysis AESTHETICS

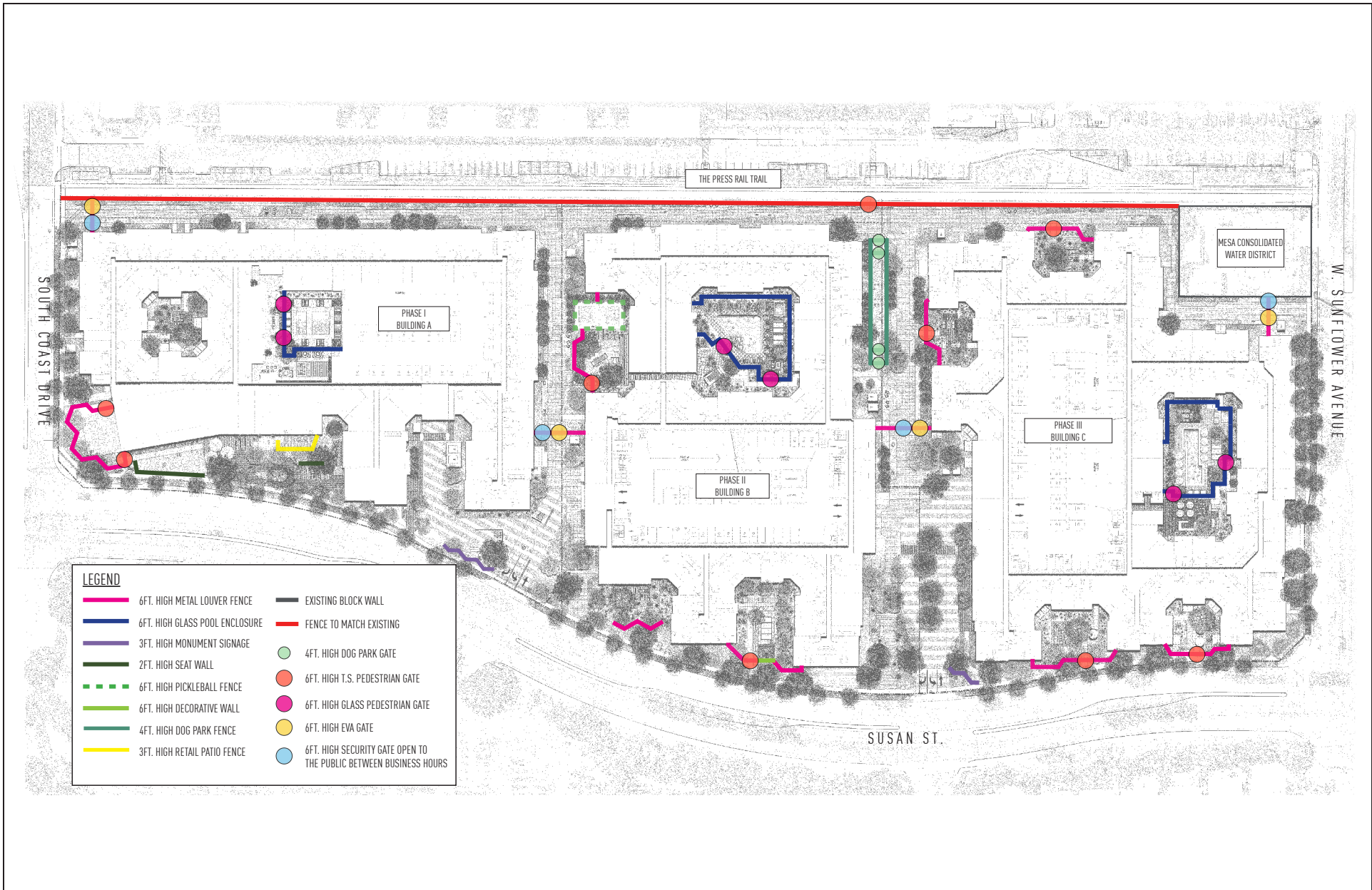
is surrounded on all sides by urbanized uses. As the project site is primarily surrounded by urbanized uses in all directions. Since the project site is situated within an urbanized area, this analysis considers whether or not the project would conflict with applicable zoning and other regulations governing scenic quality.

### *Construction*

Construction would involve the demolition of the existing 182,520-square foot Hive Creative Office Campus and former Los Angeles Chargers practice field to allow for construction of the proposed project. The proposed project would be constructed in three phases and would all have the following phases: demolition, grading, paving, construction, and architectural coating. Phase 1 would commence during the first quarter of 2026 and would be completed during the third quarter of 2028, Phase 2 would commence during third quarter of 2028 and would be completed during the second quarter of 2031, and Phase 3 would commence during the first quarter of 2031 and would be completed during the first quarter of 2034. All staging of construction equipment and materials would occur on-site. Additionally, parking for construction workers and vendors would be on-site as well. The project's construction-related visual impacts are considered temporary and would cease upon construction completion. Various controls would be implemented during construction to ensure the project does not conflict with applicable zoning or regulations. For example, construction and demolition activities would require compliance with the Construction Stormwater General Permit Order 2022-0057-DWQ, which requires the preparation and implementation of a SWPPP pursuant to PPP HYD-1. The SWPPP would require implementation of various construction BMPs which would minimize visual impacts; refer to [Table 5.8-2, \*Construction Best Management Practices\*](#). SCA HYD-1 through SCA HYD-3 would ensure dust suppression and site maintenance techniques are implemented during project construction. Further, all grading and earthwork activities would be conducted in accordance with an approved construction grading plan and grading permit issued by the City. As a result, construction-related impacts concerning the potential to conflict with applicable zoning or other regulations governing scenic quality would be less than significant.

### *Operations*

The proposed project would redevelop the site to construct a new multi-phased master-planned residential community. The proposed project includes a total of three buildings. These features are described in detail below and are depicted on [Exhibit 3-5, \*Conceptual Site Plan\*](#), [Exhibit 3-8a, \*Building A Elevations\*](#), [Exhibit 3-8b, \*Building B Elevations\*](#), and [Exhibit 3-8c, \*Building C Elevations\*](#). Additionally, a wall and fence plan is proposed for the proposed project; refer to [Exhibit 5.1-2, \*Wall and Fence Plan\*](#).



Source: MJS Landscape Architecture, August 2024



## 5. Environmental Analysis AESTHETICS

- **Building A.** Building A is located on the southernmost portion of the project site adjacent to South Coast Drive. Building A would be five stories with a maximum height of 73 feet, 3 inches; refer to [Exhibit 3-8a](#). Features associated with the 386,309-square foot building would include 315 residential units and amenities (leasing office, indoor and door lounges, a ground-level internal courtyard, public plaza, etc.), restaurant space, and a parking structure. Specifically, Building A would have a plaza would be open to the general public and would have entrances leading to flex space, restaurant space, amenities, and lounges. The entrances of the public plaza would include landscaping, seating space, art work, and shade. An art exhibit would be located along the southeast portion of Building A. Additionally, a roof deck is proposed above the parking garage of the southernmost parking structure featuring a 1,521-square-foot fitness facility, 2,215 square foot roof lounge, and outdoor deck and pool. The building would have 3,692 square feet of non-residential square footage (i.e., retail space). The building would include an enclosed parking garage that is enclosed on all four sides. Building A's frontage are rendered and depicted in [Exhibit 5.1-3a, \*Building A – South Coast Drive and Susan Street Corner\*](#) and [Exhibit 5.1-3b, \*Building A – Public Plaza\*](#).
- **Building B.** Building B would be located in the central portion of the project site adjacent to Susan Street and would be five stories with a maximum height of 77 feet, 6 inches; refer to [Exhibit 3-5](#) and [Exhibit 3-8b](#). The approximately 388,293-square foot building would consist of 346 residential units and amenities, including a leasing office, ground-level courtyards, general amenity space, dog park, mail room, move-in area, and bicycle storage space. A total of four open space courtyards (three public and one private) would be located around or in Building B. Specifically, two open space courtyards would be easily accessible to the general public and would be located along the eastern frontage of the building along Susan Street. These open space courtyards would provide landscaping, seating, and recreational activities. Approximately 572 parking spaces would be provided for Building B within the 216,794-square foot central wrap-around (aboveground) parking structure. Building B's frontage are rendered and depicted in [Exhibit 5.1-3c, \*Building B – Southeast Corner\*](#), [Exhibit 5.1-3d, \*Building B – Courtyard B-4\*](#), and [Exhibit 5.1-3e, \*Building B – Northeast Corner\*](#).
- **Building C.** Building C is proposed along the northernmost portion of the project site adjacent to Sunflower Avenue and would be five stories with a maximum height of 77 feet, 6 inches; refer to [Exhibit 3-5](#) and [Exhibit 3-8c](#). The approximately 441,005-square foot building would consist of 389 residential units and amenities, including a leasing office, ground-level courtyards, fitness room, general amenity space, mail room, move-in area, and bicycle storage space. A total of six open space courtyards (five public and one private) would be located around or in Building C. Similar to Building B, the open space courtyards would provide landscaping, seating, and recreational activities. Approximately 643 parking spaces would be provided for Building C within the 232,496-square foot northernmost wrap-around (aboveground) parking structure. Building C's frontage are rendered and depicted in [Exhibit 5.1-3f, \*Building C – Southeast Corner\*](#) and [Exhibit 5.1-3g, \*Building C – Northeast Corner\*](#).



Source: AO Architects, August 2024





Source: AO Architects, August 2024



Source: AO Architects, August 2024



Source: AO Architects, August 2024



Source: AO Architects, August 2024



Source: AO Architects, August 2024



Source: AO Architects, August 2024



## 5. Environmental Analysis AESTHETICS

The proposed project would change the existing character on-site (Hive Creative Office Campus and former Los Angeles Chargers practice field) and as such, the following analysis would consider the project’s potential to conflict with applicable regulations governing scenic quality (i.e., General Plan, Municipal Code, and Specific Plan Development Standards).

### *General Plan Scenic Quality Policies Consistency Analysis*

Table 5.1-1, *Project Consistency with the Costa Mesa General Plan*, provides a consistency analysis of the proposed project and relevant General Plan goals, objectives, and policies pertaining to scenic quality.

**Table 5.1-1 Project Consistency with the Costa Mesa General Plan**

General Plan Goal and Policies	Project Compliance
<p><b>Goal CD-1</b> Strengthen the image of the City as experienced from sidewalks and roadways.</p>	<p><b>Consistent.</b> The Specific Plan’s design objectives encourage pedestrian and human-scale development on the project site and provide development standards to encourage pedestrian connectivity. The proposed project would include street improvements in the form of sidewalks improvement and drive approaches which would be constructed to City Standards. Pedestrian amenities would be provided on-site, including walking paths, lighting, wayfinding, and various courtyards and lounges along the perimeter of the buildings. Additionally, Building A would provide pedestrian-scale architectural design by providing ground-floor restaurant space and a public plaza which has seating and lounges for pedestrians and visitors. The proposed building would have residential units oriented outwards towards roadways. Additionally, the project would include landscaping along the perimeter of the site to encourage a pedestrian-friendly environment. The proposed project would be consistent with this goal.</p>
<p><b>Objective CD-1A</b> Contribute to City beautification by enhancing the visual environment of Costa Mesa’s vehicular and pedestrian paths and corridors.</p>	<p><b>Consistent.</b> Currently, the site is developed with three existing office buildings and the practice field. Views along the existing driveways show minimal landscaping, fencing along the perimeter of the football field, and surface parking. Site access is limited by the fence and gates across the driveways. The proposed project would open the site, visually and physically, compared to existing conditions. The proposed project would include the development of contemporary-style buildings, landscaping, lighting, and wayfinding. Additionally, the proposed project would include open-space courtyards and a public plaza along Susan Street which would include intensive landscaping and architectural features. As such, the proposed project would enhance the visual environment of Costa Mesa’s vehicular and pedestrian paths and corridors. The proposed project would be consistent with this objective.</p>
<p><b>Policy CD-1.3</b> Promote treatments for walls and fences and utility cabinets along public rights-of-way that contribute to an attractive street and sidewalk environment. Require that new walls and fences complement the style and character of the local district and adjacent buildings. Newly constructed or reconstructed walls and fences adjacent to sidewalks and roadways should incorporate architectural treatments such as pilasters, masonry, or wrought iron, and should integrate tiered plantings to soften their appearance.</p>	<p><b>Consistent.</b> The proposed project would remove the existing eight-foot high wall that currently surrounds the perimeter of the Los Angeles Charger practice field. The implementation of the proposed project would open the site to the street. As such, the proposed project would remove existing walls and would allow for a more fluid transition from the proposed development to the bordering sidewalk. As shown in <a href="#">Exhibit 5.1-2</a>, the proposed project would install a variety of walls throughout the project site. Specifically, the project would install six feet tall walls surrounding outdoor courtyards, two feet tall seat walls, and decorative walls along the eastern perimeter of the project site. Additionally, the project would install a fence along the western perimeter to match the existing fence. Utility cabinets and mechanical equipment from the proposed development would be screened from view, and SCA AE-3 would ensure the project’s exterior features do not detract from the architecture by prohibiting roof access ladders, roof drain scuppers, and roof drain downspouts. The proposed project includes a contemporary design that would complement the surrounding buildings while serving as a gateway to the City. The proposed project would be consistent with this policy.</p>



## 5. Environmental Analysis

### AESTHETICS

Table 5.1-1, continued

General Plan Goal and Policies	Project Compliance
<p><b>Policy CD-1.4</b> Promote a consistent landscape character along City streets to reinforce the unique qualities of each corridor and district, including the development of landscaped medians. Support implementation of the recommended street tree palette for each City street, as identified in the City of Costa Mesa Streetscape and Median Development Guidelines.</p>	<p><b>Consistent.</b> The proposed project would incorporate landscaping and open-space. The project proposes several improvements along Susan Street that would enhance the visual quality along the project frontage. Specifically, landscaping would be incorporated along the perimeter of the proposed buildings and open space courtyards and a public plaza (within Building A) would be placed along Susan Street. The Specific Plan includes landscape development standards which would be consistent with the City’s Streetscape and Median Development Guidelines (refer to PPP AES-1).</p>
<p><b>Policy CD-1.5</b> Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.</p>	<p><b>Consistent.</b> The project proposes to construct transformers on-site that would connect to existing Southern California Edison electric pole lines along the project frontage. All on-site electrical power and communication lines would be placed underground.</p>
<p><b>Goal CD-2</b> Enhance the existing character and strengthen the identity of Costa Mesa’s districts.</p>	<p><b>Consistent.</b> The proposed project is located in the Area 1 – Home Ranch of the North Costa Mesa Specific Plan, which of single family uses, agricultural uses, commercial retail, and office buildings. The North Costa Mesa district is defined as the economic heart of the City. The proposed project provides a multi-family residential community development with a contemporary design through the construction of three multi-story buildings. Ample landscaping would be incorporated throughout the site. The design of the proposed project would complement the North Costa Mesa District and contribute to the image, identity, and character of the District and City. Additionally, the proposed project would enhance the existing character of the district by replacing existing office buildings and practice field with a contemporary designed project that would be highly visible from the surrounding area. The proposed project would be consistent with this goal.</p>
<p><b>Objective CD-2A</b> Encourage future development and redevelopment to reinforce district scale, identity, and urban form.</p>	<p><b>Consistent.</b> While the proposed project would be taller than neighboring buildings in its vicinity, the proposed project would include architectural design elements, such as step backs, differentiated building materials, and landscaping, to visually break up the massing of the proposed project and visually reinforce the scale of the district. Specifically, the proposed project would have a 21 and half feet building setback along South Coast Drive, a minimum of a 17 and half feet setback along Susan Street, and a 16 and half feet setback along Sunflower Avenue (refer to PPP AES-2). The proposed project would be consistent with this objective.</p>
<p><b>Policy CD-2.2</b> Support and seek land uses and development that correspond or enrich our existing districts.</p>	<p><b>Consistent.</b> Refer to discussion for Goal CD-2, above. The proposed project would be consistent with this policy.</p>
<p><b>Policy CD-3.2</b> Reinforce a sense of arrival into the City by promoting architecturally significant development and significant landscape plantings at key nodes. Undertake a visioning process to develop specific design guidelines that articulate the desired character for each node within Costa Mesa.</p>	<p><b>Consistent.</b> As detailed in the Specific Plan, a primary community entry to the project site would provide a sense of arrival. The entry design would be attractive and functional and convey a ceremonial sense of entry that reflects the community image and identity. Physical elements of an entry, including roadway archways, paving materials, signs, and landscape planting, would be considered and function together to physically define the entry.</p> <p>The proposed project would be located along Susan Street and is located close to an off-ramp from the I-405 Freeway. As previously discussed, the proposed project would construct contemporary-style buildings with intricate landscaping. Additionally, the project would include outdoor courtyards and lounges viewable from the roadways. As discussed throughout this table, the project would be consistent with specific design standards for the North Costa Mesa District. As such, the project is consistent with this policy.</p>





## 5. Environmental Analysis AESTHETICS

Table 5.1-1, continued

General Plan Goal and Policies	Project Compliance
<p><b>Policy CD-4.1</b> Support efforts to introduce new monuments and landmarks, and preserve, maintain, and improve the condition of Costa Mesa landmarks.</p>	<p><b>Consistent.</b> The Community Design Element defines landmarks as “a physical element that provides a point of reference or serves as a community identity marker. A landmark can be a structure, space, or natural feature that helps identify a particular area in the City. Most landmarks are also main destination locations within the City as well. Segerstrom Home, which is located near the project site to the east, is identified as a landmark site. The proposed project would support this existing landmark by developing a well-designed mixed-use development with contemporary architecture. The proposed project would be consistent with this policy.</p>
<p><b>Goal CD-5</b> Utilize Costa Mesa’s edges as opportunities to enhance the City’s image along its boundaries.</p>	<p><b>Consistent.</b> Goal CD-5 relates to the City’s edges, which the Community Design Element defines as “linear elements that serve as a visual or physical boundary, barrier, or transition between districts and that define the boundaries of a place” (p. CD-16). The Community Design Element specifically identifies the Santa Ana River and I-405 Freeway. The project site is located in close proximity to the I-405 Freeway to the south and is within one mile of the Santa Ana River to the west. The architectural design of the project would be visible from the I-405 Freeway. As previously discussed, the project would comply with the Specific Plan design standards which would enhance the visual character within the North Costa Mesa District. As such, the proposed project would enhance the City’s image.</p>
<p><b>Objective CD-5A</b> Develop and implement programs that preserve and enhance City edges.</p>	<p><b>Consistent.</b> Refer to the discussions for Goal CD-5 and Policy CD-5.1. The proposed project would be consistent with this objective.</p>
<p><b>Policy CD-5.1</b> Preserve and optimize natural views and open spaces in Costa Mesa.</p>	<p><b>Not Applicable.</b> The project site does not contain natural views or open spaces; however, the project would provide open space in the form of courtyards along Susan Street. It should be noted that the open space would be privately owned but would be open for the general public during business hours.</p>
<p><b>Goal CD-6</b> Enhance opportunities for new development and redevelopment to contribute to a positive visual image for the City of Costa Mesa that is consistent with the district image.</p>	<p><b>Consistent.</b> Refer to the discussions above. The proposed project would redevelop the site with well-designed contemporary buildings and landscaping and would contribute to a positive visual image of the City of Costa Mesa. Pursuant to SCA AE-1, the City would verify the proposed project is architecturally compatible (pertaining to building materials, style, colors, etc.) with the existing surrounding development and consistent with the North Costa Mesa Specific Plan during the plan check review process. The proposed project would be consistent with this goal.</p>
<p><b>Policy CD-6.1</b> Encourage the inclusion of public art and attractive, functional architecture into new development that will have the effect of promoting Costa Mesa as the “City of the Arts.”</p>	<p><b>Consistent.</b> Refer to the discussion for Goal CD-6, above. The proposed project would be consistent with this policy.</p>
<p><b>Policy CD-6.2</b> Encourage the use of creative and well-designed signs that establish a distinctive image for the City.</p>	<p><b>Consistent.</b> The proposed project would include entry, directional, identification, and open space signage to provide for wayfinding and placemaking. Pursuant to SCA AE-4, permits would be required for all signs according to the provisions of the Costa Mesa Sign Ordinance. Freestanding signs would be subject to review and approval by the Planning Division/Development Services Director to ensure compatibility in terms of size, height, and location with the proposed/existing development and existing freestanding signs in the project vicinity. The proposed project would be consistent with this policy.</p>
<p><b>Policy CD-7.1</b> Ensure that new and remodeled structures are designed in architectural styles that reflect the City’s eclectic quality, yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods. Continue to update and maintain the Costa Mesa Residential Guidelines.</p>	<p><b>Consistent.</b> The proposed project is located adjacent to a residential neighborhood located east of the project site. However, it should be noted that the proposed project would be located on a site that is currently developed with three two-story office buildings. While the project would construct three multi-story residential buildings, the project would incorporate features that would reduce the building’s visual impact and scale using setbacks, landscaping, and building step back. The proposed project would redevelop the site with well-designed contemporary residential buildings consistent with the prevailing character of existing development in the immediate vicinity. The proposed project would be consistent with this policy.</p>



## 5. Environmental Analysis

### AESTHETICS

**Table 5.1-1, continued**

General Plan Goal and Policies	Project Compliance
<p><b>Policy CD-7.2</b> Preserve the character and scale of Costa Mesa’s established residential neighborhoods where possible; when new residential development is proposed, encourage that the new structures are consistent with the prevailing character of existing development in the immediate vicinity, and that new development does not have a substantial adverse impact on adjacent areas.</p>	<p><b>Consistent.</b> Refer to the discussions for Policy CD-7.1. The proposed project would be consistent with this objective.</p>

Sources: City of Costa Mesa, 2015-2035 General Plan, 2016

### *Municipal Code Consistency Analysis*

The Municipal Code contains site development standards that help govern scenic quality. [Table 5.2-2, \*Municipal Code Consistency Analysis Governing Scenic Quality\*](#), provides a consistency analysis of the applicable Municipal Code regulations governing scenic quality at the project site.

**Table 5.1-2 Municipal Code Consistency Analysis Governing Scenic Quality**

Municipal Code Section	Project Compliance
<p><b>Section 13-41(1)</b> The location and orientation of all buildings shall be designed and arranged to preserve natural features by minimizing the disturbance to the natural environment. Natural features such as trees, groves, waterways, scenic points, historic spots or landmarks, bluffs or slopes shall be delineated on the site plan and considered when planning the location and orientation of buildings, open spaces, underground services, walks, paved areas, playgrounds, parking areas and finished grade elevations.</p>	<p><b>Consistent.</b> The proposed project is located in close proximity to the Segerstrom Home, a landmark identified by the City’s General Plan. However, this landmark is not located on-site. Nevertheless, the proposed project would be built in compliance with applicable General Plan policies and Specific Plan Development Standards governing aesthetics. Additionally, the proposed project would have a contemporary design and built with modern materials. The project would also include landscaping that would build the visual characteristic of the project site. As such, the project would help build the character of the project site and exemplify the nearby landmark.</p>
<p><b>Section 13-104</b> Each landscape plan shall be compatible with the shape and topography of the site and architectural characteristics of the structure(s) on the site. Each landscape plan shall be compatible with the character of adjacent landscaping, provided the quality of the adjacent landscaping meets the standard of these guidelines. However, it is not the intent of this section to require the use of identical plant materials or landscape designs. Where existing mature landscaping is in good, healthy conditions, every effort shall be made to retain trees and mature landscaping.</p>	<p><b>Consistent.</b> As shown in <a href="#">Exhibit 3-6, <i>Conceptual Landscape Plan</i></a>, the proposed project would be compatible with the shape and topography of the project site. Additionally, the proposed development would include extensive landscaping along the perimeter of each building, utilizing trees, shrubs, and grass. While the proposed project would remove the existing landscape, the Hive Live development would introduce more extensive landscaping than existing conditions.</p>

Sources: City of Costa Mesa, *City of Costa Mesa Municipal Code Ordinance No. 23-03*, adopted February 22, 2023



## 5. Environmental Analysis AESTHETICS

### *North Costa Mesa Specific Plan Consistency Analysis*

The North Costa Mesa Specific Plans has development standards that govern the aesthetics of developments within its plan area. These Development Standards regulations would supersede those regulations established by the City’s Municipal Code. If the Specific Plan does not address a specific issue, the City’s Municipal Code would apply. The following are applicable to the proposed project: Table 5.2-3, *Specific Plan Consistency Analysis Governing Scenic Quality*, provides a consistency analysis of the applicable Specific Plan Development Standards:

**Table 5.1-3 Specific Plan Consistency Analysis Governing Scenic Quality**

Development Standards	Project Compliance
<b>Development Standard 3.</b> Shade/shadow impacts of buildings in excess of two stories to surrounding land uses shall be considered during the project review.	<b>Consistent.</b> As the proposed project exceeds the two story threshold, the proposed development has prepared a Sun and Shadow Analysis (refer to PPP AES-3). This Sun and Shadow Analysis displays the project’s potential shadow and shade impacts on surrounding buildings. As shown in <u>Exhibit 5.1-4, <i>Sun and Shadow Study</i></u> , the proposed project would not create any prolonged shading to shade sensitive uses.
<b>Development Standard 4.</b> Planned development projects that include a residential component shall analyze the interface and compatibility between residential and nonresidential uses that are included as part of the project or on separate properties.	<b>Consistent.</b> The proposed project would demolish the three existing office buildings, parking areas, and former practice area in order to develop three buildings that comprise of 1,050 dwelling units, retail space, and open space. The surrounding land uses comprise of industrial and commercial uses to the north, south, and west and residential uses to the east. The proposed project would be compatible land use in this region as it would allow for a transition from heavy warehouse and industrial uses to the west to the residential community to the east.
<b>Development 9.</b> Parking structures that are visible from public streets and/or residential areas shall be landscaped in such a manner as to provide visual relief to surrounding areas without compromising the security of the parking structure.	<b>Consistent.</b> As shown in <u>Exhibit 3-5</u> , the proposed project would have parking structure entrances that are visible along Susan Street. Specifically, Building A would have a parking structure entry that would face Susan Street. However, it should be noted that the entrance of this parking structure would be facing an existing parking lot located further east. Nevertheless, as shown in <u>Exhibit 3-6</u> , the entrance of the parking structure would be heavily landscaped and trees planted along Susan Street would help obstruct the view of the parking structure entrance.

Sources: City of Costa Mesa, *North Costa Mesa Specific Plan*, updated September 2016



SPRING/AUTUMN EQUINOX 9AM



SPRING/AUTUMN EQUINOX NOON



SPRING/AUTUMN EQUINOX 2PM



SPRING/AUTUMN EQUINOX 5PM



SUMMER SOLSTICE 9AM



SUMMER SOLSTICE NOON



SUMMER SOLSTICE 2PM



SUMMER SOLSTICE 5PM



WINTER SOLSTICE 9AM



WINTER SOLSTICE NOON



WINTER SOLSTICE 2PM



WINTER SOLSTICE 5PM

Source: AO Architects, August 2024





## 5. Environmental Analysis AESTHETICS

### *Master Plan*

The Master Plan serves as a precise plan of development for the project site and provides all project details that are not defined by the Specific Plan Development Standards. The Master Plan illustrates and explains the development plans that implement Specific Plan Development Standards. The Master Plan includes several graphics which depict the following project aspects:

- Use of hardscape throughout the community;
- Pedestrian connectivity between land uses in the community;
- Community-wide parking;
- Fire protection measures;
- Loading/unloading areas and mechanical equipment locations and screening;
- Wall design and standards;
- Outside furniture design and locations;
- Community-wide lighting;
- Bicycle trails and support facilities;
- Signage design;
- Building(s) architecture and design treatments;
- Landscape and hardscape treatment;
- Susan Street scene;
- Renderings
- Open space;
- Public art design and potential locations;
- Sustainability design; and
- Wall and Fence Plan

As discussed above, the proposed project's Master Plan would meet all applicable regulation, goals, and policies governing Scenic Quality. Specifically, the project would help revitalize the existing, underutilized land with a high contemporary design structure that would include extensive landscaping, architectural features, and modern appearance that meet the visual characteristic for the area as defined in the Specific Plan.

### *Conclusion*

The proposed project would not conflict with applicable zoning or other regulations governing scenic quality. The proposed project would create a multi-family residential project with design articulation, landscaping, and streetscaping in compliance with the General Plan, Municipal Code, and Specific Plan Development Standards. Provisions of the proposed project would ensure design details of the proposed project are compliant with applicable design standards. Additionally, development of the proposed project would also be subject to several Standard Conditions of Approval in place to minimize aesthetic impacts. For example, the City would verify future development associated with the project is architecturally compatible with regard to building materials, style, colors, etc., with the existing surrounding development and consistent with the North Costa Mesa Specific Plan during the plan check process (refer to SCA AE-1). SCA AE-2 would ensure no modification(s) of the



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approved building elevations, including, but not limited to, changes that increase the building height, changes in building articulation, or a change of the finish material(s), are made during construction without prior Planning Division written approval. SCA AE-3 would ensure the project's exterior features do not detract from the architecture by prohibiting roof access ladders, roof drain scuppers, and roof drain downspouts. These standard conditions would ensure the project is compatible with existing development within the North Costa Mesa Specific Plan. Impacts would be less than significant in this regard.

#### ***Plans, Programs, Policies:***

PPP AES-1 The City of Costa Mesa would verify the proposed project is developed pursuant to the development standards included in the North Costa Mesa Specific Plan.

PPP AES-2 In conjunction with the review and approval of any master plan for the areas containing the four-story industrial/office park buildings (and parking structures, as appropriate) north of South Coast Drive and west of Susan Street, the three-story townhomes (south of Sunflower Avenue and east of Susan Street), and the five-story office buildings (and parking structures, as appropriate) south of South Coast Drive and west of Fairview Road, the following provisions shall be applied:

- Provision of sufficient setbacks between buildings and Sunflower Avenue, Susan Street, South Coast Drive, Fairview Road, adjacent to the 1-405, and from other buildings to ensure that buildings do not create a "canyon effect.
- Use of low-reflective materials on buildings and parking structures that do not promote glare.
- Provision for architectural design, hardscape features, and landscaping open space areas, in surface parking areas, or on parking structures that reflect a consistent design theme.

PPP AES-2 Shade/shadow impacts of buildings in excess of two stories to surrounding land uses shall be considered during the project review.

Additionally, refer to [Section 5.8, \*Hydrology and Water Quality\*](#) for a discussion of PPP HYD-1.

#### ***Standard Conditions of Approval:***

SCA AE-1 The City of Costa Mesa would be required to verify the proposed project is architecturally compatible (pertaining to building materials, style, colors, etc.) with the existing surrounding development and consistent with the North Costa Mesa Specific Plan during the plan check review process.

SCA AE-2 No modification(s) of the approved building elevations including, but not limited to, changes that increase the building height, removal of building articulation, or a change of the finish material(s), would be made during construction without prior Planning Division written approval. Failure to obtain prior Planning Division approval of the modification could result



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in requirement of the applicant to (re)process the modification through a discretionary review process, or modify the construction drawings to reflect the approved plans.

- SCA AE-3 No exterior roof access ladders, roof drain scuppers, or roof drain downspouts would be permitted. This condition relates to visually prominent features of scuppers or downspouts that not only detract from the architecture but may be spilling water from overhead without an integrated gutter system which would typically channel the rainwater from the scupper/downspout to the ground. An integrated downspout/gutter system painted to match the building would comply with the condition. This condition would be completed under the direction of the Planning Division.
- SCA AE-4 Permits would be required for all signs according to the provisions of the Costa Mesa Sign Ordinance. Freestanding signs would be subject to review and approval by the Planning Division/Development Services Director to ensure compatibility in terms of size, height, and location with the proposed/existing development and existing freestanding signs in the project vicinity.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.1-2: The proposed project would not create a substantial new source of light and glare. [Threshold AE-4]**

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**Level of Significance Before Mitigation:** Less than Significant

**Impact Analysis:** A significant impact may occur if lighting, as part of the proposed project, exceeds adopted thresholds for light and glare, including exterior lighting or light spillover, or if the proposed project creates a substantial new source of light or glare. Residential uses to the south of the project site represent the closest light-sensitive uses to the project.

### **Construction**

Project construction activities could involve temporary glare impacts as a result of construction equipment and materials. However, pursuant to Municipal Code Section 13-279, *Exceptions for Construction*, construction hours are limited to 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. through 6:00 p.m. Saturdays unless a temporary nighttime construction waiver is approved by the City's Development Services Director (refer to PPP N-2). No nighttime construction activities are proposed. Further, construction is not allowed on Sundays and specified Federal holidays. As PPP N-2 would prohibit construction during the evening hours, and nighttime construction is not proposed (refer to [Section 3.5.2, Project Construction Timeline](#)), construction of the proposed project is not anticipated to result in new sources of light or glare. Impacts would be less than significant in this regard.



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#### *Operation*

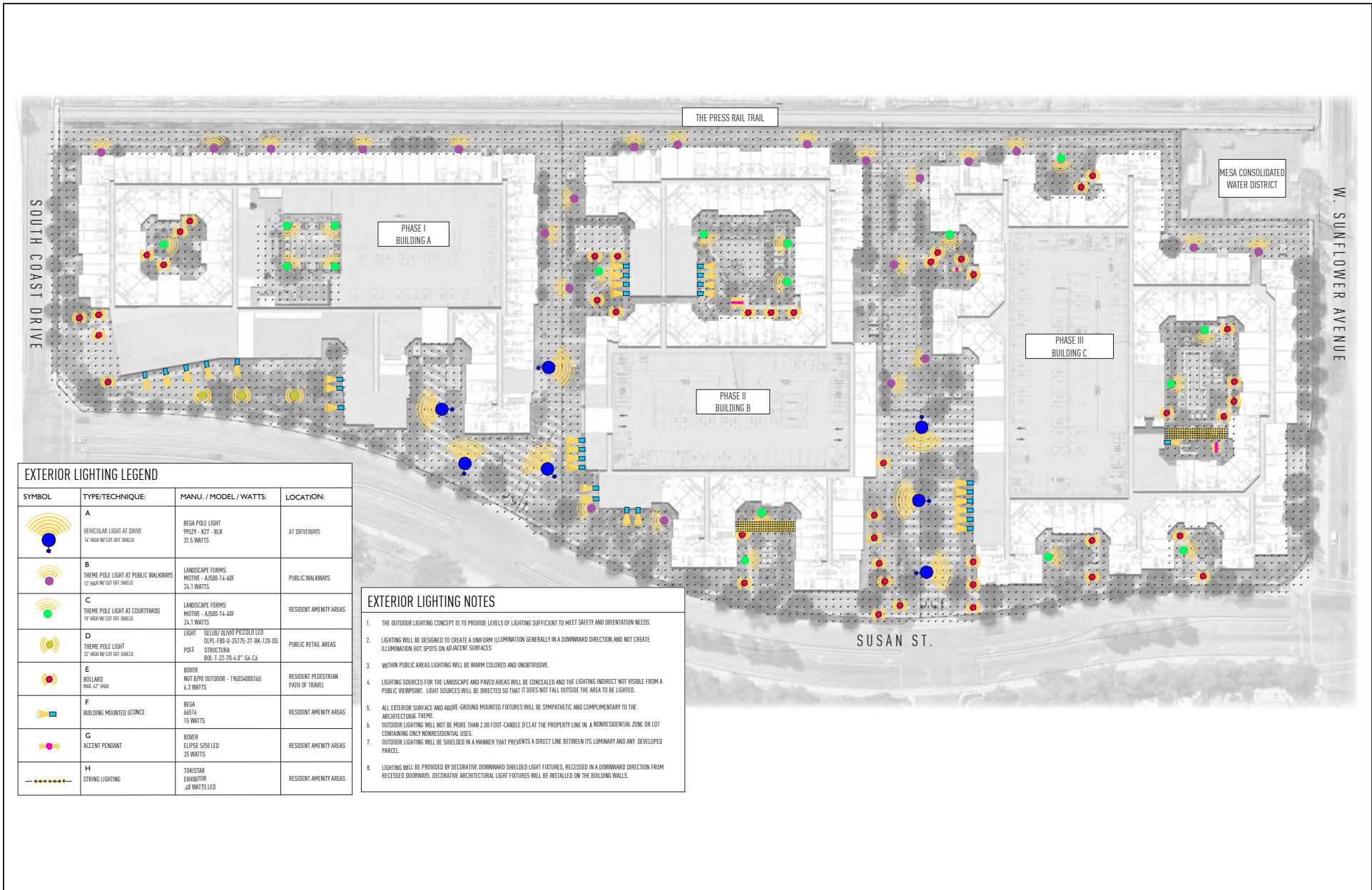
As discussed above, lighting on the project site consist of parking lot lighting, building illumination, and security lighting from the existing 182,520-square foot Hive Creative Office Campus and former Los Angeles Chargers practice field. Additionally, lighting would also come from car headlights and streetlight along Sunflower Avenue, Susan Avenue, and South Coast Drive. Existing light and glare in the project area are typical for an urban area. The implementation of the proposed project would result in an increase in lighting at the project site than existing conditions due to the increase in density.

Specifically, project implementation would result in additional sources of lighting through the development of new three buildings comprising of residential, commercial, and open space use. New sources of light would emanate from residential building interiors and exterior sources, including building illumination, parking and security lighting, and landscape lighting. As shown in [Exhibit 5.1-5, \*Lighting Plan\*](#), the proposed project would have lighting throughout the project site including lighting at open space courtyards, public plaza, driveways and access routes, string lighting, and building lighting fixtures (refer to SCA AES-6). Lighting for vehicular driveways and access route to the proposed parking lots would be directed away and shielded from adjacent residential areas (refer to PPP AES-3). Additionally, Building C, the closest building to the existing residential community to the east, would have minimal lighting along its eastern side (minus lighting for open space courtyard). The lighting for public open space courtyards would be warm colored and unobtrusive. Additionally, all lighting on landscaped and paved areas would be concealed and would not be visible from a public viewpoint. The lighting would also be directed so its range would not fall outside the area being lit. For decorative lighting, lights would be shield downwards which would prevent a direct line to any surrounding developed areas. All outdoor lighting would not be more than 0.5 foot-candle at all property lines, except the western boundary with Anduril Industries, which would not exceed two foot-candles at the property line. Lighting and building finishes would be carefully selected and designed to avoid creating glare (refer to PPP AES-2).

It should be noted that the existing residential community located east of the project site has a masonry wall and trees that border the perimeter and blocks the line-of-sight to the project site. As such, lighting and glare from the proposed project would not be highly visible.

The proposed parking structure would also result in additional sources of lighting (vehicular lighting and nighttime lights). However, it should be noted that the proposed parking structures for all three buildings would be located centrally and would be surrounded by new proposed apartment buildings on all sides due to the wraparound parking structure style. As such, lighting from within the parking structure would not be readily visible. Per SCA AE-5, a Lighting Plan and Photometric Study have been prepared for review and approval by the City's Development Services Director; refer to [Exhibit 5.1-5](#). The Lighting Plan and Photometric Study includes performance standards to minimize the project's potential to result in lighting impacts. Such standards include the following:





**EXTERIOR LIGHTING LEGEND**

SYMBOL	TYPE/TECHNIQUE:	MANU. / MODEL / WATTS:	LOCATION:
	<b>A</b> VEHICULAR LIGHT AT DRIVE 14' HIGH W/COB-UP SHIELD	BEGA POLE LIGHT 99229 - K27 - BLK 37.5 WATTS	AT DRIVEWAYS
	<b>B</b> THEME POLE LIGHT AT PUBLIC WALKWAYS 17' HIGH W/COB-UP SHIELD	LANDSCAPE FORMS MOTIVE - AJS08-14-00F 74.1 WATTS	PUBLIC WALKWAYS
	<b>C</b> THEME POLE LIGHT AT COURTYARDS 18' HIGH W/COB-UP SHIELD	LANDSCAPE FORMS MOTIVE - AJS08-14-00F 74.1 WATTS	RESIDENT AMENITY AREAS
	<b>D</b> THEME POLE LIGHT 27' HIGH W/COB-UP SHIELD	LIGHT SELOW OLIVIO PICOLO LED 02PL-F01-10-20175-27-BK-120-05 POLE STRUTTORIA B0L-1-22-78-4.0"-S4-G4	PUBLIC RETAIL AREAS
	<b>E</b> BOLLARD PAIL 42" HIGH	BOVER NUT 8790 OUTDOOR - 196354000160 6.3 WATTS	RESIDENT PEDESTRIAN PATH OF TRAVEL
	<b>F</b> BUILDING MOUNTED SCONCE	BEGA 64616 15 WATTS	RESIDENT AMENITY AREAS
	<b>G</b> ACCENT PENDANT	BOVER ELIPSE S28 LED 25 WATTS	RESIDENT AMENITY AREAS
	<b>H</b> STRING LIGHTING	TOKSTAR CONDUITOR 48 WATTS LED	RESIDENT AMENITY AREAS

**EXTERIOR LIGHTING NOTES**

1. THE OUTDOOR LIGHTING CONCEPT IS TO PROVIDE LEVELS OF LIGHTING SUFFICIENT TO MEET SAFETY AND ORIENTATION NEEDS.
2. LIGHTING WILL BE DESIGNED TO CREATE A UNIFORM ILLUMINATION GENERALLY IN A DOWNWARD DIRECTION AND NOT CREATE ILLUMINATION HOT SPOTS ON ADJACENT SURFACES
3. WITHIN PUBLIC AREAS LIGHTING WILL BE WARM COLORED AND UNOBTRUSIVE.
4. LIGHTING SOURCES FOR THE LANDSCAPE AND PAVED AREAS WILL BE CONCEALED AND THE LIGHTING INDIRECT NOT VISIBLE FROM A PUBLIC VIEWPOINT. LIGHT SOURCES WILL BE DIRECTED SO THAT IT DOES NOT FALL OUTSIDE THE AREA TO BE LIGHTED.
5. ALL EXTERIOR SURFACE AND ABOVE-GROUND MOUNTED FIXTURES WILL BE SYMPHATIC AND COMPLIMENTARY TO THE ARCHITECTURAL THEME.
6. OUTDOOR LIGHTING WILL NOT BE MORE THAN 2.00 FOOT-CANDLE (FC) AT THE PROPERTY LINE IN A NONRESIDENTIAL ZONE OR LOT CONTAINING ONLY NONRESIDENTIAL USES.
7. OUTDOOR LIGHTING WILL BE SHIELDED IN A MANNER THAT PREVENTS A DIRECT LINE BETWEEN ITS LUMINARY AND ANY DEVELOPED PARCEL.
8. LIGHTING WILL BE PROVIDED BY DECORATIVE DOWNWARD SHIELDED LIGHT FIXTURES, RECESSED IN A DOWNWARD DIRECTION FROM RECESSED DOORWAYS. DECORATIVE ARCHITECTURAL LIGHT FIXTURES WILL BE INSTALLED ON THE BUILDING WALLS.

Source: MJS Landscape Architecture, August 2024



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- Lighting design and layout shall limit spill light to no more than 0.5 foot candle at the property line of the surrounding neighbors, consistent with the level of lighting that is deemed necessary for the safety and security purposes on-site; and
- Glare shields may be required for select light standards.

All proposed lighting features (except bollards for pedestrian walkways, building mounted sconce, accent pendant, and string lighting) would be installed with cut off shields. Additionally, all lighting (except string lighting) would be directed downwards to reduce lighting on neighboring parcels. As demonstrated in [Exhibit 5.1-5](#), all outdoor lighting would not be more than 0.5 foot-candle at all property lines, except the western boundary with Anduril Industries, which would not exceed two foot-candles at the property line. Due to the distance to from light sources on-site to neighboring parcels (such as the Rail Trail), lighting would be reduced to less than 0.5 foot-candle at the boundaries with private property. As such, the proposed project would meet the performance standards intended to reduce the project's resultant lighting impacts.

With implementation of PPP AES-1, PPP AES-2, PPP AES-3, and SCA AE-5, operational lighting from the proposed project would be minimized to reduce light spillover to adjacent properties. As such, operational impacts to lighting would be less than significant.

#### *Plans, Programs, Policies:*

PPP AES-3 Lighting for parking structures and lots shall be directed away and/or shielded from adjacent residential areas where applicable.

Refer to PPP AES-1 and PPP AES-2. Additionally, refer to [Section 5.10, Noise](#), for a discussion of PPP N-2.

#### *Standard Conditions of Approval:*

SCA AE-5 Prior to the issuance of the first building permit, the Applicant shall submit a Lighting Plan and Photometric Study for approval by the Development Services Director or designee. The Lighting Plan and Photometric Study shall demonstrate compliance with the following:

- Lighting design and layout shall limit spill light to no more than 0.5 foot candle at the property line of the surrounding neighbors, consistent with the level of lighting that is deemed necessary for the safety and security purposes on-site; and
- Glare shields may be required for select light standards.

SCA AES-6 On-site lighting shall be provided in all parking areas, vehicular access ways, and along major walkways. The lighting shall be directed onto driveways and walkways within the project and away from dwelling units and adjacent properties to minimize light and glare impacts, and shall be of a type approved by the Development Services Director.



## 5. Environmental Analysis AESTHETICS

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### 5.1.4 Cumulative Impacts

The cumulative impacts discussed below rely upon the list of cumulative development projects included in Table 4-2, Related Projects. The nearest cumulative projects to the project site identified in Table 4-2 is the AAA Development Agreement (Cumulative Project 3) approximately 220 feet to the southeast and the Anduril (Cumulative Project 4) approximately 650 feet to the west; refer to Exhibit 4-1, Cumulative Projects. However, it should be noted that the Anduril project would not be visible as existing structures blocks the line of site to the Anduril project site from the project site. As such, cumulative impact analysis would analyze the combined impact of the proposed project and the AAA Development Agreement.

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**Impact 5.1-3: Development of the proposed project and related projects would not conflict with applicable zoning and other regulations governing scenic quality. [Threshold AE-3]**

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**Level of Significance Before Mitigation:** Less than Significant Impact.

**Impact Analysis:** The nearest cumulative project, cumulatively visible with the project, is the AAA Development Agreement, which would allow the construction of an office and warehouse facility on a site 220 feet southeast of the project site. All cumulative projects, including the AAA Development Agreement, would be required to show consistency with applicable City development and design plans, including the City's zoning requirements. All cumulative development would be subject to SCA AE-1, which would ensure future development is architecturally compatible with regard to building materials, style, colors, etc., with the existing surrounding development. SCA AE-2 would make certain that no modification(s) to approved building elevations, including, but not limited to, changes that increase the building height, removal of building articulation, or a change of the finish material(s), are made during construction without prior Planning Division written approval. SCA AE-3 would make sure the exterior features do not detract from the architecture by prohibiting roof access ladders, roof drain scuppers, and roof drain downspouts. These processes would ensure compliance with the City's desired architectural styles, color schemes, materials, etc., for these specific areas.

As concluded in Impact 5.1-1, implementation of the proposed project would result in less than significant impacts pertaining to a conflict with regulations governing scenic quality upon compliance with the General Plan, Municipal Code, Specific Plan Development Standards, Master Plan, and Standard Conditions of Approval. Thus, impacts would not be cumulatively considerable; impacts in regard are less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** Refer to SCA AE-1 through SCA AE-3.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



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**Impact 5.1-4: Development of the proposed project and related projects would not create a new substantial source of light and glare. [Threshold AE-4]**

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*Level of Significance Before Mitigation:* Less than Significant.

*Impact Analysis:* Development of cumulative projects could result in increased lighting and glare in the City. General Plan Community Design Policy CD-8.1.H and Municipal Code Section 13-49 require outdoor lights to be shielded to avoid spillover onto adjacent properties and specifically, to be directed away from residential areas. Potential impacts would be minimized on a project-by-project basis, which would ensure proper lighting fixtures, placement, and minimal spillover. As a result, related development would not result in cumulatively considerable light and glare impacts.

As discussed in Impact 5.1-2, the project's operational light and glare impacts would be less than significant with implementation of the Specific Plan Development Standards. Specifically, according to the Lighting Plan prepared for the proposed project, all lighting from the development would be directed away from neighboring parcels, including the residential community to the east. Additionally, lighting on-site would be shielded and directed downwards to reduce their light impact. Exterior lighting from the proposed project would not be more than 0.5 foot-candle at all property lines, except the western boundary with Anduril Industries, which would not exceed two foot-candles at the property line. Due to the distance to from light sources on-site to neighboring parcels (such as the Rail Trail), lighting would be reduced to less than 0.5 foot-candle at the boundaries with private property. As such, impacts would not be cumulative considerable in this regard.

Further, construction activities would not result in new sources of light and glare following conformance with the Municipal Code's allowable construction hours. Any construction work outside of the allowable hours would be subject to review by the Development Services Director to ensure nighttime construction would not result in light and glare. As such, the proposed project would not significantly contribute to cumulative construction-relative lighting impacts or operational glare impacts.

*Plans, Programs, Policies:* Refer to PPP AES-1, PPP AES-2, and PPP AES-3.

*Standard Conditions of Approval:* Refer to SCA AE-5.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.1.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to aesthetics have been identified.



## Chapter 5.2 Air Quality



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## 5. Environmental Analysis

### 5.2 AIR QUALITY

This section of the Draft EIR addresses the potential air pollutant emissions generated by the construction and operation of the project and impacts on air quality. The analysis also addresses the consistency of the project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) 2022 Air Quality Management Plan (2022 AQMP). The analysis of project-generated air pollutant emissions focuses on whether the project would cause an exceedance of an ambient air quality standard or SCAQMD significance thresholds. Refer to [Appendix C, \*Air Quality/Greenhouse Gas Emissions/Energy Data\*](#) for the modeling outputs and results.

#### 5.2.1 Environmental Setting

##### 5.2.1.1 REGULATORY BACKGROUND

###### Federal Level

###### *U.S. Environmental Protection Agency*

The U.S. Environmental Protection Agency (EPA) is responsible for implementing the Federal Clean Air Act (FCAA), which was first enacted in 1955 and amended numerous times after. The FCAA established federal air quality standards known as the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for “criteria” pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare; refer to [Table 5.2-1, \*National and California Ambient Air Quality Standards\*](#).

###### State Level

###### *California Air Resources Board*

California Air Resource Board (CARB) administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, including with the NAAQS in [Table 5.2-1](#), are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for the preparation of the State Implementation Plan (SIP) for the State of California.



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**Table 5.2-1 National and California Ambient Air Quality Standards**

Pollutant	Averaging Time	California <sup>2</sup>		Federal <sup>2</sup>	
		Concentration <sup>3</sup>	Attainment Status	Standards	Attainment Status <sup>7</sup>
Ozone (O <sub>3</sub> ) <sup>8</sup>	1-Hour	0.09 ppm (180 µg/m <sup>3</sup> )	<b>Nonattainment</b>	NA	N/A
	8-Hour	0.070 ppm (137 µg/m <sup>3</sup> )	<b>Nonattainment</b>	0.070 ppm (137 µg/m <sup>3</sup> )	<b>Nonattainment</b>
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>9</sup>	24-Hour	50 µg/m <sup>3</sup>	<b>Nonattainment</b>	150 µg/m <sup>3</sup>	Unclassified
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>	<b>Nonattainment</b>	N/A	N/A
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>9</sup>	24-Hour	No Separate State Standard		35 µg/m <sup>3</sup>	Attainment
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	<b>Nonattainment</b>	12.0 µg/m <sup>3</sup>	Attainment
Carbon Monoxide (CO)	1-Hour	20 ppm (23 mg/m <sup>3</sup> )	Attainment	35 ppm (40 mg/m <sup>3</sup> )	Attainment
	8-Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Attainment
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>10</sup>	1-Hour	0.18 ppm (339 µg/m <sup>3</sup> )	Attainment	100 ppb (188 µg/m <sup>3</sup> )	Attainment
	Annual Arithmetic Mean	0.030 ppm (57 µg/m <sup>3</sup> )	N/A	53 ppb (100 µg/m <sup>3</sup> )	Attainment
Sulfur Dioxide (SO <sub>2</sub> ) <sup>11</sup>	1-Hour	0.25 ppm (655 µg/m <sup>3</sup> )	Attainment	75 ppb (196 µg/m <sup>3</sup> )	N/A
	3-Hour	N/A	N/A	N/A	N/A
	24-Hour	0.04 ppm (105 µg/m <sup>3</sup> )	Attainment	0.14 ppm (for certain areas) <sup>11</sup>	Attainment
	Annual Arithmetic Mean	N/A	N/A	0.030 ppm (for certain areas) <sup>11</sup>	Attainment
Lead <sup>12,13</sup>	30-Day Average	1.5 µg/m <sup>3</sup>	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 µg/m <sup>3</sup>	Attainment
	Rolling 3-Month Average	N/A	N/A	0.15 µg/m <sup>3</sup>	Attainment
Visibility-Reducing Particles <sup>14</sup>	8-Hour	Extinction coefficient = 0.23 km@<70% RH	Unclassified	No National Standards	
Sulfates	24-Hour	25 µg/m <sup>3</sup>	Attainment		
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Unclassified		
Vinyl Chloride <sup>12</sup>	24-Hour	0.01 ppm (26 µg/m <sup>3</sup> )	N/a		





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**Table 5.2-1, Notes**

Source: California Air Resources Board, *Ambient Air Quality Standards Chart*, May 4, 2016.

Notes:

°C = degrees Celsius

EPA = United States Environmental Protection Agency

ppm = parts per million

km = kilometer(s)

µg/m<sup>3</sup> = micrograms per cubic meter

mg/m<sup>3</sup> = milligrams per cubic meter

PST = Pacific Standard Time

RH = relative humidity

ppb = parts per billion

N/A = Not Applicable

- <sup>1</sup> California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM<sub>10</sub>, PM<sub>2.5</sub>, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- <sup>2</sup> National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM<sub>10</sub>, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m<sup>3</sup> is equal to or less than one. For PM<sub>2.5</sub>, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- <sup>3</sup> Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- <sup>4</sup> National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- <sup>5</sup> To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- <sup>6</sup> On June 2, 2010, a new 1-hour SO<sub>2</sub> standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO<sub>2</sub> national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved. Note that the 1-hour national standard is in units of ppb. California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- <sup>7</sup> CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- <sup>8</sup> The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m<sup>3</sup> as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- <sup>9</sup> In 1989, CARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.

Like the EPA, CARB also designates areas within California as either attainment or non-attainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as non-attainment for a pollutant if air quality data show that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard and are not used as a basis for designating areas as non-attainment.

The following CARB regulations would be applicable to the proposed project:

- California Code Regulations (CCR), Title 13, Sections 2449(d)(3) describes requirements for fleets that change in size.
- California Code Regulations (CCR), Title 13, Sections 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.

### Regional Level

#### *South Coast Air Quality Management District*

The SCAQMD is one of 35 air quality management districts that have prepared AQMPs to accomplish a five-percent annual reduction in emissions. SCAQMD adopted the 2022 AQMP on December 2, 2022. The primary



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purpose of the 2022 AQMP is to identify, develop, and implement strategies and control measures to meet the 2015 eight-hour ozone NAAQS-70 parts per billion (ppb) as expeditiously as practicable, but no later than the statutory attainment deadline of August 3, 2038, for the Basin and August 3, 2033, for the Riverside County portion of the Salton Sea Air Basin. The 2022 AQMP incorporates the Southern California Association of Governments (SCAG)'s *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (2020-2045 RTP/SCS) and motor vehicle emissions from CARB. SCAG updates the RTP/SCS every four years and the most recent plan, the 2024-2050 RTP/SCS (Connect SoCal 2024) was adopted on April 4, 2024. Connect SoCal 2024 is a vision for the future of Southern California that includes policies, strategies, and projects to advance the region's mobility, economy, and sustainability through 2050. However, SCAQMD has not adopted an updated AQMP to incorporate the Connect SoCal 2024.

In addition to the 2022 AQMP and its rules and regulations, the SCAQMD published the CEQA Air Quality Handbook. The SCAQMD CEQA Air Quality Handbook provides guidance to assist local government agencies and consultants in developing the environmental documents required by CEQA. With the help of the CEQA Air Quality Handbook, local land use planners and other consultants can analyze and document how proposed and existing projects affect air quality and should be able to fulfill the requirements of the CEQA review process. The SCAQMD is in the process of developing an Air Quality Analysis Guidance Handbook to replace the current CEQA Air Quality Handbook approved by the SCAQMD Governing Board in 1993.

SCAQMD adopts rules and regulations to implement various portions of the AQMP. Several of these rules may apply to the project construction and/or operation. SCAQMD Rule 403 requires the implementation of the best available fugitive dust control measure during active construction periods that can generate fugitive dust emissions. These construction periods typically include on-site earth-moving activities, construction/demolition activities, and construction equipment travel on paved and unpaved roads.

The following SCAQMD rules and regulations would be applicable to the proposed project:

- SCAQMD Rule 403: Requires projects to incorporate fugitive dust control measures;
- SCAQMD Rule 1108: Limits the Volatile organic compound (VOC) content of asphalt;
- SCAQMD Rule 1113: Limits the VOC content of architectural coatings;
- SCAQMD Rule 1143: Limits the VOC content of solvents used during construction; and
- SCAQMD Rule 445: Prohibit the installation of wood-burning devices into any new development.

#### *Southern California Association of Governments*

SCAG is the regional planning agency that implements the 2020-2045 RTP/SCS for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and addresses regional issues relating to transportation, the economy, community development, and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and State air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the



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responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. The 2020-2045 RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the 2022 AQMP. The SCAQMD combines its portion of the AQMP with measures prepared by SCAG.<sup>1</sup> The Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP, are based on the 2020-2045 RTP/SCS. The latest Connect SoCal 2024 was adopted on April 4, 2024. Connect SoCal 2024 is a vision for the future of Southern California that includes policies, strategies, and projects to advance the region's mobility, economy, and sustainability through 2050. While SCAG recently adopted the Connect SoCal 2024, the SCAQMD has not released an updated AQMP. As such, this consistency analysis is based off the 2022 AQMP and the RTP/SCS that was adopted at the time, the 2020-2045 RTP/SCS.

### Local

#### *General Plan*

The 2015-2035 Costa Mesa General Plan (General Plan) establishes the long-range planning and policy direction that guides change and preserves the qualities that define our community. The General Plan sets forth the Vision for Costa Mesa for the next two decades. The Conservation Elements of the General Plan include the following objective and policies related to air quality:

- **Objective CON-4.A:** Pursue the prevention of the significant deterioration of local and regional air quality.
  - **Policy CON-4.A.1:** Support regional policies and efforts that improve air quality to protect human and environmental health and minimize disproportionate impacts on sensitive population groups.
  - **Policy CON-4.A.2:** Encourage businesses, industries, and residents to reduce the impact of direct, indirect, and cumulative impacts of stationary and non-stationary pollution sources.
  - **Policy CON-4.A.3:** Require that sensitive uses such as schools, childcare centers, parks and playgrounds, housing, and community gathering places are protected from adverse impacts of emissions.
  - **Policy CON-4.A.3:** Continue to participate in regional planning efforts with the Southern California Association of Governments, nearby jurisdictions, and South Coast Air Quality Management District to meet or exceed air quality standards.

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<sup>1</sup> South Coast Air Quality Management District, *2022 Air Quality Management Plan*, adopted December 2, 2022.



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#### 5.2.1.2 EXISTING SETTING

##### Geography

The project site is located within the South Coast Air Basin (Basin), a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of Los Angeles and all of Orange County, Riverside, and San Bernardino Counties, in addition to the San Geronio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of air pollutants throughout the Basin.

##### Climate

The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semi-arid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. The annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically 9 to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall are greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal Basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O<sub>3</sub>) observed during the summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.



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The area in which the project is located offers clear skies and sunshine yet is still susceptible to air inversions. These inversions trap a layer of stagnant air near the ground, where it is then further loaded with pollutants. These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

The City experiences a mild Southern California coastal climate with average high temperatures between 66°F and 78°F, and average low temperatures between 48°F to 66°F. The area also experiences an average of up to 3.0 inches of precipitation per month, with the most precipitation occurring in the month of February.<sup>2</sup>

#### *Criteria Air Pollutants*

Pursuant to the FCAA of 1970, the EPA established the NAAQS. The NAAQS were established for six major pollutants, termed “criteria” pollutants,<sup>3</sup> including O<sub>3</sub>, Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>), Sulfur Dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>). In addition, the CCAA established CAAQS for three additional pollutants (sulfates, hydrogen sulfide, and visibility reducing particles). Volatile organic compounds (VOCs) are not criteria air pollutants but act as criteria air pollutant precursors.

A description of each of the primary and secondary criteria air pollutants and their known health effects are presented below.

- **Ozone(O<sub>3</sub>):** O<sub>3</sub> occurs in two layers of the atmosphere. The layer surrounding the earth’s surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the “good” O<sub>3</sub> layer) extends upward from about 10 to 30 miles and protects life on earth from the sun’s harmful ultraviolet rays. “Bad” O<sub>3</sub> is a photochemical pollutant and needs VOCs, nitrogen oxides (NO<sub>x</sub>), and sunlight to form; therefore, VOCs and NO<sub>x</sub> are O<sub>3</sub> precursors. To reduce O<sub>3</sub> concentrations, it is necessary to control the emissions of these O<sub>3</sub> precursors. Significant O<sub>3</sub> formation generally requires an adequate number of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High O<sub>3</sub> concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While O<sub>3</sub> in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level O<sub>3</sub> (in the troposphere) can adversely affect the human respiratory system and other tissues. O<sub>3</sub> is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung diseases such as asthma and chronic pulmonary lung disease are the most susceptible to the health effects of O<sub>3</sub>. Short-term exposure (lasting for a few hours) to O<sub>3</sub> at elevated levels can result in aggravated respiratory diseases such as emphysema, bronchitis, and asthma, shortness of breath, increased

<sup>2</sup> Weather Spark, Average Weather in Costa Mesa, California, United States <https://weatherspark.com/y/1836/Average-Weather-in-Costa-Mesa-California-United-States-Year-Round>, accessed on July 22, 2024.

<sup>3</sup> Criteria pollutants are defined as those pollutants for which the Federal and State governments have established AAQS, or criteria, for outdoor concentrations to protect public health.



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susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

- **Carbon Monoxide (CO):** CO is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO is a localized pollutant that is found in high concentrations only near its source; therefore, elevated concentrations are usually only found near areas of high traffic volumes. Other sources of CO include the incomplete combustion of petroleum fuels at power plants and fuel combustion from wood stoves and fireplaces during the winter. CO causes several health problems, including the aggravation of some heart diseases, reduced tolerance for exercise, impaired mental function, and impaired fetal development. At high levels of exposure, CO reduces the amount of oxygen in the blood, which may be fatal.
- **Nitrogen Oxides (NO<sub>x</sub>):** NO<sub>x</sub> is a family of highly reactive gases that are a primary precursor to the formation of ground-level O<sub>3</sub> and react in the atmosphere to form acid rain. NO<sub>2</sub> (often used interchangeably with NO<sub>x</sub>) is a reddish-brown gas that can cause breathing difficulties at elevated levels. Peak readings of NO<sub>2</sub> occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations). NO<sub>2</sub> can irritate and damage the lungs and lower resistance to respiratory infections such as influenza. The health effects of short-term exposure are still unclear. However, continued or frequent exposure to NO<sub>2</sub> concentrations that are typically much higher than those normally found in the ambient air may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO<sub>2</sub> may aggravate eyes and mucus membranes and cause pulmonary dysfunction.
- **Sulfur Dioxide (SO<sub>2</sub>):** SO<sub>2</sub> is a colorless, irritating gas with a rotten egg smell; it is formed primarily by the combustion of sulfur-containing fossil fuels. SO<sub>2</sub> is often used interchangeably with sulfur oxides (SO<sub>x</sub>). Exposure of a few minutes to low levels of SO<sub>2</sub> can result in airway constriction in some asthmatics.
- **Coarse Particulate Matter (PM<sub>10</sub>):** PM<sub>10</sub> refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM<sub>10</sub> arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM<sub>10</sub> scatters light and significantly reduces visibility. In addition, these particulates penetrate the lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the Statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).
- **Fine Particulate Matter (PM<sub>2.5</sub>):** Due to recent increased concerns over health impacts related to fine particulate matter (particulate matter 2.5 microns in diameter or less), both State and Federal PM<sub>2.5</sub> standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, EPA announced new PM<sub>2.5</sub> standards. Industry groups challenged the new standard in court, and the implementation of the standard was blocked. However, upon appeal by the EPA, the United States Supreme Court reversed this decision and upheld the EPA's new standards. In February 2024, EPA lowered the federal primary PM<sub>2.5</sub> annual standard to 9.0 microgram per cubic meter (ug/m<sup>3</sup>) from the 12.0 ug/m<sup>3</sup> standard set in 2012. The secondary annual



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standard remains at 15.0 ug/m<sup>3</sup>. States and Tribal Authorities will submit initial recommendations of areas that do not attain this standard (i.e., nonattainment areas) to EPA by February 2025, and EPA will finalize area designations by February 2026.

- **Volatile Organic Compounds (VOCs):** VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O<sub>3</sub> to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOC is not considered a criteria pollutant; however, it is a precursor to O<sub>3</sub>, which is a criteria pollutant. Due to the role VOC plays in O<sub>3</sub> formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established. The terms VOC and ROG (see below) are often used interchangeably.
- **Reactive Organic Gases (ROG):** Like VOCs, ROGs are also precursors in forming O<sub>3</sub> and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O<sub>3</sub>, which is a criteria pollutant. The terms ROG and VOC (see above) are often used interchangeably.
- **Toxic Air Contaminants (TACs):** Toxic air contaminants are air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs are different than criteria pollutants because ambient air quality standards have not been established for TACs. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. Exposure to TACs may result in long-term health effects, such as cancer, birth defects, neurological damage, asthma, or genetic damage; or short-term acute effects, such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

### Existing Local Ambient Air Quality

SCAQMD, together with CARB, maintains ambient air quality monitoring stations in the Basin. The closest station that monitors CO and NO<sub>2</sub> is the Anaheim-812 W Vermont Street approximately 8.4 miles north of



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the project site. The closest air quality monitoring station that monitors O<sub>3</sub>, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> is the Anaheim-Pampas Lane Station at 1630 West Pampas Lane, approximately 9.4 miles northwest of the project site. The air quality trends from these stations are used to represent the ambient air quality in the project area. The ambient air quality data in Table 5.2-2, *Ambient Air Quality Monitored in the Project Vicinity*, show pollutant levels are below the applicable State and Federal standards most of the time.

**Table 5.2-2 Ambient Air Quality Monitored in the Project Vicinity**

Pollutant	Primary Standard		Year	Maximum Concentration <sup>1</sup>	Number of Days State/Federal Std. Exceeded
	California	Federal			
Ozone (O <sub>3</sub> ) (1-hour) <sup>2</sup>	0.09 ppm for 1 hour	NA <sup>6</sup>	2021	0.089 ppm	0 / 0
			2022	0.102 ppm	1 / 0
			2023	0.089 ppm	0 / 0
Ozone (O <sub>3</sub> ) (8-hour) <sup>2</sup>	0.070 ppm for 8 hours	0.070 ppm for 8 hours	2021	0.068 ppm	0 / 0
			2022	0.076 ppm	1 / 1
			2023	0.076 ppm	2 / 2
Carbon Monoxide (CO) <sup>3,4</sup> (1-hour)	20 ppm for 1 hour	35 ppm for 1 hour	2021	2.288 ppm	0 / 0
			2022	2.594 ppm	0 / 0
			2023	2.357 ppm	0 / 0
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>3</sup>	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2021	0.072 ppm	0 / 0
			2022	0.062 ppm	0 / 0
			2023	0.058 ppm	0 / 0
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>2,4</sup>	No Separate Standard	35 µg/m <sup>3</sup> for 24 hours	2021	54.4 µg/m <sup>3</sup>	10 / NA
			2022	33.1 µg/m <sup>3</sup>	0 / NA
			2023	45.6 µg/m <sup>3</sup>	1 / NA
Coarse Particulate Matter (PM <sub>10</sub> ) <sup>2,4,5,7</sup>	50 µg/m <sup>3</sup> for 24 hours	150 µg/m <sup>3</sup> for 24 hours	2021	63.6 µg/m <sup>3</sup>	1 / 0
			2022	67.0 µg/m <sup>3</sup>	1 / 0
			2023	97.8 µg/m <sup>3</sup>	1 / 0

**Notes:**

ppm = parts per million  
µg/m<sup>3</sup> = micrograms per cubic meter  
NA = Not Applicable

PM<sub>10</sub> = particulate matter 10 microns in diameter or less  
PM<sub>2.5</sub> = particulate matter 2.5 microns in diameter or less

1. Maximum concentration is measured over the same period as the California Standards.
2. Data collected from Anaheim-Pampas Lane Monitoring Station located at 1630 West Pampas Lane, Anaheim CA 92802.
3. Data collected from Anaheim-812 W Vermont Street Monitoring Station located 812 West Vermont Avenue, Anaheim, CA 92802.
4. PM<sub>10</sub> and PM<sub>2.5</sub> exceedances are derived from the number of samples exceeded, not days.
5. PM<sub>10</sub> exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
6. The Federal standard for 1-hour ozone was revoked in June 2005.
7. The Federal standard for average PM<sub>10</sub> was revoked in December 2006.

Sources: California Air Resources Board, ADAM Air Quality Data Statistics, <http://www.arb.ca.gov/adam/>, accessed August 8, 2024; California Air Resources Board, AQMIS2: Air Quality Data, <https://www.arb.ca.gov/aqmis2/aqdselect.php>, accessed August 8, 2024.

### Sensitive Receptors

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The following types of people are most likely to be adversely affected by air pollution, as identified by CARB: children under 14, elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. Locations that may contain a high concentration of these sensitive population groups are called sensitive receptors and include residential areas, hospitals, day-care facilities, elder-care facilities, elementary schools, and parks. Sensitive receptors in the project vicinity include residential uses, schools, and churches. The closest sensitive receptors to the project site are residences 105 feet to the east.





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### Existing On-Site Emissions

Operational emissions are currently generated by existing uses on the project site. The project site is currently developed with the Hive Creative Campus (in the northern portion) and the Los Angeles Chargers practice field<sup>4</sup> (in the southern portion). Table 5.2-3, *Existing Criteria Air Pollutant Emissions* summarizes emissions from the existing (baseline) condition.

**Table 5.2-3 Existing Criteria Air Pollutant Emissions**

Source	Pollutant Emissions (lbs/day) <sup>1</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
Summer Emissions						
Mobile	9.23	6.88	76.20	0.18	16.70	4.33
Area	5.40	0.06	7.49	<0.01	0.01	0.01
Energy	0.06	1.17	0.98	0.01	0.09	0.09
Total Summer Emissions	14.69	8.11	84.67	0.19	16.80	4.43
Winter Emissions						
Mobile	9.12	7.49	71.10	0.18	16.70	4.33
Area	4.17	0.00	0.00	0.00	0.00	0.00
Energy	0.06	1.17	0.98	0.01	0.09	0.09
Total Winter Emissions	13.35	8.66	72.08	0.19	16.79	4.42

Notes: lbs/day= pounds per day; VOC = volatile organic compounds; NO<sub>x</sub> = nitrous oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur dioxides; PM<sub>10</sub> = coarse particulate matter; PM<sub>2.5</sub> = fine particulate matter

1. The numbers may not add up precisely due to rounding.

### 5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- AQ-1 Conflict with or obstruct implementation of the applicable air quality plan.
- AQ-2 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard.
- AQ-3 Expose sensitive receptors to substantial pollutant concentrations.
- AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

#### 5.2.1.3 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

SCAQMD has established daily emissions thresholds for construction and operation of a proposed project in the Basin. The emissions thresholds were established based on the attainment status of the Basin regarding air quality standards for specific criteria pollutants. Because the concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are regarded as conservative and would overstate an individual project's contribution to health risks.

<sup>4</sup> The Los Angeles Chargers practice field was analyzed as golf course in CalEEMod, as it is the most analogous land use category.



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#### Regional Emissions Thresholds

The City uses the SCAQMD *1993 CEQA Air Quality Handbook* to identify potentially significant impacts on air quality. For the purposes of this analysis, an impact is considered significant if a project:

- Generates total emissions (direct and indirect) in excess of the thresholds identified in [Table 5.2-4, SCAQMD Significance Thresholds](#).
- Generates a violation of any ambient air quality standard when added to the local background; or
- Does not conform with the applicable attainment or maintenance plan(s).

[Table 5.2-4](#) lists the CEQA significance thresholds for construction and operational emissions established for the Basin. Projects in the Basin with construction- or operation-related emissions that exceed any of these emission thresholds would be considered significant under SCAQMD guidelines. These thresholds apply as both project-specific and cumulative thresholds. If a project exceeds these standards, it is considered to have a project-specific and cumulative impact.

**Table 5.2-4 SCAQMD Significance Thresholds**

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROG)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO <sub>x</sub> )	100 lbs/day	55 lbs/day
Sulfur Oxides (SO <sub>x</sub> )	150 lbs/day	150 lbs/day
Coarse Particulates (PM <sub>10</sub> )	150 lbs/day	150 lbs/day
Fine Particulates (PM <sub>2.5</sub> )	55 lbs/day	55 lbs/day

Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, revised March 2023.  
Notes: lbs/day = pounds per day

#### Localized Significance Threshold

The SCAQMD published the *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008, which recommends air quality analyses to include assessments of both construction and operational impacts on nearby sensitive receptors. Localized Significance Thresholds (LSTs) represent the maximum emissions from a project site that are not expected to result in an exceedance of the most stringent applicable NAAQS or CAAQS for CO, NO<sub>2</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>, as shown in [Table 5.2-1](#).

LST analyses only apply to CO, NO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions during construction and operation and are at the discretion of the lead agency. Screening-level analysis of LSTs is only recommended for construction activities at project sites that are five acres or less. SCAQMD recommends that any project greater than five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. To minimize efforts, the SCAQMD developed mass rate lookup tables as a simple screening procedure. If a project's on-site emissions do not exceed the screening levels for any pollutant, it can be concluded that the project would not cause or contribute to an adverse localized air quality impact. Screening levels are provided for various distances (i.e., 82 feet [25 meters], 164 feet [50 meters], 328 feet [100 meters], 656 feet [200 meters], and 1,640 feet [500 meters]) between the project boundary and the nearest sensitive receptor and various project site acreages (i.e., one, two, and five acres).



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#### CO Hot Spot Threshold

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the project are above or below State and Federal CO standards. Ambient CO levels throughout the Basin are below the standards, therefore, a project would have a significant CO impact if project emissions result in an exceedance of one or more of the 1-hour or 8-hour standards. The following are applicable local emission concentration standards for CO:

- California State 1-hour CO standard of 20 ppm; and
- California State 8-hour CO standard of 9 ppm.

If ambient levels already exceed a State or Federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. SCAQMD defines a measurable amount as 1.0 ppm or more for the 1-hour CO concentration or 0.45 ppm or more for the 8-hour CO concentration.

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

At the time of the publishing of the *1993 CEQA Air Quality Handbook*, the Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Basin and in California have steadily declined. In 2007, SCAQMD was designated in attainment for CO under both the CAAQS and NAAQS. As identified within SCAQMD's *2003 Air Quality Management Plan* and the *1992 Federal Attainment Plan for Carbon Monoxide*, peak CO concentrations in the Basin were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal air does not mix) in order to generate a significant CO impact.

#### Health Risk Thresholds

To determine whether a proposed project would cause a significant effect related to health risk, the impact must be determined by examining the types and levels of TACs generated by implementation of the project and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the State CEQA Guidelines, the SCAQMD recommends



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that the air pollution thresholds shown below be used by lead agencies in determining whether a project would result in potentially significant impacts related to health risk. If the lead agency finds that the proposed project has the potential to exceed these air pollution thresholds, the project impacts should be considered significant. Table 5.2-5, SCAQMD Toxic Air Contaminants Incremental Risk Thresholds for TACs, lists the TAC incremental risk thresholds for construction and operation of a project.

**Table 5.2-5 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds**

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast Air Quality Management District, *Air Quality Significance Threshold*, March 2023.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether a given project has a potentially significant development-specific and cumulative impact. The measurements consider the maximally exposed individual resident (MEIR) and the point of maximum impact (PMI). The MEIR identifies the individual resident or sensitive receptor that would have the maximum risk of exposure associated with DPM emissions from the proposed project. The PMI is defined as the location where the risk of exposure associated with DPM emissions from the proposed project is highest.

The 10 in one million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics.

The SCAQMD has also established non-carcinogenic risk parameters for use in health risk assessments (HRAs). Noncarcinogenic risks are quantified by calculating a “hazard index” (HI), expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less than one (1.0) means that adverse health effects are not expected. As such, non-carcinogenic exposures of less than 1.0 are considered less than significant.

### Cumulative Impacts

Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD’s recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in non-attainment. As discussed in the SCAQMD’s White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution:

As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR... projects that exceed the project-specific significance thresholds are considered by the



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SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

### 5.2.3 Environmental Impacts

Air pollutant emissions associated with the project would occur over the short-term from construction activities and over the long-term from operational activities including project-related vehicular trips, area sources, stationary sources, and energy consumption (e.g., electricity and natural gas usage).

#### 5.2.1.1 METHODOLOGY

The analysis of impacts related to air quality considered the potential future improvements in the project area. The project proposes to demolish the existing Hive Creative Office Campus and Los Angeles Chargers practice field and construct a new multi-phased master-planned residential community (“Hive Live”). The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,925 square feet of open space. The California Emissions Estimator Model Version 2022.1. (CalEEMod) was used to model the project’s construction and operational emissions. The methodology for construction and operation emission estimates and consistency with AQMP for the project are discussed below.

#### AQMP Consistency

The SCAQMD’s CEQA Air Quality Handbook recommends an evaluation of the following two criteria to determine whether a project would be consistent or in conflict with the AQMP:

1. The project would not generate population and employment growth that would be inconsistent with the SCAG’s growth forecasts.
2. 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 the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

Consistency Criterion No. 1 refers to the SCAG’s growth forecasts, and associated assumptions included in the AQMP. The future air quality levels projected in the AQMP are based on SCAG’s growth projections, which are based, in part, on the general plans of cities located within the SCAG region. Therefore, if the level of housing development related to the project is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP, the project would not jeopardize attainment of the air quality levels identified in the AQMP.

Consistency Criterion No.2 refers to the CAAQS. An impact would occur if the long-term emissions associated with the project would exceed SCAQMD’s regional significance thresholds for operation-phase and construction-phase emissions.



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#### Construction

Project construction primarily generate temporary criteria pollutants from construction equipment operation on-site and construction worker vehicle trips to and from the project site, and from construction material deliveries to and from the project site. Construction input data for CalEEMod include, but are not limit to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; and (3) areas to be excavated and graded. According to the construction schedule provided by the project Applicant, the proposed project would be constructed in three phases over approximately eight years. There would be overlaps between architectural coating and demolition and grading activities for the following phases: Phase 1 architectural coating would overlap with Phase 2 demolition and grading, and Phase 2 architectural coating would overlap with Phase 3 demolition and grading. Furthermore, there would be overlaps between construction and operation. Phase 2 construction would overlap with Phase 1 operation, and Phase 3 construction would overlap with Phase 1 and Phase 2 operation. Table 5.2-6, *Construction Assumptions*, summarizes the proposed construction schedule, the total construction area of each phase, and the estimated soil export volume of each phase.

**Table 5.2-6 Construction Assumptions**

Phase	Construction Activities	Start Month/Year	Duration (Months)	Total Construction Area	Soil Export Volume
1	Demolition	January 2026	1	4.68 Acreages	12,100 Cubic Yards
	Grading	February 2026	3		
	Paving	May 2026	2		
	Building Construction	July 2026	23		
	Architectural Coating	July 2028	3		
2	Demolition	July 2028	2	4.44 Acreages	7,800 Cubic Yards
	Grading	September 2028	3		
	Paving	December 2028	2		
	Building Construction	February 2029	23		
	Architectural Coating	March 2031	3		
3	Demolition	February 2031	2	5.13 Acreages	6,100 Cubic Yards
	Grading	April 2031	3		
	Paving	July 2031	2		
	Building Construction	September 2031	25		
	Architectural Coating	January 2034	4		

Source: Provided by the project Applicant in July 2024.

Construction emissions were quantified by estimating the types and quantity of equipment list that would be used on-site during each construction phase, as provide by the model defaults generated from the assumptions in Table 5.2-6. CalEEMod also estimates off-site emissions from worker, vendor, and hauling truck trips. The number of worker and vendor trips were based on CalEEMod defaults, and the hauling truck trips were based on the soil export volumes proved in the Table 5.2-6. The default trip lengths were used for worker and vendor trips, while the lengths for hauling truck trips were provided by the project applicant, which would be 30 miles round trip for demolished material hauling and 30 miles round trip for grading phase soil export hauling.

#### Operation

Operational sources of criteria pollutant emissions include stationary, area, energy and mobile sources, which are further discussed below. CalEEMod modeling was conducted for the existing (baseline) condition and the



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proposed project condition. The total existing (baseline) emissions, show in [Table 5.2-4](#), were deducted from the total project emissions to determine the net project-generated emissions.

#### *Stationary Source*

Emissions associated with stationary sources include emergency generators and process boilers. As a conservative analysis, the project is assumed to have one diesel generator and six boilers per building. The generator would operate a maximum of one hour per day, 50 hours per year. The boilers would consume 200,000 Btu/hour per the 2022 Water Heater Efficiency Guide.<sup>5</sup>

#### *Area Sources*

Emissions associated with area sources include hearths, consumer products, landscape maintenance, and architectural coating. Area source emissions were calculated using standard emission rates from CARB, EPA, SCAQMD, and CalEEMod model defaults. Per SCAQMD Rule 445, wood-burning devices are prohibited in new development, and therefore, only natural gas hearths were assumed to be installed.

#### *Energy Sources*

The project would be served by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas). Emissions from energy sources are primarily generated by natural gas use. The emission factors for natural gas combustion are based on EPA's AP-42 (Compilation of Air Pollutant Emissions Factors). Emissions from electricity use are not included in the air quality analysis as they only apply to greenhouse gas (GHG) emissions since electricity generation is an indirect emission generated off-site and, therefore, not relevant for local and regional air quality conditions. The annual natural gas consumption was provided by model defaults generated from the project's buildout land use types and sizes.

#### *Mobile Sources*

The vehicle emission factors were CalEEMod default values for Orange County in the project's buildout year of each phase (i.e., 2028 for Phase 1, 2031 for Phase 2, and 2034 for Phase 3 and full buildout). The project-specific VMT were calculated from project trip generation rates and CalEEMod default trip lengths. Mobile emissions are based primarily upon *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California* (Traffic Study) prepared by Linscott, Law & Greenspan Engineers on January 9, 2025. Under the existing (baseline) condition, the project site generates 2,733 trips per day, and under the proposed project condition, the project would generate 4,948 trips per day at full buildout. Therefore, the project would cause a net increase of 2,215 trips per day.

### **5.2.1.2 IMPACT ANALYSIS**

The following impact analysis addresses the thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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<sup>5</sup> California Energy Commission, 2022 *Water Heater Efficiency Guide*, October 2022.



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**Impact 5.2-1: Construction activities associated with the proposed project would not generate short-term emissions in exceedance of SCAQMD’s threshold criteria that would cumulatively contribute to the nonattainment designations in the Basin. [Threshold AQ-2]**

*Level of Significance Before Mitigation:* Less Than Significant Impact.

**Impact Analysis:**

*Regional Construction Emissions*

Short-term air quality impacts are predicted to occur during grading and construction activities associated with the project implementation. Temporary air emissions would result from the following activities:

- Particulate (fugitive dust) emissions from grading and building construction; and
- Exhaust emissions from the construction equipment and the motor vehicles of the construction crew.

The proposed project involves demolition of existing structures and construction of a new multi-phased master-planned residential community (“Hive Live”). Emissions for each construction phase have been quantified based upon the phase duration and equipment types, refer to [Table 5.2-6](#) for details of construction details. The analysis of daily construction emissions was prepared by the CalEEMod. [Table 5.2-7, Construction Criteria Pollutant Emissions](#), presents the project’s anticipated daily short-term construction emissions.

**Table 5.2-7 Construction Criteria Pollutant Emissions**

Construction Year (Phase)	Maximum Daily Emissions (lbs/Day) <sup>1,4</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2026 (Phase 1)	4.05	37.20	38.50	0.07	4.27	2.45
2027 (Phase 1)	1.72	11.30	25.00	0.03	3.71	1.12
2028 (Phase 1 and Phase 2 Overlapping) <sup>2</sup>	39.50	37.20	38.70	0.08	4.98	2.54
2029 (Phase 2)	2.57	17.40	36.30	0.05	5.82	1.73
2030 (Phase 2)	1.86	11.30	28.00	0.04	5.34	1.47
2031 (Phase 2 and Phase 3 Overlapping) <sup>3</sup>	39.45	31.90	37.60	0.07	5.33	2.36
2032 (Phase 3)	1.59	9.61	24.00	0.03	4.33	1.19
2033 (Phase 3)	1.55	9.35	23.40	0.03	4.31	1.17
2034 (Phase 3)	32.30	0.86	3.03	<0.01	0.75	0.18
<b>Maximum Daily Construction Emissions</b>	<b>39.50</b>	<b>37.20</b>	<b>38.70</b>	<b>0.08</b>	<b>5.82</b>	<b>2.54</b>
<i>SCAQMD Construction Thresholds</i>	75	100	550	150	150	55
<b>Threshold Exceeded?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: Refer to [Appendix C](#) for assumptions used in this analysis.

Note: lbs/day = pounds per day; SCAQMD = South Coast Air Quality Management District; µg/m<sup>3</sup> = microgram of pollutant per cubic meter of air; ppm = parts per million; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter less than 10 microns in size; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

- 1 The higher emissions between summer and winter are presented. Emissions were calculated using CalEEMod version 2022.1, as recommended by the SCAQMD. Modeling assumptions include compliance with SCAQMD Rule 403, which requires: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stockpiles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour.
- 2 Phase 1 Architectural Coating would overlap with Phase 2 Demolition and Grading. Architectural coating and grading phases overlapping would generate higher emissions and therefore is presented here as a worst-case.
- 3 Phase 2 Architectural Coating would overlap with Phase 3 Demolition and Grading. Architectural coating and grading phases overlapping would generate higher noise level and therefore is presented here as a worst-case.
- 4 The numbers may not add up precisely due to rounding.





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The project would be required to comply with 13 CCR Section 2499 (limiting idling to five minutes or less), limit fugitive dust and VOC emissions, and recycle/reuse of at least 50 percent of the construction material (refer to PPP AIR-1, PPP AIR-2, and PPP AIR-3). The project would also be required to comply with SCA PLNG-14 (obtain demolition permit), SCA AQMD-3 (contact SCAQMD for additional permits required by the district), and SCA HYD-1 (require adequate watering to mitigate construction-generated dust particulates) through SCA HYD-3 (grading operations would be suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour) pertaining to SCAQMD permits, compliance with Rule 403, and other dust control measures during construction. As shown in [Table 5.2-7](#), project construction would not result in exceedance of applicable SCAQMD thresholds. As such, short-term construction impacts would be less than significant.

#### *Air Quality Health Impacts*

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals [e.g., age, gender]). In particular, O<sub>3</sub> precursors, VOCs and NO<sub>x</sub>, affect air quality on a regional scale. Health effects related to O<sub>3</sub> are, therefore, the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating project-generated criteria pollutants to specific health effects or additional days of nonattainment would not produce meaningful results. In other words, the project's increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

Further, as noted in the Brief of Amicus Curiae by the SCAQMD<sup>6</sup>, the SCAQMD acknowledged it would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons including modeling limitations as well as where in the atmosphere air pollutants interact and form. Furthermore, as noted in the Brief of Amicus Curiae by the San Joaquin Valley Air Pollution Control District (SJVAPCD)<sup>7</sup>, SJVAPCD has acknowledged that currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts.

The SCAQMD acknowledges that health effects quantification from ozone, as an example is correlated with the increases in the ambient level of ozone in the air (concentration) that an individual person breathes. SCAQMD states that it would take a large amount of additional emissions to cause a modeled increase in ambient ozone levels over the entire region. The SCAQMD states that based on their own modeling in the SCAQMD's 2012 *Air Quality Management Plan*, a reduction of 432 tons (864,000 pounds) per day of NO<sub>x</sub> and a reduction of 187 tons (374,000 pounds) per day of VOCs would reduce ozone levels at the highest monitored site by only nine parts per billion. As such, the SCAQMD concludes that it is not currently possible to accurately

<sup>6</sup> South Coast Air Quality Management District, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.

<sup>7</sup> San Joaquin Valley Air Pollution Control District, Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno, 2014.



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quantify ozone-related health impacts caused by NO<sub>x</sub> or VOC emissions from relatively small projects (defined as projects with regional scope) due to photochemistry and regional model limitations. As such, for the purpose of this analysis, since the project would not exceed SCAQMD regional thresholds for construction air emissions, the project would also have less than significant air quality health impacts.

#### ***Plans, Programs, Policies:***

PPP AIR-1 Construction activities are required to be conducted in compliance with 13 California Code of Regulations (CCR) Section 2499, which requires nonessential idling of construction equipment is restricted to five minutes or less.

PPP AIR-2 Construction activities are required to comply with applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, including, but not limited, to the following:

- Rule 402, *Nuisance*, which states a project shall not “discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property;” and
- Rule 1113, *Architectural Coatings*, which limits the volatile organic compound content of architectural coatings.

PPP AIR-3 Construction activities are required to recycle/reuse at least 50 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard, and to use green building materials such as those materials that are rapidly renewable or resource efficient, and recycled and manufactured in an environmentally friendly way, for at least ten percent of the project, as specified in the California Department of Resources Recycling and Recovery Sustainable Green Building Program.

***Standard Conditions of Approval:*** Refer to [Section 5.9, \*Hydrology and Water Quality\*](#), for a discussion of SCA HYD-1 through SCA HYD-3. Additionally, the following also apply:

SCA PLNG-14 Demolition permits for existing structure(s) shall be obtained and all work and inspections completed prior to final building inspections. Applicant is notified that written notice to the South Coast Air Quality Management District (SCAQMD) may be required ten (10) days prior to demolition.

SCA AQMD-3 Applicant shall contact the South Coast Air Quality Management District (SCAQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by the district.

***Mitigation Measures:*** No mitigation measures are required.



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*Level of Significance After Mitigation:* Less Than Significant Impact.

**Impact 5.2-2: Operational air emissions associated with the proposed project would not exceed applicable SCAQMD threshold criteria that would cumulatively contribute to the nonattainment designations in the Basin. [Threshold AQ-2]**

*Level of Significance Before Mitigation:* Less Than Significant Impact.

### Impact Analysis:

#### Operational Emissions At Buildout

Operational emissions generated by both stationary and mobile sources of the proposed project would result from normal daily activities on-site after construction of each phase is complete. Table 5.2-8, *Operational Criteria Pollutant Emissions*, depicts long-term operational emissions associated with the proposed project by phase and at buildout generated by area sources, energy sources, mobile sources, and stationary sources, and the net increase of buildout emissions from existing (baseline) conditions. As shown in Table 5.2-8, operational emissions of the proposed project would not exceed the operational thresholds established by the SCAQMD.

**Table 5.2-8 Operational Criteria Pollutant Emissions**

Source	Pollutant Emissions (lbs/Day)					
	VOC	NOx	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Phase 1</b>						
<b>Summer Emissions</b>						
Mobile	4.72	3.22	38.50	0.01	10.20	2.63
Area	11.00	4.88	20.70	0.03	0.39	0.39
Energy	0.05	0.89	0.38	0.01	0.07	0.07
Stationary Source	1.83	7.87	5.51	0.05	0.46	0.31
<b>Total Phase 1 Summer Emissions</b>	<b>17.60</b>	<b>16.86</b>	<b>65.09</b>	<b>0.10</b>	<b>11.12</b>	<b>3.40</b>
<b>Total Baseline Summer Emissions (Existing Buildings Demolished During Construction Phase 1 and Phase 2)</b>	<b>10.04</b>	<b>5.50</b>	<b>61.27</b>	<b>0.14</b>	<b>11.76</b>	<b>3.07</b>
<b>Total Net Increase From Existing Conditions</b>	<b>7.56</b>	<b>11.36</b>	<b>3.82</b>	<b>(0.04)</b>	<b>(0.64)</b>	<b>0.33</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Winter Emissions</b>						
Mobile	4.68	3.50	35.90	0.01	10.20	2.63
Area	9.29	4.70	2.00	0.03	0.38	0.38
Energy	0.05	0.89	0.38	0.01	0.07	0.07
Stationary Source	1.83	7.87	5.51	0.05	0.46	0.31
<b>Total Phase 1 Winter Emissions</b>	<b>15.85</b>	<b>16.96</b>	<b>43.79</b>	<b>0.10</b>	<b>11.11</b>	<b>3.39</b>
<b>Total Baseline Winter Emissions (Existing Buildings Demolished during Construction Phase 1 and Phase 2)</b>	<b>8.72</b>	<b>5.87</b>	<b>50.05</b>	<b>0.12</b>	<b>11.75</b>	<b>3.06</b>
<b>Total Net Increase From Existing Conditions</b>	<b>7.13</b>	<b>11.09</b>	<b>(6.26)</b>	<b>(0.02)</b>	<b>(0.64)</b>	<b>0.33</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>



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Table 5.2-8, continued

Source	Pollutant Emissions (lbs/Day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Phase 1 through Phase 2 Emissions</b>						
<b>Summer Emissions</b>						
Mobile	8.28	5.42	68.70	0.19	20.00	5.15
Area	24.60	5.67	58.60	0.04	0.47	0.46
Energy	0.11	1.86	0.79	0.01	0.15	0.15
Stationary Source	3.66	15.70	11.00	0.11	0.93	0.62
<b>Total Phase 1 through Phase 2 Summer Emissions</b>	<b>36.65</b>	<b>28.65</b>	<b>139.09</b>	<b>0.35</b>	<b>21.55</b>	<b>6.38</b>
<b>Total Baseline Summer Emissions</b>	<b>14.69</b>	<b>8.11</b>	<b>84.67</b>	<b>0.19</b>	<b>16.80</b>	<b>4.43</b>
<b>Net Increase From Existing Conditions</b>	<b>21.96</b>	<b>20.54</b>	<b>54.42</b>	<b>0.16</b>	<b>4.75</b>	<b>1.95</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Winter Emissions</b>						
Mobile	8.23	5.89	64.00	0.18	20.00	5.15
Area	18.30	5.17	2.20	0.03	0.42	0.42
Energy	0.11	1.86	0.79	0.01	0.15	0.15
Stationary Source	3.66	15.70	11.00	0.11	0.93	0.62
<b>Total Phase 1 through Phase 2 Winter Emissions</b>	<b>30.30</b>	<b>28.62</b>	<b>77.99</b>	<b>0.33</b>	<b>21.50</b>	<b>6.34</b>
<b>Total Baseline Winter Emissions</b>	<b>13.35</b>	<b>8.66</b>	<b>72.08</b>	<b>0.19</b>	<b>16.79</b>	<b>4.42</b>
<b>Net Increase From Existing Conditions</b>	<b>16.95</b>	<b>19.96</b>	<b>5.91</b>	<b>0.14</b>	<b>4.71</b>	<b>1.92</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Phase 1 through Phase 3 (Buildout)</b>						
<b>Summer Emissions</b>						
Mobile	11.90	7.36	99.10	0.28	30.90	7.93
Area	39.00	16.50	95.40	0.10	1.35	1.33
Energy	0.17	2.95	1.26	0.02	0.24	0.24
Stationary Source	2.93	6.88	14.60	0.06	1.01	1.01
<b>Total Phase 1 through Phase 3 Summer Emissions</b>	<b>54.00</b>	<b>33.69</b>	<b>210.36</b>	<b>0.46</b>	<b>33.50</b>	<b>10.51</b>
<b>Total Baseline Summer Emissions</b>	<b>14.69</b>	<b>8.11</b>	<b>84.67</b>	<b>0.19</b>	<b>16.80</b>	<b>4.43</b>
<b>Net Increase From Existing Conditions</b>	<b>40.65</b>	<b>25.03</b>	<b>138.28</b>	<b>0.27</b>	<b>16.71</b>	<b>6.09</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Winter Emissions</b>						
Mobile	11.80	8.00	92.20	0.27	30.90	7.93
Area	29.10	15.70	6.67	0.10	1.27	1.27
Energy	0.17	2.95	1.26	0.02	0.24	0.24
Stationary Source	2.93	6.88	14.60	0.06	1.01	1.01
<b>Total Phase 1 through Phase 3 Winter Emissions</b>	<b>44.00</b>	<b>33.53</b>	<b>114.73</b>	<b>0.45</b>	<b>33.42</b>	<b>10.45</b>
<b>Total Baseline Winter Emissions</b>	<b>13.35</b>	<b>8.66</b>	<b>72.08</b>	<b>0.19</b>	<b>16.79</b>	<b>4.42</b>
<b>Net Increase From Existing Conditions</b>	<b>30.65</b>	<b>24.87</b>	<b>42.65</b>	<b>0.26</b>	<b>16.63</b>	<b>6.03</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: lbs/day = pounds per day; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter less than 10 microns in size; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size; SCAQMD = South Coast Air Quality Management District.

1 Emissions were calculated using CalEEMod version 2022.1, as recommended by SCAQMD.

2 The numbers may not add up precisely due to rounding.

Source: Refer to Appendix C for assumptions used in this analysis

As the project would be constructed in three phases, operation of earlier phases would overlap with construction of later phases. Table 5.2-9, *Overlapping Construction and Operational Criteria Pollutant Emissions*,



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summarizes the proposed project's overlapping construction and operational emissions by phase generated by area sources, energy sources, mobile sources, and stationary sources, and the net increase from existing (baseline) conditions.

**Table 5.2-9 Overlapping Construction and Operational Criteria Pollutant Emissions**

Source	Pollutant Emissions (lbs/Day) <sup>1</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Phase 1 Operation + Phase 2 Construction – Existing Operation (Buildings demolished during Phase 1 and 2 Construction)</b>						
Maximum Phase 1 Operation Emissions	17.60	16.96	65.09	0.10	11.12	3.40
Maximum Phase 2 Construction Emissions	37.70	36.30	38.70	0.08	5.82	2.54
Maximum Existing Operation Emissions (Buildings demolished during Phase 1 and 2 Construction)	10.04	5.87	61.27	0.14	11.76	3.07
<b>Total Emissions<sup>2</sup></b>	<b>45.26</b>	<b>47.39</b>	<b>42.52</b>	<b>0.04</b>	<b>5.18</b>	<b>2.87</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Phase 1 Operation + Phase 2 and 3 Overlapping Construction – Existing Operation (Buildings demolished during Phase 1 and 2 Construction)</b>						
Maximum Phase 1 Operation Emissions	17.60	16.96	65.09	0.10	11.12	3.40
Maximum Phase 2 and 3 Construction Emissions	39.45	18.28	19.40	0.03	2.35	1.36
Maximum Existing Operation Emissions (Building demolished during Phase 1 and 2 Construction)	10.04	5.87	61.27	0.14	11.76	3.07
<b>Total Emissions</b>	<b>47.01</b>	<b>29.37</b>	<b>23.22</b>	<b>(0.00)</b>	<b>1.71</b>	<b>1.69</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Phase 1 Operations + Phase 2 Operations + Phase 3 Construction – Existing Operation (Baseline Emissions)</b>						
Maximum Phase 1 and 2 Operation Emissions	26.61	23.15	77.82	0.21	11.11	3.39
Maximum Phase 3 Construction Emissions	32.30	31.90	37.60	0.07	4.75	2.36
Maximum Baseline Emissions	14.69	8.66	84.67	0.19	16.80	4.43
<b>Total Emissions<sup>2</sup></b>	<b>44.22</b>	<b>46.39</b>	<b>30.75</b>	<b>0.09</b>	<b>(0.94)</b>	<b>1.32</b>
SCAQMD Operational Thresholds	55	55	550	150	150	55
<b>Exceed Thresholds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: lbs/day = pounds per day; VOC = volatile organic compounds; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; SO<sub>2</sub> = sulfur oxides; PM<sub>10</sub> = particulate matter less than 10 microns in size; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size; SCAQMD = South Coast Air Quality Management District.  
<sup>1</sup> Emissions were calculated using CalEEMod version 2022.1, as recommended by SCAQMD.  
<sup>2</sup> The numbers may not add up precisely due to rounding.

Source: Refer to Appendix C for assumptions used in this analysis

As shown in Table 5.2-9, the overlapping construction and operational emissions from the proposed project would not exceed the regional thresholds of significance established by the SCAQMD for criteria pollutants. Therefore, impacts during overlapping of construction and operation of the proposed project would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



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#### Impact 5.2-3 Project construction would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-3]

**Level of Significance Before Mitigation:** Potentially Significant Impact.

**Impact Analysis:**

**Construction Localized Impact Analysis**

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised October 2009]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level projects. The SCAQMD provides the LST look-up tables for one-, two-, and five-acre projects emitting CO, NO<sub>x</sub>, PM<sub>2.5</sub>, or PM<sub>10</sub>. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The project site is located within Source Receptor Area (SRA) 17 (Central Orange County).

The SCAQMD guidance on applying CalEEMod to LSTs specifies the number of acres a particular piece of equipment would likely disturb per day.<sup>8</sup> SCAQMD provides LST screening thresholds for one-, two-, and five-acre site disturbance areas; SCAQMD does not provide LST screening thresholds for projects over five acres. Although the project site is over five acres, the proposed project would only actively disturb approximately one acre per day during all construction phases. Therefore, the LST screening thresholds for one acre were utilized for the LST analysis, which are the most stringent screening thresholds. Further, the nearest sensitive receptors are located 105 feet (32 meters) east of the project site. LST screening thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, the lowest LST values for 25 meters were used, per SCAQMD guidance.

Table 5.2-10, *Construction Localized Significance Modeling Results*, shows the localized construction-related emissions. The localized emissions presented in this table are less than those in Table 5.2-7 because localized emissions include only on-site emissions (i.e., from construction equipment and fugitive dust) and do not include off-site emissions (i.e., from the worker, vendor, and hauling trips). As shown in Table 5.2-10, the proposed project's construction emissions would not exceed the LST screening thresholds for SRA 17. Therefore, construction LST impacts would be less than significant.

**Table 5.2-10 Construction Localized Significance Modeling Results**

Construction Year	Pollutant (pounds/day) <sup>1, 2, 8</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
2026 (Phase 1) <sup>3</sup>	20.70	19.00	2.49	1.48
2027 (Phase 1) <sup>4</sup>	9.39	12.90	0.34	0.31
2028 (Phase 1 and 2 Overlapping) <sup>5</sup>	20.41	19.82	2.43	1.42
2029 (Phase 2) <sup>4</sup>	8.58	12.90	0.28	0.25

<sup>8</sup> The number of acres represent the total acres traversed by grading equipment. To properly grade a piece of land, multiple passes with equipment may be required. The disturbance acreage is based on the equipment list and days of the grading phase according to the anticipated maximum number of acres a given piece of equipment can pass over in an 8-hour workday.



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Construction Year	Pollutant (pounds/day) <sup>1, 2, 8</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
2030 (Phase 2) <sup>4</sup>	8.39	12.90	0.26	0.24
2031 (Phase 2 and 3 Overlapping) <sup>5</sup>	18.28	19.40	2.35	1.36
2032 (Phase 3) <sup>4</sup>	7.87	12.80	0.22	0.21
2033 (Phase 3) <sup>4</sup>	7.67	12.80	0.20	0.19
2034 (Phase 3) <sup>6</sup>	0.76	1.10	0.01	0.01
<b>Maximum Daily Emissions</b>	<b>20.70</b>	<b>19.82</b>	<b>2.49</b>	<b>1.48</b>
<i>LST Screening Threshold<sup>7</sup></i>	<i>81.00</i>	<i>485.00</i>	<i>4.00</i>	<i>3.00</i>
<b>Screening Thresholds Exceeds?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: µg/m<sup>3</sup> = microgram per cubic meter; ppm = parts per million; NO<sub>x</sub> = nitrogen oxides; CO = carbon monoxide; PM<sub>10</sub> = particulate matter less than 10 microns in size; PM<sub>2.5</sub> = particulate matter less than 2.5 microns in size

1 Emissions were calculated using CalEEMod, version 2022.1. Totals may be off due to rounding.

2 The reduction/credits for construction emissions are based on adjustments to CalEEMod and are required by the SCAQMD Rules. The adjustments applied in CalEEMod include the following: properly maintain mobile and other construction equipment; replace the ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stockpiles with tarps; and limit speeds on unpaved roads to 15 miles per hour.

3 Highest levels of emissions are during demolition phase for NO<sub>x</sub> and CO, and grading phase for PM<sub>10</sub> and PM<sub>2.5</sub> in 2026.

4 Highest levels of emissions are during building construction phase for NO<sub>x</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> in 2027, 2029, 2030, 2032, and 2033.

5 As the Phase 1 architectural coating would overlap with Phase 2 demolition and grading, and Phase 2 architectural coating would overlap with Phase 3 demolition and grading, the architectural coating has been added on the demolition and grading on-site emissions.

6 Highest levels of emissions are during architectural coating phase for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> in 2034.

7 The LST Screening Thresholds were determined using Appendix C of the SCAQMD Final Localized Significant Threshold Methodology guidance document for pollutants NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. The LST Screening Thresholds were based on the anticipated daily acreage disturbance for construction (the thresholds for one-acre were used), the LST screening thresholds of 25 meters based on the distance to sensitive receptors, and the SRA 17 (Central Orange County).

8 The numbers may not add up precisely due to rounding.

Source: Refer to Appendix C for assumptions used in this analysis

### Localized Construction Air Quality Health Impacts

The proposed project's construction activities would involve the operation of diesel-powered equipment, which would emit DPM. In 1998, CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. Construction of the proposed project would be required to comply with California Code Regulations (CCR), Title 13, Sections 2449(d)(3) and 2485, to minimize the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. Implementation of these regulations would reduce the amount of DPM emissions from the construction of the proposed project.

Nevertheless, as discussed above, project construction would last for over eight years, and the closest sensitive receptors are located 105 feet east of the project site. Due to the proximity of the project site to nearby sensitive receptors and the extended period of construction activities, DPM emissions generated from the project's construction off-road equipment would be approximately 0.296 pounds per day (the average daily on-site exhaust; refer to [Appendix C](#)) and could potentially cause air quality related health risk impacts to the nearest sensitive receptors. Therefore, Mitigation Measure AQ-1 would be required to reduce DPM emissions and associated health impacts. Mitigation Measure AQ-1 would require that all off-road diesel-fueled construction vehicles and equipment greater than 50 horsepower meet Tier 4 emissions standards. Tier 4 standards regulate the amount of exhaust particulate matter emissions, which are DPMs, from off-road diesel engines and require emissions of particulate matter to be reduced. The Tier 4 emission standards would reduce DPM emissions to approximately 0.038 pounds per day, which is an approximately 87 percent reduction compared to the unmitigated emissions, refer to [Appendix C](#) for detail modeling and calculations. With the implementation of Mitigation Measure AQ-1, impacts in this regard would be reduced to less than significant levels.



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**Plans, Programs, Policies:** Refer to PPP AIR-2.

**Standard Conditions of Approval:** Refer to SCA PLNG-14, SCA AQMD-3, and SCA HYD-1.

#### **Mitigation Measures:**

**AQ-1** Prior to initiation of any construction activities, the project applicant shall provide documentation to the City of Costa Mesa Building Safety Division that all off-road diesel-powered construction equipment greater than 50 horsepower to be utilized during construction would meet the Tier 4 emission standards. A copy of each unit's certified tier specification and California Air Resources Board (CARB) or South Coast Air Quality Management District (SCAQMD) operating permit shall be provided to the City of Costa Mesa Building Safety Division at the time of mobilization of each applicable unit of equipment.

**Level of Significance After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

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**Impact 5.2-4: Project operations would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

#### **Impact Analysis:**

##### **Operational Localized Impacts Analysis**

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend extended periods queuing and idling at the site (e.g., warehouse or transfer facilities). No industrial uses are planned on the project site. Therefore, operational LSTs would not apply to the mix of uses to be developed by the proposed project. As such, the proposed project's operational phase LST impacts would be less than significant.

As detailed above, operational air quality impacts would be less than significant, and the project would not result in adverse impacts to nearby sensitive uses. Additionally, project operations would not result in adverse impacts from stationary and mobile pollution sources. Thus, the impacts in this regard would be less than significant.

##### **CO Hot Spot Analysis**

CO emissions are a function of vehicle idling time, meteorological conditions, and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (e.g., adversely affecting residents, school children, hospital patients, and the elderly).

At the time of the publishing of the 1993 *CEQA Air Quality Handbook*, the Basin was designated nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the Basin and in California





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### AIR QUALITY

have steadily declined. In 2007, SCAQMD was designated attainment for CO under both the CAAQS and NAAQS. As identified within SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the Basin were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. A CO hot spot analysis was conducted at four busy intersections in Los Angeles County at the peak morning and afternoon periods and did not predict a violation of CO standards. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour (or 24,000 vehicles per hour where vertical and/or horizontal air does not mix) in order to generate a significant CO impact. One of the top four worst intersections in the Basin (i.e., Sunset Boulevard/Highland Avenue) is in the City of Los Angeles, approximately 37 miles northwest of the proposed project. Because the SCAQMD modeled intersections do not exceed the CO standards, intersections within the proposed project study area with less volumes of traffic and under less extreme conditions would not exceed the CO standards. Buildout of the proposed project would not produce the volume of traffic (2,215 net daily trips) required to generate a CO hot spot. Furthermore, the highest hourly recorded CO value at the Anaheim-812 W Vermont Street Monitoring Station between 2021 and 2023 was 2.594 ppm, which is well below the 35-ppm 1-hour CO Federal Standard; refer to [Table 5.2-2](#). Therefore, implementation of the proposed project would not be expected to result in CO hot spots, and impacts would be less than significant. No mitigation is required.

#### *Localized Operational Air Quality Health Impacts*

The proposed project would involve the development of a multi-phased residential development that would result in very limited operational activities, including landscaping maintenance operations, emergency generators, and boilers for the apartment buildings, that would generate DPM or other TAC emissions. As shown in [Table 5.2-8](#) and [Table 5.2-9](#), the project would generate nominal particulate matter emissions during operation. Furthermore, the emergency generators would be subject to the applicable SCAQMD permitting process. Therefore, operation of the proposed project is not anticipated to result in an elevated cancer or other health risk to nearby sensitive receptors, and, as such, the health impact during operation of the proposed project would be less than significant.

***Plans, Programs, Policies:*** No PPPs are applicable to this threshold of significance.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.2-5: The proposed project would be consistent with the applicable air quality management plan. [Threshold AQ-1]**

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***Level of Significance Before Mitigation:*** Potentially Significant Impact .

***Impact Analysis:*** The project site is located within the Basin, which is governed by SCAQMD. On December 2, 2022, the SCAQMD Governing Board adopted the 2022 AQMP. The 2022 AQMP incorporates the latest



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scientific and technical information and planning assumptions, including the latest applicable growth assumptions, updated emission inventory methodologies for various source categories. Additionally, the 2022 AQMP utilized information and data from the SCAG and its 2020-2045 RTP/SCS. SCAG updates the RTP/SCS every four years and the most recent plan, the Connect SoCal 2024 was adopted on April 4, 2024. Connect SoCal 2024 is a vision for the future of Southern California that includes policies, strategies, and projects to advance the region's mobility, economy, and sustainability through 2050. While SCAG recently adopted the Connect SoCal 2024, the SCAQMD has not released an updated AQMP. As such, this consistency analysis is based off the 2022 AQMP and the RTP/SCS that was adopted at the time, the 2020-2045 RTP/SCS. According to the SCAQMD's CEQA Air Quality Handbook, projects must be analyzed for consistency with two main criteria, as discussed below:

**Criterion 1: With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.**

**a) Would the project result in an increase in the frequency or severity of existing air quality violations?**

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of a project's pollutant emissions relative to localized pollutant concentrations associated with the CAAQS and NAAQS is used as the basis for evaluating project consistency. As detailed above under Impact 5.2-3 and Impact 5.2-4, localized concentrations of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> would be less than significant during project construction and operation. Therefore, the project would not result in an increase in the frequency or severity of existing air quality violations. Because ROG<sub>s</sub> are not a criteria pollutant, there is no ambient standard or localized threshold of ROG<sub>s</sub>. Due to the role ROG plays in O<sub>3</sub> formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established. As such, the project would not cause or contribute to localized air quality violations or delay the attainment of air quality standards or interim emissions reductions specified in the AQMP.

**b) Would the project cause or contribute to new air quality violations?**

As discussed above under Impact 5.2-1 and Impact 5.2-2, the proposed project would result in emissions that are below the SCAQMD thresholds. As such, the proposed project would not have the potential to cause or contribute to a new violation of the ambient air quality standards.

**c) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?**

The proposed project would result in less than significant impacts with regard to localized concentrations during project construction and operations; refer to Impact 5.2-3 and Impact 5.2-4. As such, the project would not delay the timely attainment of air quality standards or 2022 AQMP emissions reductions.

**Criterion 2: With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning with**



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the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the consistency analysis for the second criterion focuses on whether the project exceeds the assumptions utilized in preparing the forecasts presented in the 2022 AQMP. Determining whether a project exceeds the assumptions reflected in the 2022 AQMP involves the evaluation of the following criteria.

### a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?

A project is consistent with the 2022 AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the 2022 AQMP. In the case of the 2022 AQMP, three sources of data form the basis for the projections of air pollutant emissions: general plans, SCAG's regional growth forecast, and SCAG's 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS also provides socioeconomic forecast projections of regional population growth.

Based on the General Plan Land Use Map, the project site is currently designated as Industrial Park (IP) within the North Costa Mesa Specific Plan. The project site also has a zoning designation of Planned Development Industrial (PDI) within a special Area (North Costa Mesa Specific Plan). The Industrial Park land use designation allows for a floor area ratio (FAR) of 0.40 and a maximum square footage of 252,648 square feet. The North Costa Mesa Specific Plan (Specific Plan) identifies the project site as Subarea 1 (Home Ranch) C (Industrial Park). The project would require approval of a General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement, and Public Art Plan.

Based on the City's average household size of 2.52, the 1,050 units would introduce up to 2,646 additional residents within the City and current population is 109,423 persons as of January 1, 2024.<sup>9</sup> The forecast population in 2045 is 123,700 persons.<sup>10</sup> The project's potential growth-inducing impacts would be considered less than significant since the 2,646 additional residential represents only a 2.4 percent increase from the City's current population and well within the projected growth by 2045. The proposed project is a multi-phased residential community with 1,050 dwelling units and 3,692 square feet retail. As indicated in Section 5.12, *Population and Housing*, it is not anticipated that the project would result in a net increase in jobs on-site after full buildout. Thus, the project would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity with approval of the amendments. As the SCAQMD has incorporated these same projections into the 2022 AQMP, it can be concluded that the project would be consistent with the projections.

<sup>9</sup> State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2021-2024 with 2020 Census Benchmark, May 2024*, <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2024/>, accessed July 22, 2024.

<sup>10</sup> Southern California Association of Governments, *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy Demographics & Growth Forecast*, September 3, 2020.



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It is also noted that the project's construction and operational air emissions would not exceed the SCAQMD regional thresholds, and localized emissions during construction would also be below SCAQMD LST thresholds. The project would also be required to comply with the applicable SCAQMD emission reduction measures such as Rule 403. As such, the project would not result in or cause NAAQS or CAAQS violations. A less than significant impact would occur regarding 2022 AQMP consistency with the project.

#### **b) Would the project implement all feasible air quality mitigation measures?**

The proposed project would result in less than significant air quality impacts. Compliance with all feasible emission reduction rules and measures identified by the SCAQMD, and Mitigation Measure AQ-1 would be required as identified in Impacts 5.2-1 through 5.2-4. As such, the proposed project meets this 2022 AQMP consistency criterion.

#### **c) Would the project be consistent with the land use planning strategies set forth in the AQMP?**

Land use planning strategies set forth in the 2022 AQMP are primarily based on the 2020-2045 RTP/SCS. The project proposes redevelopment of the Hive Live Campus with a multi-phased residential community with 1,050 dwelling units and 3,692 square feet retail spaces for the residents, and 335,958 square feet of open space, landscaping, streetscape improvements. The project site is near two bus stops served by the Orange County Transportation Authority (OCTA). There is one bus stop along Harbor Boulevard, approximately 0.25 miles west, and another bus stop along Fairview Road, approximately 0.35 miles east. Furthermore, the project would provide bicycle parking spaces, electric vehicle charging stations, and vanpool/carpool parking spaces, which would promote alternative mode of transportation. As such, the proposed project would be consistent with the land use planning strategies set forth in the 2022 AQMP and would meet this AQMP consistency criterion.

In summary, the proposed project would not result in substantial population growth, and project emissions would not substantially contribute to the Basin's nonattainment designations and would not interfere with SCAQMD's implementation of the 2022 AQMP. Furthermore, the project would be consistent with the General Plan Objective CON-4.A that pursues the prevention of the significant deterioration of local and regional air quality as the emissions associated with project would not exceed operational and construction thresholds established by the SCAQMD. Due to these factors the proposed project would be consistent with the 2022 AQMP.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** Refer to Mitigation Measure AQ-1 below.

**Level of Significance After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.



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**Impact 5.2-6 The proposed project would not result in odors that affect a substantial number of people. [Threshold AQ-4]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Odors from Construction Activities*

Construction activities associated with the project may generate detectable odors from heavy-duty equipment exhaust and architectural coatings. However, construction-related odors would be short-term in nature and cease upon project completion. In addition, the project would be required to comply with CCR Title 13 Sections 2449(d)(3) and 2485 (refer to PPP AIR-1), which require the project to minimize idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than five minutes. This would further reduce the detectable odors from heavy-duty equipment exhaust. The project would also comply with SCAQMD Rule 402, *Nuisances*, and the Rule 1113, *Architectural Coating* (refer to PPP AIR-2) which would minimize odor impacts from VOC emissions during architectural coating. As such, impacts to existing adjacent land uses would be less than significant.

*Odors from Operational Activities*

According to the SCAQMD 1993 *CEQA Air Quality Handbook*, land uses associated with operational odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors. Therefore, the impacts associated with operational odors would be less than significant.

*Plans, Programs, Policies:* Refer to PPP AIR-1 and AIR-2.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.2.2 Cumulative Impacts

Due to the extent of the area potentially impacted from cumulative project emissions (i.e., the Basin), SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds.

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**Impact 5.2-7: Short-term construction activities associated with the proposed project and other related cumulative projects, would not result in increased air pollutant emission impacts. [Threshold AQ-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.



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**Impact Analysis:** The SCAQMD neither recommends quantified analyses of cumulative construction emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction impacts. The SCAQMD significance thresholds for construction are intended to meet the objectives of the 2022 AQMP to ensure the NAAQS and CAAQS are not exceeded. As the City has no control over the timing or sequencing of cumulative projects in the project vicinity, any quantitative analysis to ascertain the daily construction emissions that assumes multiple, concurrent construction would be speculative. Future cumulative projects would also be required to analyze construction emission impacts on a project-level under CEQA and implement mitigation as needed.

As indicated in [Table 5.2-7](#), the project would not result in short-term air quality impacts as the project-level emissions would not exceed the SCAQMD adopted construction threshold. Therefore, the project would not result in cumulatively considerable impacts with regards to short-term construction air quality emissions.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.2-8: Implementation of the proposed project and other related cumulative projects would not result in increased impacts pertaining to operational air emissions. [Threshold AQ-2]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** The SCAQMD has set forth both a methodological framework as well as significance thresholds for the assessment of a project's cumulative operational air quality impacts. The SCAQMD's approach for assessing cumulative impacts is based on the SCAQMD's 2022 AQMP forecasts of attainment of NAAQS in accordance with the requirements of the Federal and State CAAs. This forecast also takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the project is consistent with the growth assumptions upon which the SCAQMD's 2022 AQMP is based. If the project is consistent with the growth assumptions, then the future development would not impede the attainment of NAAQS, and a significant cumulative air quality impact would not occur.

As discussed above, the project would not result in long-term air quality impacts, as the project's operational emissions would not exceed the SCAQMD adopted operational thresholds. Emission reduction technology, strategies, and plans are constantly being developed. As a result, the project would not contribute a cumulatively considerable net increase of any non-attainment criteria pollutant or expose sensitive receptors to potentially significant health risk impacts. Therefore, cumulative operational impacts associated with the implementation of the project would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.



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**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.2-9 Implementation of the proposed project and related projects would not result in cumulatively considerable carbon monoxide hotspot impacts and localized health risk. [Threshold AQ-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Due to the extent of the area potentially impacted from cumulative project emissions (i.e., the Basin), SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD LST emissions thresholds. As the project would not exceed the SCAQMD LST thresholds, less than significant cumulative impacts would occur. Further, as discussed in Impact 5.2-3 and Impact 5.2-4, the project would not have a cumulatively considerable impact regarding CO hot spots and health risk impacts. Less than significant impacts would result in this regard.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.2-10: Implementation of the proposed project and related projects would not result in cumulatively considerable inconsistencies with the applicable air quality plan. [Threshold AQ-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:**

As discussed under Impact 5.2-5, the project's anticipated population growth is within SCAG's 2020-2045 forecast population projection for the City and region and is accounted for in the 2022 AQMP. Furthermore, the project's air emissions would not exceed the SCAQMD regional thresholds, and localized emissions would be below SCAQMD LST thresholds. Thus, the project would be consistent with the types, intensity, and patterns of land use envisioned for the project vicinity per the 2020-2045 RTP/SCS and would be consistent with the 2022 AQMP. As such, the project would not have a cumulatively considerable contribution to impacts in this regard, and a less than significant impact would occur.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



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### AIR QUALITY

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**Impact 5.2-11: Implementation of the proposed project and related projects would not result in cumulatively considerable odors that affect a substantial number of people. [Threshold AQ-4]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* As discussed under Impact 5.2-6, the proposed project does not include any uses identified by the SCAQMD as being associated with odors. Further, the project be required to minimize the idling time of construction equipment (refer to PPP AIR-1) and VOC emissions during architectural coating (refer to PPP AIR-2). As such, the project's incremental contribution to impacts in this regard would be less than cumulatively considerable, and a less than significant impact would occur.

*Plans, Programs, Policies:* Refer to PPP AIR-1 and PPP AIR-2.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

#### 5.1.1 Significant Unavoidable Impacts

No significant unavoidable impacts related to air quality have been identified.





## Chapter 5.3 Biological Resources



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### 5.3 BIOLOGICAL RESOURCES

This section identifies existing biological resources in the project area and provides an analysis of potential impacts that may result from project implementation. Existing baseline biological conditions and characteristics, an analysis of the potential direct and indirect impacts on sensitive resources, and appropriate mitigation measures to reduce potential impacts to the extent feasible for those impacts determined to be significant, if any, are described throughout the analysis. The analysis in this section is based in part on the following information:

- *Results of a Biological Resources Assessment for the Hive Live Project – City of Costa Mesa, Orange County, California* (Biological Resources Assessment), prepared by Michael Baker International, dated November 14, 2024.

A complete copy of this study is included in [Appendix D, \*Biological Resources Assessment\*](#).

#### 5.3.1 Environmental Setting

##### 5.3.1.1 REGULATORY BACKGROUND

###### Federal

###### *Endangered Species Act*

As defined within the Federal Endangered Species Act (FESA), an endangered species is any animal or plant listed by regulation as being in danger of extinction throughout all or a significant portion of its geographical range. A threatened species is any animal or plant that is likely to become endangered within the foreseeable future throughout all or a significant portion of its geographical range. Without a special permit, federal law prohibits the “take” of any individuals or habitat of federally listed species. Under Section 9 of the FESA, take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” The term “harm” has been clarified to include “any act which actually kills or injures fish or wildlife and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.” Enforcement of FESA is administered by the U.S. Fish and Wildlife Service (USFWS).

Under the definition used by the FESA, Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species and that may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated as Critical Habitat if they contain one or more of the physical or biological features that are essential to that species’ conservation and if the occupied areas are inadequate to ensure the species’ recovery. If a project may result in take or adverse modification to a species’ designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus may include projects that occur on federal lands, require federal permits (e.g., federal Clean Water Act [CWA] Section 404 permit), or receive



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### BIOLOGICAL RESOURCES

any federal oversight or funding. If there is a federal nexus, then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS under the FESA.

Whenever federal agencies authorize, fund, or carry out actions that may adversely modify or destroy Critical Habitat, they must consult with USFWS under Section 7 of the FESA. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing uses federal funds, or requires federal authorization or permits (i.e., funding from the federal Highway Administration or a permit from the USACE).

#### *Migratory Bird Treaty Act*

Pursuant to the federal Migratory Bird Treaty Act (MBTA) (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 Code of Federal Regulations [CFR] 10, 21). The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) may also be considered a “take.” This regulation seeks to protect migratory birds and active nests.

In 1972, the MBTA was amended to include protection for migratory birds of prey (i.e., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

#### **State**

#### *California Endangered Species Act*

In addition to federal laws, the State of California has its own California Endangered Species Act (CESA), enforced by the California Department of Fish and Wildlife (CDFW). The CESA program maintains a separate listing of species beyond the FESA, although the provisions of each act are similar.

State-listed threatened and endangered species are protected under provisions of the CESA. Activities that may result in “take” of individuals (defined in CESA as; “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill”) are regulated by CDFW. Habitat degradation or modification is not included in the definition of “take” under CESA. Nonetheless, CDFW has interpreted “take” to include the destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

The State of California considers an endangered species as one whose prospects of survival and reproduction are in immediate jeopardy. A threatened species is considered as one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A candidate species is one that potentially qualifies for listing under CESA, pending a formal review and assessment of available data; these species are afforded all of the same legal protections as if they were already listed. A rare species is one that is considered present in such small numbers throughout its range



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that it may become endangered if its present environment worsens. State threatened, endangered, and candidate species are fully protected against take, as defined above.

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label “species of concern” as an informal term that refers to species which might be in need of concentrated conservation actions.

As the species of concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species will be proposed for listing as a threatened or endangered species.

### *California Fish and Game Code*

#### *Sections 3503, 3503.5, 3511, and 3513*

The CDFW administers the California Fish and Game Code (CFGF). There are particular sections of the CFGF that are applicable to natural resource management. For example, Section 3503 makes it unlawful to destroy any birds’ nest or any birds’ eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey), such as hawks, eagles, and owls, are protected under Section 3503.5 which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. Pertinent species that are State fully protected include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). In addition, Section 3513 makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

#### *Sections 1600 et seq.*

Sections 1600 et seq. of the CFGF establishes a fee-based process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely affect fish and wildlife resources, or when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

Section 1602 of the CFGF requires any person, State, or local governmental agency or public utility to notify CDFW before beginning any activity that will do one or more of the following:

1. substantially obstruct or divert the natural flow of a river, stream, or lake;
2. substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
3. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.



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This applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State, including the maintenance of existing drain culverts, outfalls, and other structures. To avoid the need for a Lake or Streambed Alteration Agreement from CDFW, all proposed impacts should remain outside of the top of active banks and the canopy/dripline of any associated riparian vegetation, whichever is greater.

#### *Native Plant Protection Act*

Sections 1900-1913 of the CFGC were developed to preserve, protect, and enhance rare and endangered plants in the State of California. The Native Plant Protection Act requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. Provisions of the Native Plant Protection Act prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use which would adversely impact listed plants. Specifically, the provisions of the Native Plant Protection Act allow the CDFW to salvage listed plant species that would otherwise be destroyed.

#### **Local**

##### *General Plan*

The Open Space and Recreation Element and Community Design Element of the General Plan include the following goals, objectives, and policies related to biological resources within the City:

- **Goal OSR-1:** Provide a high-quality environment through the development of recreation resources and preservation of open space that meets community needs in Costa Mesa.
  - **Objective OSR-1A:** Maintain and preserve existing parks, and strive to provide additional parks, public spaces, and recreation facilities that meet the community's evolving needs.
    - **Policy OSR-1.21:** Provide opportunities for public access to all open space areas, except where sensitive resources may be threatened or damaged, public health and safety may be compromised, or access would interfere with the managed production of resources.
- **Goal CD-7:** Promote and protect the unique identity of Costa Mesa's residential neighborhoods.
  - **Objective CD-7B:** Encourage the use of native plant palettes in the creation of landscaping plans used to establish a sense of place in neighborhood identification efforts.
    - **Policy CD-7.3:** Ensure that California native plants are used to support the local ecology and save water. Develop landscaping guidelines that reflect the local community.

##### *Municipal Code*

Municipal Code, Title 15, Chapter V, *Parkway Trees*, establishes rules and regulations relating to the planting, removal, or alteration of trees in public places within the City.



## 5. Environmental Analysis BIOLOGICAL RESOURCES

### 5.3.1.2 EXISTING CONDITIONS

The project site is currently developed with the Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). Topographically, the project site is generally flat, ranging from approximately 30 feet above mean sea level (amsl) to approximately 40 feet amsl, with no clear directional slope.

#### Vegetation Communities

Based on the field survey conducted as part of the Biological Resources Assessment, there were no natural vegetation communities observed within the entire project site. Ground cover consists entirely of developed/ornamental areas; refer to Biological Resources Assessment Figure 3, *Vegetation Communities and Other Land Uses*. As mentioned above, the project site consists of the Hive Creative Office Campus and the former Los Angeles Chargers practice field. These areas have been constructed upon or physically altered to a degree that natural soil substrates and native vegetation are no longer supported. Ornamental vegetation is present throughout the project site.

The entire 14.25-acre project site was mapped as developed/ornamental. Ornamental landscaping is located throughout the parking lot and surrounding the Hive Creative Office Campus. This primarily includes the main Hive Creative Office Campus as well as landscaping around the perimeter of the parking lot and buildings and landscaping along the walking path on the northern side of the project site. The ornamental plantings showcase a variety of different species; some of the more commonly occurring species observed within the project site include privet (*Ligustrum* sp.), fountaingrass (*Pennisetum setaceum*), deergrass (*Muhlenbergia rigens*), Brisbane box (*Lophostemon confertus*), creeping fig (*Ficus pumila*), bamboo (Subfamily Bambusoideae), rock purslane (*Calandrinia spectabilis*), and a variety of century plants (*Agave* spp.). Approximately 40 percent of the project site is composed of the former Los Angeles Chargers practice field, located in the southern portion of the site, which consist entirely of manicured lawns.

#### Wildlife Species

A total of 14 wildlife species were observed during the field survey (conducted on April 30, 2024) within the project site, all but one of which were birds. Bird species detected included, but are not limited to, bushtit (*Psaltriparus minimus*), lesser goldfinch (*Spinus psaltria*), American crow (*Corvus brachyrhynchos*), house finch (*Haemorbous mexicanus*), and western fence lizard (*Sceloporus occidentalis*). There is no aquatic habitat on-site and thus no potential for fish or amphibians to occur. No mammals were detected during the field survey. It may be possible for coyotes (*Canis latrans*) to occur, particularly with the Santa Ana River located approximately one mile to the west, but generally the project site is completely surrounded by developed urbanization and is isolated from any migration corridor potentially suitable for mammals.

#### Nesting Birds

Nesting birds are protected pursuant to the MBTA and CFGC Sections 3503, 3503.5, and 3513. To maintain compliance with the MBTA and CFGC, clearance surveys are typically required prior to any ground disturbance or vegetation removal activities to avoid direct or indirect impacts to active bird nests and/or nesting birds.



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### BIOLOGICAL RESOURCES

Consequently, if an active bird nest is destroyed or if project activities result in indirect impacts (e.g., nest abandonment, loss of reproductive effort) to nesting birds, it is considered “take” and is potentially punishable by fines and/or imprisonment. The project site provides abundant nesting habitat for many year-round and seasonal avian residents within the parking lot and parkway trees. At the time of the field survey, no birds were observed displaying nesting behavior on-site, although an American crow was observed flying over and away from the site while carrying nesting material and was presumably nesting on an adjacent property.

#### Migratory Corridors and Linkages

Wildlife corridors and linkages are key features for wildlife movement between habitat patches that provide suitable cover, foraging, breeding, or other habitat for wildlife. Wildlife corridors are generally defined as those areas that provide opportunities for individuals or local populations to conduct seasonal migrations, permanent dispersals, or daily commutes, while linkages generally refer to broader areas that provide movement opportunities for multiple keystone/focal species or allow for propagation of ecological processes (e.g., for movement of pollinators), often between areas of conserved land.

The project site is located in an urbanized area of the City (surrounded entirely by development). Surrounding development is primarily composed of commercial, residential, and public/institutional uses. The project is not located within a wildlife corridor or linkage. A former railroad right-of-way runs along the western edge of the project site; this railroad right-of-way now terminates at South Coast Drive and runs to the northeast until it connects to the Amtrak/Metrolink tracks running through Orange County. However, in the project site and general vicinity, the railroad right-of-way is no longer active and the portion of it running along the project’s edge has already been converted into a pedestrian/bike trail (i.e., the Rail Trail). The Rail Trail also terminates at South Coast Drive, south of which is the existing IKEA and associated parking lot, followed by I-405. There are no feasible migratory corridors in or around the project site and the project site is not expected to be used by migrating wildlife.

#### Special-Status Biological Resources

A total of 35 special-status plant species and 38 special-status wildlife species as well as six special-status natural vegetation communities have been recorded in the United States Geological Survey (USGS) *Newport Beach* and *Tustin, California* 7.5-minute quadrangles by the CDFW California Natural Diversity Database (CNDDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CIRP), and the USFWS Information for Planning and Consultation (IPaC) project planning tool.

##### *Special-Status Plants*

A total of 35 special-status plant species have been recorded in the USGS *Newport Beach* and *Tustin, California* 7.5-minute quadrangles by the CNDDDB and CIRP and in the project region by IPaC. No special-status plant species were identified within the project site during the field survey. The project site consists of the Hive Creative Office Campus and the former Los Angeles Chargers practice field completely surrounded by development. On-site habitats are paved or vegetated with manicured landscaping, with no opportunity for rare plants to establish either on the project site or in the surrounding area due to a lack of suitable habitat. As such,





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none of the special-status plant species identified by the CNDDDB, CIRP, and IPaC are expected to occur within the project site.

#### *Special-Status Wildlife*

A total of 38 special-status wildlife species have been recorded in the USGS *Newport Beach and Tustin, California* 7.5-minute quadrangles by the CNDDDB and in the project region by IPaC. No special-status wildlife species were detected within the project site during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the project site has a high potential to support Cooper's hawk (*Accipiter cooperii*; a State Watch List [WL] species) as a foraging species. However, Cooper's hawk is not expected to nest on-site due to a lack of suitable nesting trees. No other special-status wildlife species identified by the CNDDDB and IPaC are expected to occur within the project site.

It should be noted that the Biological Resources Assessment's wildlife IPaC results are slightly different from those listed in the *Report of Phase 1 Environmental Site Assessment and Additional Environmental Services: The Hive* (Biological Resources ESA), prepared by Targus Associates, LLC, dated 2018, with the results of the Biological Resources ESA including one additional species not included in the Biological Resources Assessment's search results: southwestern willow flycatcher (*Empidonax traillii extimus*; a State endangered [SE] and federally endangered [FE] species). However, it was determined that neither the southwestern willow flycatcher, nor any other federally-listed species identified in the Biological Resources ESA or Biological Resources Assessment, would occur on the project site (due to a lack of suitable nesting trees).

#### *Special-Status Vegetation Communities*

A total of six special-status vegetation communities have been reported in the USGS *Newport Beach and Tustin, California* 7.5-minute quadrangles by the CNDDDB: Southern Coast Live Oak Riparian Forest, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, Southern Foredunes, and Southern Sycamore Alder Riparian Woodland. None of these special-status vegetation communities were present within the project site. In addition, no other special-status vegetation communities as defined by CDFW in the California Sensitive Natural Community List were observed within the project site.

#### **Critical Habitat**

Critical Habitat refers to specific areas within the geographical range of a species that were occupied at the time it was listed that contain the physical or biological features that are essential to the survival and eventual recovery of that species. Areas of Critical Habitat may require special management considerations or protection, regardless of whether the species is still extant in the area. Areas that were not known to be occupied at the time a species was listed can also be designated Critical Habitat if they contain one or more of the physical or biological features that are essential to that species' conservation and if the other areas that are occupied are inadequate to ensure the species' recovery. If a project may result in take or adverse modification to a species' designated Critical Habitat and the project has a federal nexus, the project proponent may be required to provide suitable mitigation. Projects with a federal nexus may include projects that occur on federal lands, require federal permits (e.g., CWA Section 404 permit), or receive any federal oversight or funding. If there is a federal nexus,



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### BIOLOGICAL RESOURCES

then the federal agency that is responsible for providing funds or permits would be required to consult with the USFWS pursuant to the FESA. The project site is not located within USFWS-designated Critical Habitat for any federally listed species.

#### 5.3.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- B-1 Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
- B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Services.
- B-3 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.
- B-4 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site.
- B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- B-6 Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.

No impacts relating to Thresholds B-2, B-3, B-5, and B-6 were identified, as substantiated in Section 8.0, *Impacts Found Not to Be Significant*, of this Draft EIR. These thresholds are not addressed in the following analysis.

#### 5.3.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which significant impacts could occur. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.3-1: Development of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. [Threshold B-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.



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### *Impact Analysis:*

#### *Special-Status Plant Species and Vegetation Communities*

As stated, a total of 35 special-status plant species as well as six special-status natural vegetation communities have been recorded in the USGS *Newport Beach* and *Tustin, California* 7.5-minute quadrangles by the CNDDDB and CIRP and in the project region by IPaC. However, no special-status plant species or vegetation communities were identified within the project site during the field survey. The project site consists of the Hive Creative Office Campus and the former Los Angeles Chargers practice field completely surrounded by development. On-site habitats are paved or vegetated with manicured landscaping, with no opportunity for rare plants or special-status vegetation communities to establish either on the project site or in the surrounding area due to a lack of suitable habitat. Thus, no impact on special-status plant species or vegetation communities would occur.

#### *Special-Status Wildlife Species*

As stated, a total of 38 special-status wildlife species have been recorded in the USGS *Newport Beach* and *Tustin, California* 7.5-minute quadrangles by the CNDDDB and in the project region by IPaC. No special-status wildlife species were detected within the project site during the field survey. Based on the results of the field survey and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the project site has a high potential to support Cooper's hawk (a State WL species) as a foraging species. However, Cooper's hawk is not expected to nest on-site due to a lack of suitable nesting trees. No other special-status wildlife species identified by the CNDDDB and IPaC are expected to occur within the project site. As such, impacts to special-status wildlife species would be less than significant.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

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**Impact 5.3-2: Development of the proposed project could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site. [Threshold B-4]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* Habitat linkages provide links between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet inadequate for others. Wildlife corridors are key features for dispersal, seasonal migration, breeding,



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and foraging. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

The project site is not located within any wildlife corridors. The project site is surrounded by developed land on all sides, with minimal to no opportunities for movement of wildlife. Further, the closest wildlife corridor is the Santa Ana River, approximately 0.94-mile to the northwest and one mile to the west; however, the Santa Ana River is separated from the project site by extensive development. Wildlife movement into or out of the project site is reduced by the lack of any connectivity to open space areas, by the presence of surrounding high-traffic roadways, and existing residential developments. Additionally, elevated noise levels, vehicle traffic, lighting, and human presence associated with the surrounding residential and commercial developments and roadways decrease the suitability of the project site to be used as a wildlife movement corridor or linkage.

The project site provides abundant nesting habitat for many year-round and seasonal avian residents within the parking lot and parkway trees. At the time of the field survey, no birds were observed displaying nesting behavior on-site, although an American crow was observed flying over and away from the site while carrying nesting material and was presumably nesting on an adjacent property. Nesting birds are protected pursuant to the MBTA and CFGC. Specifically, the MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. To reduce potential impacts to nesting birds during the nesting bird season (January 1 through August 31), Mitigation Measure BIO-1 requires a pre-construction nesting bird clearance survey be conducted to determine the presence/absence, location, and status of any active nests on or adjacent to the project site. If an active bird nest is found, a “no-disturbance” buffer shall be established around the active nest and shall be monitored until the young have fledged and left the nest or the nest otherwise becomes inactive under natural conditions. With the implementation of Mitigation Measure BIO-1, the project’s potential impacts to nesting birds would be reduced to less than significant levels.

***Plans, Programs, Policies:*** No PPPs are applicable to this threshold of significance.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

#### ***Mitigation Measures:***

BIO-1            If project-related activities are to be initiated during the nesting season (January 1 to August 31), a pre-construction nesting bird clearance survey shall be conducted by a qualified biologist retained by the project applicant no more than three days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active bird nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures shall be required. If an active bird nest is found, the species shall be identified, and a “no-disturbance” buffer shall be established around the active nest. The size of the “no-disturbance” buffer shall be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. The qualified biologist shall periodically monitor any active bird nests to determine if project-related activities occurring outside the “no-disturbance” buffer disturb the birds and if the buffer shall be increased. Once



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the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the “no-disturbance” buffer may occur following an additional survey by the qualified biologist to search for any new bird nests in the restricted area.

*Level of Significance After Mitigation:* Less Than Significant Impact With Mitigation Incorporated.

### 5.3.4 Cumulative Impacts

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**Impact 5.3-3** Development of the proposed project and related projects could result in cumulatively considerable impacts to any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. [Threshold B-1]

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* As discussed, the City is largely built out with relatively little land available for new development. As a result, the cumulative development projects identified in [Table 4-2](#) primarily consist of infill development and would result in development similar to what currently exists in the surrounding vicinity. Additionally, the City would review site-specific development proposals against the City’s Municipal Code requirements for all future projects requiring discretionary approval. This regulatory procedure would ensure cumulative development is reviewed against the qualities and characteristics expected of development and major renovations in the City. Cumulative development would be reviewed against applicable General Plan policies.

As discussed above, there are no natural vegetation communities within the boundaries of the project. Instead, ground cover consists entirely of developed/ornamental areas. While it was determined that the project site has a high potential to support Cooper’s hawk as a foraging species, this species is not expected to nest on-site due to a lack of suitable nesting trees. All remaining special-status plant and wildlife species and vegetation communities identified by the CNDDDB, CIRP, and IPaC have a low potential to occur or are not expected to occur within the project site. Therefore, the proposed project would not result in cumulatively considerable biological impacts in this regard. Impacts in this regard would be less than significant.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.



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### BIOLOGICAL RESOURCES

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**Impact 5.3-4**     **Development of the proposed project and related projects could result in cumulatively considerable impacts with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site. [Threshold B-4]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* Cumulative projects identified in [Table 4-2](#), *Related Projects*, a could result in cumulatively considerable impacts to the movement of native resident or migratory fish or wildlife species or with established native resident or migrator wildlife corridors or impede the use of wildlife nursery sites. However, the City would review site-specific development proposals against the Municipal Code requirements for all future projects requiring discretionary approval. This regulatory procedure would ensure cumulative development is reviewed to determine site-specific impacts associated with migratory birds and wildlife corridors. Further, cumulative development would be reviewed against applicable General Plan policies.

As discussed above, the project site would not be suitable for use as a wildlife movement corridor or linkage. Additionally, implementation of Mitigation Measure BIO-1 would require a pre-construction nesting bird clearance survey be conducted to determine the presence/absence, location, and status of any active nests on or adjacent to the project site. With implementation of Mitigation Measure BIO-1, the proposed project would not result in significant impacts to nesting birds. As such, the project's less than significant impacts would not be cumulatively considerable.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* Refer to Mitigation Measure BIO-1.

*Level of Significance After Mitigation:* Less Than Significant Impact With Mitigation Incorporated.

### 5.3.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to biological resources have been identified.



## Chapter 5.4 Cultural Resources



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## 5. Environmental Analysis

### 5.4 CULTURAL RESOURCES

Cultural resources comprise archaeological and historical resources. Archaeology studies human artifacts, such as places, objects, and settlements, that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, cultural use, or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of Draft EIR evaluates the potential for project implementation to impact cultural resources. The analysis in this section is based in part on the following information:

- *Cultural and Paleontological Resources Identification Memorandum for the Costa Mesa Hive Live Project, City of Costa Mesa, Orange County, California*, (Cultural and Paleo Resources Memo), prepared by Michael Baker International, dated June 3, 2024.

This study is included in the technical appendices of this Draft EIR (refer to [Appendix E](#), *Cultural and Paleontological Resources Identification Memorandum*).

#### 5.4.1 Environmental Setting

##### 5.4.1.1 REGULATORY BACKGROUND

###### State

###### *California Public Resources Code*

Archaeological and historical sites are protected under a wide variety of State policies and regulations in the California Public Resources Code (Public Resources Code). In addition, cultural resources are recognized as nonrenewable resources and receive protection under the Public Resources Code and CEQA. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, or any object building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource is considered historically significant if it meets any of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or



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### CULTURAL RESOURCES

4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]). Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Public Resources Code Sections 5097.9 to 5097.991 provide protection to Native American historical and cultural resources and sacred sites; identify the powers and duties of the Native American Heritage Commission (NAHC); require descendants to be notified when Native American human remains are discovered; and provide for treatment and disposition of human remains and associated grave goods.

#### *California Health and Safety Code*

The discovery of human remains is regulated per California Health and Safety Code Section 7050.5, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation...until the coroner...has determined...that the remains are not subject to...provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible.... The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and...has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.



## 5. Environmental Analysis CULTURAL RESOURCES

### Local

#### *General Plan*

The Historical and Cultural Resources Element of the General Plan includes the following goals, objectives, and policies to protect cultural resources within the City:

- **Goal HCR-1:** Historical, Archeological, and Paleontological Resource Preservation. The City of Costa Mesa supports focused efforts to provide residents with a sense of community and history through the protection and preservation of historical and cultural resources.
  - **Objective HCR-1A:** Encourage preservation and protection of the City's archaeological, paleontological, and historical resources.
    - **Policy HCR-1.4:** Require, as part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources, and the impact of proposed development on those resources.
    - **Policy HCR-1.7:** Require cultural resources studies (i.e., archaeological and historical investigations) for all applicable discretionary projects, in accordance with CEQA regulations. The studies should identify cultural resources (i.e., prehistorical sites, historical sites, and isolated artifacts and features) in the project area, determine their eligibility for inclusion in the California Register of Historical Resources, and provide mitigation measures for any resources in the project area that cannot be avoided. Cultural resources studies shall be completed by a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistorical or historical archaeology.
    - **Policy HCR-1.8:** Comply with requirements of the California Environmental Quality Act regarding protection and recovery of archaeological resources discovered during development activities.

#### *Municipal Code*

Municipal Code, Title 13, Chapter IX, Article 14, *Historic Preservation*, is intended to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, sites, districts, neighborhoods, natural features and significant permanent landscaping having special historical, archaeological, cultural, architectural, or community value in the City. Pursuant to Article 14, no person, owner, or other entity shall restore, rehabilitate, alter, develop, construct, demolish, remove, or change the appearance of any cultural resource on the local Register of Historic Places without first having applied for and been granted a certificate of appropriateness to do so by the Planning Commission (or other commission/committee designated by the City Council).



## 5. Environmental Analysis

### CULTURAL RESOURCES

#### 5.4.1.2 EXISTING CONDITIONS

##### Natural Setting

The project site is located within the Peninsular Ranges Geomorphic Province of California, which extends from the Los Angeles region to the tip of Baja California in Mexico. This region is characterized as a series of northwest-trending mountain ranges separated by fault zones and a coastal plain of landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by rocks of the western Peninsular Ranges, while the coastal plain is underlain by subsequently deposited marine and nonmarine sedimentary formations. The site is located within the coastal plain portion of the region and is underlain by Quaternary, Late Holocene to Late Pleistocene alluvial deposits.

##### Cultural Setting

###### *Prehistoric Period*

The earliest habitation of the Los Angeles Basin and Santa Ana River watershed likely occurred in the Paleocoastal or Paleoindian period, which is generally dated between about 13,000 and 8,500 before present (BP). The earliest inhabitants were highly mobile hunter-gatherers who left behind minimal archaeological remains.

The first uncontested evidence of human occupation in this area dates to about 9,000 BP. The archaeological evidence is associated with the Millingstone Cultural Horizon, or, as it is also known, the Encinitas Tradition. Millingstone populations established permanent settlements that were located primarily on the coast and in other locations with reliable water sources and a variety of potential food sources. There, these established human populations relied heavily on shellfish, seeds, and small animals. The period takes its name from the appearance of ground stone artifacts. In the Early Millingstone, these ground stone artifacts are manos and metates, but after approximately 5,000 BP, when acorns become important in the diet, mortars and pestles become an important component of the artifact assemblage.

The period between 3,500 BP and 1,500 BP is known as the Intermediate period. Increasing population pressures led to intensified exploitation of existing terrestrial and marine resources. The intensified resource procurement was enabled by technological innovations such as the circular fishhook on the coast, greater use of the mortar and pestle to exploit acorns more efficiently, and the use of the dart and atlatl to diversify hunting. Larger numbers of settlements that are also greater in size are observed in the archaeological record, suggesting a larger and more sedentary population. Trade networks and greater craft specialization developed during this period.

During the Late Prehistoric, which began approximately 1,500 BP and continued until European contact, is the period of the development and florescence of the Native American tribes encountered by the Spanish. Late Prehistoric subsistence consisted of hunting, trapping, fishing, and gathering, and continued the pattern of increased population and sedentary lifestyle.



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### *Historic Period*

In 1810, Mexican Governor Jose Joaquin de Arrillaga granted the 63,414-acre Rancho Santiago de Santa Ana, including the project area, to Jose Antonio Yorba and his nephew Pablo Peralta. The project area is located within the mapped boundaries of Rancho Santiago de Santa Ana. Native Americans continued to live on the land grant and made up much of the rancho's workforce. California's Native Americans sometimes preferred to live as vaqueros and laborers on the region's vast land grants in order to avoid living more directly under the mission system.

In 1821, Mexico won its independence from Spain. The new state was secular in nature and moved increasingly toward secularization of the mission and dispersal of the mission properties among politically connected elites. In 1834, the missions began to be secularized, and their lands were divided up. Little of the missions' lands and wealth went to the Native Americans. More than 600 ranchos were granted between 1833 and 1846 as the Mexican government sought to solidify its authority over Alta California amid fears of intrusion by the United States.

The United States captured California during the Mexican-American War of 1846 to 1848. The discovery of gold in California led to a population boom in the 1850s and 1860s. American settlers began to arrive in the area that is present-day Costa Mesa in the late 19th century, leading to the establishment of the towns of Fairview and Harper. Fairview, founded in 1887, quickly grew into a boomtown but faced decline by 1889. Harper, a community that arose alongside the Santa Ana and Newport Railway, was renamed Costa Mesa in 1920 after a contest sponsored by resident Fanny Bixby Spencer and her husband.

Agriculture played a crucial role in Costa Mesa's early economy, with the region known for its apple and lima bean production. However, severe droughts in the early 20th century caused many farming families to leave. The introduction of oil drilling in 1906 marked a shift towards industrial development.

Costa Mesa experienced significant growth during and after World War II. The establishment of the Santa Ana Army Air Base brought thousands of service members to the area, many of whom settled there permanently after the war. This influx of new residents spurred the City's incorporation in 1953.

Today, Costa Mesa is known for its vibrant economy based on retail, commerce, and light manufacturing. It is home to cultural landmarks such as the Orange County Fairgrounds, the Segerstrom Center for the Arts, and numerous parks and recreational facilities.

### **Project Site**

#### *Site History and Historic Context*

The project area was used for agricultural purposes or undeveloped prior to 2004. In 1953, the project area was undeveloped land situated within the confines of Huntzinger Avenue, Santa Ana Road, Baker Street, and Harbor Boulevard. An off-site pump station, adjoining the northwestern corner of the project site, is owned and operated by the Mesa Water District (MWD) as one of the well locations.



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### CULTURAL RESOURCES

In the 1963 aerial of the project area, the land was still undeveloped, with the exception of the off-site MWD facility. However, the landscape around it, within less than 0.5-mile each way, had new roads installed. Just over 100 feet from the southernmost portion of the project area, a new road, Greenville Road, curved in from Huntzinger Avenue and wrapped westerly towards the Santa Ana city boundary. The project area experienced little change in 1972, but a large commercial building is shown in the parcel immediately west of the project area.

In 1987, 1992, and 1993 aerials, the project area is still undeveloped, but much of the area surrounding the project area was developed. In 1994, the area in the location of the off-site pump station had been graded or worked and the off-site tank was removed. The beginnings of new structure foundations occur along the southern edge of the off-site graded area.

The 1995 aerial of the project area shows two small structures and a paved lot enclosed by a wall located off-site, adjoining the northwestern portion of the project area, where the off-site pump station was previously located. Additionally, the project area and the areas just west appear to have been graded or mowed with a 170-foot by 700-foot strip immediately west of the project area with new green growth.

The 1996 aerial shows a newly completed road known now as Susan Street, along the eastern edge of the project area connecting South Coast Drive and Sunflower Avenue. Susan Street now separates the project area from the land to its east and west of Greenville Road. The southern half of that area is shown as developed into a large parking lot, while the northern half remained undeveloped.

By 1998, the parking lot at the present-day Costa Mesa Justice Center had been expanded toward the building of what is the present-day AAA Costa Mesa building. The land in between the parking lot and building remained undeveloped; the project area land also remained undeveloped. The project area remained undeveloped in 1999, 2000, and 2002.

An aerial from 2003 shows the project area under grading in preparation for the construction of the now-existing building complex. The undeveloped area on the east side of Susan Street was also prepared for construction, beginning with the construction of the foundation to the north of the developed parking lot.

By 2004, the building structure, which currently serves as the Hive Creative Office Campus and Los Angeles Chargers practice field, had been built. The parking lot around it was also developed. In 2005, 2009, and 2010 aerials, development on-site remained the same with no visible alterations. By 2010, no visible construction alterations had been made to the project area; however, the undeveloped land between the Costa Mesa Justice Center parking lot and the AAA Costa Mesa Insurance building had been altered. In 2012, the project area and its surrounding areas continued to have no visible alterations. No historic-aged buildings are present within the project area.

### Cultural Resources

#### *Field Survey*

An archaeological survey of the project area was conducted on April 30, 2024, as part of the Cultural and Paleo Resources Memo.



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In the developed portions of the project site, the ground is covered with lawns, landscaping, and structures, and the Chargers practice field is covered with artificial turf, so there was very little to no surface visibility of undisturbed soils. These improvements would have resulted in substantial subsurface disturbances. No archaeological resources were identified within this part of the project site.

The ditches along the perimeter of the project area and in the center of the parking lot on the west side of the Hive Creative Office Campus were inspected for artifacts, as these were the only areas with exposed dirt. In the ditches inspected along the perimeter of the project area, four *Chione* sp. shell fragments and one historic ceramic fragment were identified on the shallow banks of the ditches). The distances between the artifacts are such that the discoveries are considered isolate finds. Based on the Cultural and Paleo Resources Memo, the first three feet of soil within the project area are composed of primarily undocumented artificial fill. Since the origin of the fill is not documented, it is unclear if the fill came from on-site or off-site. Regardless, the context of the surface finds lack integrity as a result of previous filling and grading in the area, and the isolate finds are not considered significant.

### Records Search

A records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located at California State University, Fullerton was conducted on April 24, 2024. The search was conducted to identify previous cultural resources studies and previously recorded cultural resources within a half-mile radius of the project area. The CHRIS search included a review of the Archaeological Determinations of Eligibility for Orange County, California Inventory of Historic Resources, California Points of Historical Interest, California Historical Landmarks list, and the Built Environment Resources Directory for Orange County.

The SCCIC records search identified 14 previously conducted cultural resources studies within a 0.5-mile radius of the project site, none of which included the project site; refer to Cultural and Paleo Resources Memo Table 1, *Previous Cultural Resource Investigations within 0.5 Miles*. The SCCIC records search also identified 11 previously recorded cultural resources within a 0.5-mile radius of the project site; refer to Cultural and Paleo Resources Memo Table 2, *Previously Recorded Cultural Resources within 0.5 Miles*. However, none of the previously recorded cultural resources are located within or adjacent to the project site.

### 5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- C-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.
- C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- C-3 Disturb any human remains, including those interred outside of dedicated cemeteries.



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No impact relating to Threshold C-1 was identified, as substantiated in [Section 8.0, \*Impacts Found Not to Be Significant\*](#), of this Draft EIR. This threshold will not be addressed in the following analysis.

#### 5.4.2 Environmental Impacts

The following impact analysis addresses thresholds of significance for which significant impacts could occur. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.4-1: Development of the project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5. [Threshold C-2]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* As discussed in the Cultural and Paleo Resources Memo, surficial deposits on-site consist of artificial fill, but below approximately three feet, the soil consists of younger Quaternary alluvial sediments. These sediments have the potential to contain buried archaeological deposits. The late nineteenth- to early twentieth-century bed of the Santa Ana River was located approximately 0.6-mile to the northwest of the project site and would have provided abundant resources to area inhabitants. As the river meandered and changed its course, it or its tributaries may have been located closer to the project site at times. These conditions heighten the sensitivity of the project site for buried cultural resources.

However, the project site has experienced recent disturbances associated with the construction of the existing Hive Creative Office Campus and former Los Angeles Chargers practice field. Building methods at the time and the installation of associated utilities would have resulted in the disturbance of archaeological sites buried at shallow depths. On-site geotechnical testing indicates that the layer of artificial fill, up to three feet below existing ground surface covers the entire project site. However, buried resources may remain in areas where developments such as parking lots or structures with shallow foundations have required only minimal ground disturbance or below the existing imported fill. As such, project excavation could encounter native soils (depths greater than three feet below ground surface), which have the potential to support unknown buried archaeological resources. Therefore, as detailed in the Cultural and Paleo Resources Memo, the sensitivity for buried archaeological resources on-site is considered low at and near the surface but increases to moderate with depth.

Mitigation Measure CUL-1 would require a qualified archaeologist who meets the Secretary of the Interior's Standards for professional archaeology to be retained by the project applicant for the project and be on-call during all demolition and grading/excavation activities. The qualified archaeologist would provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural (prehistoric and historic) resources. As part of the training, construction personnel would be required to be briefed on proper procedures to follow should resources of a potentially cultural nature be discovered during construction. The qualified archaeologist would ensure the applicant submits a written Project Monitoring Plan to the City's Development Services Director for review and approval. Additionally, in the event resources of a potentially Native American nature are encountered during any stage of project construction, all construction work within 50 feet (15 meters) of the find must cease and the qualified Native





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American Monitor must assess the find for importance. Construction activities outside of the buffer area may continue. With implementation of Mitigation Measure CUL-1, the project would not cause a substantial adverse change in the significance of an archaeological resource or site pursuant to Section 15064.5 of the CEQA Guidelines, and impacts would be reduced to less than significant levels.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** Refer to Mitigation Measure TCR-1 in [Section 5.16, Tribal Cultural Resources](#). In addition, the following mitigation would apply:

CUL-1 Prior to issuance of grading permits, the City of Costa Mesa shall ensure a qualified archaeologist who meets the Secretary of the Interior's Standards for professional archaeology has been retained for the project and shall be on-call during all demolition and grading/excavation. The qualified archaeologist shall ensure the following measures are followed for the project:

- Prior to any ground disturbance, the qualified archaeologist, or their designee, shall provide worker environmental awareness protection training to construction personnel regarding regulatory requirements for the protection of cultural (prehistoric and historic) resources. As part of this training, construction personnel shall be briefed on proper procedures to follow should resources of a potentially cultural nature be discovered during construction. Workers shall be provided contact information and protocols to follow in the event that inadvertent discoveries are made. The training can be in the form of a video or PowerPoint presentation. Printed literature (handouts) can accompany the training and can also be given to new workers and contractors to avoid the necessity of continuous training over the course of the project.
- Prior to any ground disturbance, the applicant shall submit a written Project Monitoring Plan (PMP) to the City of Costa Mesa's Development Services Director for review and approval. The monitoring plan shall include monitor contact information (including the qualified archeologist and the Native American Monitor per Mitigation Measure TCR-1), specific procedures for field observation, diverting and grading to protect finds, and procedures to be followed in the event of significant finds.
- In the event resources of a potentially Native American nature are discovered during any stage of project construction, all construction work within 50 feet (15 meters) of the discovered tribal cultural resource ("TCR") shall cease and the Monitor shall assess the discovery. Construction activities outside the buffer zone may continue during the Monitor's assessment.
  - Non-Native American (Non-TCR) Discoveries: If warranted based on the qualified archaeologist's evaluation of the archaeological (but non-TCR) discovery, the archaeologist shall collect the resource and prepare a test-level



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report describing the results of the investigation. The test-level report shall evaluate the site including discussing the significance (depth, nature, condition, and extent of the resource), identifying final Cultural Mitigation Measures, if any, that the City of Costa Mesa's Development Services Director shall verify are incorporated into future construction plans, and providing cost estimates.

- o **Conjoined Archaeological and Native American (TCR) Discoveries:** If, following consultation with the Monitor, it is determined that a historic or prehistoric discovery includes Native American materials or resources, then the Monitor shall determine the appropriate treatment of the discovered TCR(s) consistent with Mitigation Measure TCR-1. The Monitor shall prepare a TCR discovery report, which may include descriptions and evaluations of the area and conditions at the site of the discovery (i.e., depth, nature, condition, and extent of the resources), as well as a discussion of the significance to the Kizh Nation.
- o The requirements of Section 15064.5 of the CEQA Guidelines shall be followed. Construction work within the buffer area surrounding a TCR discovery shall resume only after the Monitor has (1) appropriately inventoried and documented the resource and any surrounding material of significance to the Kizh Nation, and (2) completed the appropriate treatment of the resource consistent with Mitigation Measure TCR-1.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

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**Impact 5.4-2: Development of the project could disturb human remains, including those interred outside of dedicated cemeteries. [Threshold C-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Due to the project area's urbanized environment, it is not anticipated that human remains, including those interred outside of dedicated cemeteries, would be encountered during excavation or grading activities. In the unlikely event that human remains are encountered, State Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98 (PPP CUL-1). The County coroner must be notified of the find immediately. If the remains are determined to be Native American, the County coroner would notify the NAHC, which would determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment. Following compliance with existing State regulations (PPP CUL-1), which detail the appropriate actions



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necessary in the event human remains are encountered, impacts concerning disturbance of human remains would be less than significant.

### *Plans, Programs, Policies:*

PPP CUL-1 The proposed project is required to comply with California Public Resources Code 5097.9-5097.991 (which protects Native American historical and cultural resources, and sacred sites) and Health and Safety Code Section 7050.5 (pertaining to the discovery or recognition of any human remains).

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.4.3 Cumulative Impacts

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**Impact 5.4-3 Development of the proposed project and related projects could result in cumulatively considerable impacts to archaeological resources. [Threshold C-2]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* Table 4-2 identifies the related projects and other possible development in the area determined as having the potential to interact with the project to the extent that a significant cumulative effect may occur. Project-related impacts to archeological resources have been determined to be less than significant with implementation of Mitigation Measure CUL-1. Future cumulative projects would be evaluated on a project-by-project basis to determine the extent of potential impacts to site-specific archaeological resources. Related projects would be required to adhere to State and Federal regulations, as well as project-specific mitigation measures. Thus, with compliance with Mitigation Measure CUL-1, the project's less than significant impacts would not be cumulatively considerable.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* Refer to Mitigation Measure CUL-1.

*Level of Significance After Mitigation:* Less Than Significant Impact With Mitigation Incorporated.

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**Impact 5.4-4 Development of the proposed project and related projects would not result in cumulatively considerable impacts to human remains, including those interred outside of dedicated cemeteries. [Threshold C-3]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.



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**Impact Analysis:** Table 4-2 identifies the related projects and other possible development in the area determined as having the potential to interact with the project to the extent that a significant cumulative effect may occur. Project-related impacts to human remains have been determined to be less than significant with compliance with Section 5097.98 of the California Public Resources Code (PPP CUL-1). Future cumulative projects would be evaluated on a project-by-project basis to determine the extent of potential impacts to site-specific human remains. Related projects would be required to adhere to State and Federal regulations, as well as project-specific mitigation measures. As discussed under Impact Statement 5.4-2, following compliance with existing State regulations (PPP CUL-1), which detail the appropriate actions necessary in the event human remains are encountered, impacts concerning disturbance of human remains would be less than significant. Thus, the project's less than significant impacts would not be cumulatively considerable.

**Plans, Programs, Policies:** Refer to PPP CUL-1.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

#### 5.4.4 Significant Unavoidable Impacts

No significant unavoidable impacts related to cultural resources have been identified.



## Chapter 5.5 Energy



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### 5.5 ENERGY

This section evaluates the potential impacts on energy resources resulting from construction and operation of the project, with potential short- and long-term energy consumption impacts. This section presents the regulatory setting; environmental setting; methodology for determining potential impacts; impact analysis; proposed measures to mitigate significant impacts, if necessary; and an analysis of potential cumulative impacts pertaining to energy resources. Energy modeling data can be found in [Appendix C, \*Air Quality/Greenhouse Gas/Energy Data\*](#).

#### 5.5.1 Environmental Setting

##### 5.5.1.1 REGULATORY BACKGROUND

###### Federal

###### *Energy Independence and Security Act of 2007*

The Energy Independence and Security Act of 2007 was enacted to improve vehicle fuel economy and help reduce dependence on foreign oil. Specifically, the act increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS), which requires fuel producers to use at least 36 billion gallons of biofuel in 2022 and reduces the nation's demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020, an increase in fuel economy standards of 40 percent. On June 21, 2023, the US Environmental Protection Agency (EPA) announced a final rule to establish biofuel volume requirements and associated percentage standards for cellulosic biofuel, biomass-based diesel, advanced biofuel, and total renewable fuel for the years 2023 to 2025. The act also sets energy efficiency standards for lighting and appliances.

###### *Energy Policy and Conservation Act*

The Energy Policy and Conservation Act was enacted in 1975 and established fuel economy standards for new light-duty vehicles sold in the United States. As a result of the act, the National Highway Traffic and Safety Administration (NHTSA) was tasked with establishing and regularly updating vehicle standards.

###### *Corporate Average Fuel Economy Standards*

Established by the US Congress in 1975, the Corporate Average Fuel Economy (CAFE) Standards (49 Code of Federal Regulations [CFR] Parts 531 and 533) set fuel economy standards for all new passenger cars and light trucks sold in the United States. The NHTSA and the EPA jointly administer the CAFE standards, which become more stringent each year.

In August 2016, the EPA and NHTSA announced the adoption of phase two programs related to the fuel economy and greenhouse gas (GHG) emissions standards for medium- and heavy-duty trucks. The phase two program applied to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards were expected to lower carbon dioxide (CO<sub>2</sub>) emissions by approximately 1.1 billion metric tons



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of CO<sub>2</sub> (MTCO<sub>2</sub>) and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program. The NHTSA and the EPA jointly published the “Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program” (SAFE I Rule) in September 2019 and issued the Final SAFE Rule (i.e., SAFE Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks) in April 2020. The SAFE I Rule relaxed federal CAFE vehicle standards and revoked California’s authority to set its own vehicle standards. On December 29, 2021, the NHTSA issued the final rule to repeal the SAFE I Rule, effective January 28, 2022, which removes the improper restrictions placed on states and local governments from developing innovative policies to address their specific environmental and public health challenges.<sup>1</sup> The EPA also issued a decision on March 14, 2022, that rescinded its 2019 withdrawal of California’s authority to set its own vehicle standards.<sup>2</sup>

#### *Construction Equipment Fuel Efficiency Standard*

The EPA sets emission standards for construction equipment. The first federal standards (Tier 1) were adopted in 1994 for all off-road engines over 50 horsepower (hp) and were phased in by 2000. A new standard was adopted in 1998 that introduced Tier 1 for all equipment below 50 hp and established the Tier 2 and Tier 3 standards. The EPA finalized a new emissions standard for automobiles and gasoline fuels in 2014 under Tier 3 which will be completely implemented in 2025. The current iteration of emissions standards for construction equipment are the Tier 4 efficiency requirements, which reduce oxides of nitrogen (NO<sub>x</sub>) and particulate matter (PM) emissions and are contained in 40 CFR Parts 1039, 1065, and 1068 (originally adopted in 69 Federal Register 38958 [June 29, 2004], and updated in 2014 [79 Federal Register 46356]). Emissions requirements for new off-road Tier 4 vehicles were phased in from 2008 to 2015. However, Tier 4 standards do not apply to existing off-road engines that were built before Tier 4 emission standards went into effect.

### State

#### *Assembly Bill 2076*

Pursuant to Assembly Bill 2076, the California Energy Commission (CEC) and California Air Resources Board (CARB) prepared and adopted a joint-agency report in 2003, titled Reducing California’s Petroleum Dependence. The report included recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita vehicle miles traveled (VMT). One of the performance-based goals of Assembly Bill 2076 is to reduce petroleum demand to 15 percent below 2003 demand. Furthermore, in response to the CEC’s 2003 and 2005 Integrated Energy Policy Reports (IEPR), the Governor directed the CEC to take the lead in developing a long-term plan to increase alternative fuel use.

#### *California Energy Commission Integrated Energy Policy Report*

In 2002, the California State legislature adopted Senate Bill (SB) 1389, which requires the CEC to develop an integrated energy policy report every two years. SB 1389 requires the CEC to conduct assessments and forecasts

<sup>1</sup> Federal Register, Vol. 86, No. 247, December 29, 2021.

<sup>2</sup> Federal Register, Vol. 87, No. 49, March 14, 2022.





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of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices, and use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the State's economy, and protect public health and safety.

The CEC adopted the 2023 Integrated Energy Policy Report (2023 IEPR) on February 14, 2024. The 2023 IEPR provides the results of the CEC's assessments of a variety of energy issues facing California, many of which will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining reliability and controlling costs. The 2023 IEPR discusses speeding connection of clean resources to the electricity grid, the potential use of clean and renewable hydrogen, and the California Energy Demand Forecast to 2040.

### *Renewables Portfolio Standards*

First established in 2002 under SB 1078, California's Renewables Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030. SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are to (1) increase the procurement of electricity from renewable sources from 33 percent to 50 percent and (2) double the energy savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. On September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California's RPS and requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and states that CARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045.

The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include:

1. Determining annual procurement targets and enforcing compliance;
2. Reviewing and approving each investor-owned utility's renewable energy procurement plan;
3. Reviewing contracts for RPS-eligible energy; and
4. Establishing the standard terms and conditions used in contracts for eligible renewable energy.

### *California's Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6)*

In 1978, the CEC established Title 24, Part 6 of the California Code of Regulations (CCR), which are California's energy efficiency standards for residential and nonresidential buildings. Title 24, Part 6, also referred to as the California Energy Code, was codified in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and nonresidential buildings. California's energy efficiency standards are updated on an approximate three-year cycle. The 2022 California Energy Code became effective on January 1, 2023.



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#### *California Green Building Standards (CCR Title 24, Part 11)*

The California Green Building Standards Code (Title 24, Part 11), commonly referred to as the CALGreen Code, is a Statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the California Department of Housing and Community Development. The CALGreen Code requires new residential and commercial buildings to comply with mandatory measures under five topical areas: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code also provides voluntary tiers and measures that local governments may adopt to encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code was adopted in 2022 and became effective on January 1, 2023.

#### **Local**

##### *General Plan*

The Conservation Element of the General Plan includes the following objective and policies to encourage energy conservation within the City:

- **Objective CON-2.A:** Work to conserve energy resources in existing and new buildings, utilities, and infrastructure.
  - **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.
  - **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.
  - **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.



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- **Policy CON-4.A.7:** Encourage installation of renewable energy devices for businesses and facilities and strive to reduce communitywide energy consumption.

#### 5.5.1.2 EXISTING CONDITIONS

##### Energy

Energy use is typically quantified using British thermal units (Btu). A Btu is the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit (°F). The generating capacity of a unit of electricity is expressed in megawatts (MW). Electricity generation may be quantified in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh). Natural gas generation is expressed in therms, where one therm is equivalent to 100,000 Btu.

##### *Statewide and Regional Energy Usage*

California is one of the lowest per capita energy users in the United States due to its energy efficiency programs and mild climate. In 2021, California consumed 7,359 trillion Btu of energy with a total consumption per capita of 189 million Btu.

##### *Electricity and Natural Gas*

Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, and fireplaces, as well as industrial processes and alternative fuel vehicles.

Most of California's electricity is generated in-State, but California relies on out-of-state imports for nearly 90 percent of its natural gas supply. In 2022, approximately 30 percent of California's electricity was imported from the Northwest and Southwest. Of the 287,220 GWh of total electricity consumed in California in 2022, 203,257 GWh was generated in-State.<sup>3</sup> Approximately 52 percent of the in-State generation was from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass.<sup>4</sup>

The electricity and natural gas consumption attributable to County of Orange (County) from 2012 to 2022 is shown in [Table 5.5-1, \*Electricity and Natural Gas Consumption in Orange County 2012-2022\*](#). Year 2022 is the most recent year for which data is available.

<sup>3</sup> California Energy Commission, 2022 *Total System Electric Generation*, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>, accessed July 15, 2024.

<sup>4</sup> California Energy Commission, 2022 *Total System Electric Generation*, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>, accessed July 15, 2024.



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**Table 5.5-1 Electricity Consumption in Orange County 2012-2022**

Year	Electricity Consumption (in millions of kilowatt hours)	Natural Gas Consumption (in millions of therms)
2012	20,372.57	612.55
2013	20,732.06	636.15
2014	20,732.06	544.76
2015	20,724.59	544.47
2016	20,234.20	569.94
2017	20,127.01	575.51
2018	19,993.46	575.10
2019	19,818.93	623.15
2020	19,691.16	594.60
2021	19,213.66	580.21
2022	20,243.72	572.45

Source:  
California Energy Commission, *Electricity Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed August 5, 2024.  
California Energy Commission, *Gas Consumption by County*, <http://www.ecdms.energy.ca.gov/>, accessed August 5, 2024.

### Petroleum

Petroleum fuels are primarily consumed by on-road and off-road equipment, and some industrial processes. Though California’s population and economy are expected to grow, gasoline demand is forecasted to decline due to improvements in fuel efficiency and increased light-duty vehicle electrification.

California is one of the top producers of petroleum in the nation, with Statewide drilling operations concentrated primarily in Kern and Los Angeles Counties. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. In 2019, the State supplied about 3 percent of the United States’ total onshore and offshore production of crude oil. California oil refineries also process Alaskan and foreign crude oil received at ports in Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries depend increasingly on imports. Of the total amount of California’s oil supply in 2022, 59 percent was supplied by imports, 26 percent by California, and 15 percent by Alaska.

In California, gasoline consumed primarily by light-duty cars, pickup trucks, and sport utility vehicles is the most used transportation fuel. Diesel, the second most-used transportation fuel, is primarily consumed by heavy-duty trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles. Both gasoline and diesel are primarily petroleum-based, and their consumption releases GHG emissions. The transportation sector is the single largest source of GHG emissions in the State and accounts for the largest share of the State’s energy consumption. Nearly 40 percent of all inventoried GHG emissions in the State in 2021 were generated by the transportation sector.<sup>5</sup> The State’s transportation sector accounts for approximately 67 percent of California’s total petroleum consumption in 2021.<sup>6</sup> To reduce Statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-State refineries.

<sup>5</sup> California Air Resources Board, *Current California GHG Emission Inventory Data*, <https://ww2.arb.ca.gov/ghg-inventory-data>, accessed July 15, 2024.

<sup>6</sup> United States Energy Information Administration, *Table F16: Total Petroleum Consumption Estimates, 2021*, [https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep\\_fuel/html/fuel\\_use\\_pa.html&sid=US&sid=CA](https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA), accessed July 15, 2024.



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#### *Alternative Fuels*

A variety of alternative fuels are used to reduce petroleum-based fuel demand. Conventional gasoline and diesel may be replaced by alternative fuels, such as hydrogen, biodiesel, and electricity, depending on the capability of the vehicle. Currently, there are 36 biodiesel refueling stations, 107 hydrogen refueling stations, and 93,855 electric vehicle (EV) charging stations (41,384 public EV chargers and 52,471 private chargers) across California.<sup>7,8,9</sup>

#### *Local Service Providers*

Southern California Edison (SCE) provides electricity to the project site. SCE is an independently owned utility that provides electricity to approximately 15 million customers throughout a 50,000-square-mile service area, including 180 incorporated cities in 15 counties. In 2022, the total electricity consumption in the SCE service area was 107,876 GWh, with the greatest consumption occurring in the residential and commercial building sectors, which consumed 39,400 GWh and 36,069 GWh, respectively.<sup>10</sup>

Southern California Gas (SoCalGas) provides natural gas to the project site. SoCalGas provides natural gas to approximately 21.8 million customers throughout a 24,000-square-mile service area, including parts of the following counties: Riverside, Orange, San Bernardino, Los Angeles, Ventura, Santa Barbara, Kern, Inyo, Tulare, and Mono. In 2022, the total natural gas consumption in the SoCalGas service area was 6,566 million therms, with the greatest consumption occurring in the residential and industrial sectors, which consumed 2,275 million therms and 1,645 million therms, respectively.<sup>11</sup>

#### **Existing Energy Usage on the Project Site**

The project site is currently developed with the Hive Creative Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). The Hive Creative Campus consists of three existing two-story office buildings supported by a surface parking lot. Operation of the existing land uses consumes electricity for various purposes, including, but not limited to, heating, cooling, and ventilation of buildings; water heating; operation of electrical systems; security and control center functions; lighting; and use of on-site equipment and appliances. Based on California Emissions Estimator Model Version 2022.1 (CalEEMod). Existing on-site electricity consumption, natural gas consumption and operational fuel consumption are shown in [Table 5.5-2, \*Existing Electricity and Natural Gas Consumption\*](#).

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<sup>7</sup> United States Department of Energy, *Biodiesel Fueling Station Locations*, [https://afdc.energy.gov/fuels/biodiesel\\_locations.html#/find/nearest?fuel=BD](https://afdc.energy.gov/fuels/biodiesel_locations.html#/find/nearest?fuel=BD), accessed July 15, 2024.

<sup>8</sup> California Energy Commission, *Hydrogen Refueling Station in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/hydrogen-refueling>, accessed July 15, 2024.

<sup>9</sup> California Energy Commission, *Electric Vehicle Chargers in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/electric-vehicle>, accessed July 15, 2024.

<sup>10</sup> California Energy Commission, *2022 Total System Electric Generation*, <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>, accessed July 15, 2024.

<sup>11</sup> United States Department of Energy, *EIA forecasts record U.S. natural gas consumption in 2022*, <https://www.eia.gov/todayinenergy/detail.php?id=53839>, accessed August 8, 2024.



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**Table 5.5-2 Existing Energy Consumption**

Land Use	Electricity (kWh/year)	Natural Gas (therms)	Fuel Consumption (Gallons)
Existing Land Use	3,068,226	43,641	462,699

Source: Refer to [Appendix C](#).  
Notes: kWh/year = kilowatt-hours per year

### 5.5.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- E-1 Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
- E-2 Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

### 5.5.3 Environmental Impacts

#### 5.5.3.1 METHODOLOGY

##### Operations

The analysis of impacts related to energy use considered the potential future developments on the project site. The analysis of operational electricity and natural gas usage is based on the CalEEMod modeling results for the proposed project. The proposed project’s estimated electricity and natural gas consumption is based primarily on CalEEMod’s default settings for Orange County and consumption factors provided by SCE and SoCalGas, the electricity and natural gas providers for the City and the project site. The results of the CalEEMod modeling are included in [Appendix C](#). The amount of operational fuel consumption was estimated using the proposed project’s annual VMT as modeled in CalEEMod, and CARB EMFAC2021 website platform, which provides typical fuel efficiency for the County.

##### Energy Sources

The proposed project’s annual electricity and natural gas consumption were compared to the total consumption in Orange County in 2022, the latest year consumption data is available. Energy consumption from the existing uses was deducted from the proposed project’s consumptions. The CalEEMod modeling included energy consumption data for the proposed project. The annual electricity (kWh) and natural gas (therms) consumption from CalEEMod were used as the approximate annual energy consumption during operation.

##### Fuel Consumption

The proposed project’s mobile source energy consumptions were estimated by multiplying the proposed project’s total VMT calculated from proposed project trip generation and CalEEMod defaults values by the fuel consumption rate from EMFAC2021. Fuel consumption from mobile sources is based primarily upon *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California* (Traffic Study) prepared by Linscott, Law & Greenspan, Engineers on January 9, 2025. Under the existing (baseline) condition, the project site generates



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2,733 trips per day, and under the proposed project condition, the project would generate 4,948 trips per day. Therefore, the project would cause a net increase of 2,215 trips per day.

### Construction

The estimated construction fuel consumption is based on the proposed project's construction equipment list, timing/phasing, and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips. Project construction would require temporary energy consumption primarily using fuel for construction equipment, construction worker vehicle trips to and from the project site, and the import and export of earth materials to and from the project site by heavy trucks. Energy consumption during construction, including gasoline and diesel fuel consumption from construction equipment, hauling trips, vendor trips, and worker trips, was estimated using the assumptions and factors from CalEEMod.

The proposed project would require energy use in the form of on-site energy sources (electricity and natural gas) and from mobile sources in the form of fuel consumption.

### CEQA Guidelines Appendix F

Per CEQA Guidelines Appendix F, *Energy Conservation*, in order to ensure energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary energy consumption (Public Resources Code Section 21100(b)(3)). Environmental effects may include:

- The proposed project's energy requirements and its energy use efficiencies by amount and fuel type during demolition, construction, and operation; **(Criterion 1)**
- The effects of the proposed project on local and regional energy supplies; **(Criterion 2)**
- The effects of the proposed project on peak and base period demands for electricity and other forms of energy; **(Criterion 3)**
- The degree to which the proposed project complies with existing energy standards; **(Criterion 4)**
- The effects of the proposed project on energy resources; **(Criterion 5)** and
- The proposed project's projected transportation energy use requirements and its overall use of efficient transportation alternatives, if applicable. **(Criterion 6)**

#### 5.5.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.



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**Impact 5.5-1: The project would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. [Threshold E-1]**

*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* This analysis focuses on three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel for vehicle trips and off-road equipment associated with project construction and operations. The proposed project’s estimated annual energy consumption and the net increase from existing conditions is summarized in [Table 5.5-3, Project and County Energy Consumption](#).

**Table 5.5-3 Project and County Energy Consumption**

Energy Type	Existing Conditions <sup>1,2</sup>	Project Annual Energy Consumption <sup>1</sup>	Net Increase from Existing Conditions <sup>2</sup>	Orange County Annual Energy Consumption <sup>3</sup>	Percentage Increase Countywide
<b>Operational Energy Consumption</b>					
<b>Phase 1</b>					
Electricity Consumption (MWh)	1,703	2,089	386	20,243,722	0.0019%
Natural Gas Consumption (therms)	24,226	35,208	10,982	572,454,744	0.0019%
<b>Phase 1 and 2</b>					
Electricity Consumption (MWh)	3,068	4,035	967	20,243,722	0.0048%
Natural Gas Consumption (therms)	43,641	73,637	29,997	572,454,744	0.0052%
<b>Full Buildout (Phase 1 through 3)</b>					
Electricity Consumption (MWh)	3,068	5,743	2,675	20,243,722	0.0132%
Natural Gas Consumption (therms)	43,641	116,843	73,202	572,454,744	0.0128%
<b>Operational Fuel Consumption (Gallons)</b>					
Phase 1: Operational Automotive Fuel Consumption	322,254	282,141	-40,113	1,184,141,101 (2028 Projections)	-0.0034%
Phase 1 and 2: Operational Automotive Fuel Consumption	462,699	554,670	91,971	1,130,010,864 (2031 Projections)	0.0081%
Full Buildout: Operational Automotive Fuel Consumption	462,699	857,795	395,096	1,089,146,174 (2036 Projections)	0.0363%
<b>Construction Fuel Consumption (Gallons)<sup>4</sup></b>					
<b>Phase 1</b>					
Construction Diesel	--	22,783	22,783	13,230,135 (2026 Projections)	0.1722%
Construction Gasoline	--	93,040	93,040	1,088,796,204 (2026 Projection)	0.0085%
<b>Phase 2</b>					
Construction Diesel	--	19,811	19,811	13,376,523 (2028 Projections)	0.1481%
Construction Gasoline	--	120,119	120,119	1,184,141,101 (2028 Projections)	0.0101%
<b>Phase 3</b>					
Construction Diesel	--	19,531	19,531	13,466,073 (2031 Projections)	0.1450%
Construction Gasoline	--	146,569	146,569	1,130,010,864 (2031 Projections)	0.0130%





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#### Table 5.5-3, Notes

Notes:

1. As modeled in CalEEMod version 2022.1.
2. Refer to [Table 5.5-2](#) for existing energy consumption. The existing conditions do not include any construction activities. Existing conditions under Phase 1 operation include existing buildings to be demolished during construction Phase 1, while existing conditions under Phase 1 and 2 operation and full buildout include all existing buildings to be demolished.
3. The project's electricity and natural gas consumption are compared to the total consumption in Orange County in 2022, the latest year consumption data is available. Countywide fuel consumption is from the California Air Resources Board EMFAC2021 model. The Countywide projected fuel consumption is based on the first year of operation for each phase (operational fuel consumption) or first year of construction for each phase (construction fuel consumption). Orange County electricity consumption data source: California Energy Commission, Electricity Consumption by County, <http://www.ecdms.energy.ca.gov/elecbycounty.aspx>, accessed July 15, 2024. Orange County natural gas consumption data source: California Energy Commission, Gas Consumption by County, <http://www.ecdms.energy.ca.gov/gasbycounty.aspx>, accessed July 15, 2024.
4. Annual construction fuel consumption was calculated by averaging the total consumption over eight years of construction duration. The construction fuel consumption is compared to the Countywide diesel fuel consumption used for the mining and construction sector.

Refer to [Appendix C](#) for assumptions used in this analysis.

#### Construction

During construction, the project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during demolition, grading, building construction, paving, and architectural coatings. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements that heavy-duty diesel equipment not in use for more than five minutes be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).

The project-related incremental increase in the use of energy bound in construction materials, such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas), would not substantially increase demand for energy compared to overall local and regional demand for construction materials. As indicated in [Table 5.5-3](#), the project would consume the most gasoline during Phase 3 of construction. The project's annual average fuel consumption from gasoline construction vehicle use during Phase 3 would be approximately 146,569 gallons, which would account for 0.0130 percent of the County's annual gasoline consumption. Additionally, the project would consume the most diesel during Phase 1 of construction. Also indicated in [Table 5.5-3](#), the project's annual average fuel consumption from diesel construction equipment use during Phase 1 would be approximately 22,783 gallons, which would account for 0.1722 percent of the County's annual diesel consumption. It should be noted that the Countywide annual diesel consumption is based solely on diesel consumption for the mining and construction sector. As such, construction would have a nominal effect on the local and regional energy supplies (**Criterion 1** and **Criterion 2**).

Construction fuel use is temporary and would cease upon completion of construction activities. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State (**Criterion 5**). Additionally,



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construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the EPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements, such as the current 2022 CALGreen Code, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris (refer to PPP EN-4 and EN-6). Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects. As such, a less than significant impact would occur.

#### *Operation*

##### ***Transportation Energy Demand***

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. As indicated in [Table 5.5-3](#), the project's operational automotive transportation at full buildout (Phase 1 through Phase 3) is estimated to consume approximately 857,795 gallons of fuel per year, or a net increase of 395,096 gallons from existing conditions. This net increase would account for 0.0363 percent of the County's forecasted annual consumption of fuel for the buildout year of 2036. As such, the proposed project would account for a nominal percentage of the forecasted annual operational automotive fuel consumption for the County and, thus, would have a nominal effect on the local and regional energy supplies. The project does not propose any unusual features that would result in excessive long-term operational fuel consumption (**Criterion 1** and **Criterion 2**).

The project would include multiple parking structures. The proposed project would be required to comply with the most current and applicable version of the Title 24 standards pertaining to EV capable spaces and parking stalls with EV chargers. The project would also include features such as bicycle parking, electric vehicle charging station, and vanpool/carpool parking, which would promote near-zero and zero-emissions technologies and encourage alternative modes of transportation (refer to PPP EN-1, EN-3 and EN-5). Additionally, the project site is surrounded by bus stops that are serviced by Orange County Transportation Agency (OCTA). Thus, the project would encourage and support the use of EVs and alternative modes of transportation, thus reducing petroleum fuel consumption (**Criterion 4** and **Criterion 6**).

Therefore, fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. A less than significant impact would occur.

##### ***Building Energy Demand***

The CEC developed 2024 to 2040 forecasts for energy consumption and peak demand in support of the 2023 IEPR for each of the major electricity and natural gas planning areas and the State based on the economic and



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demographic growth projections. CEC forecasted baseline electricity consumption grows at a rate of about 1.7 percent annually through 2040.<sup>12</sup> The natural gas consumption grows at a rate of about 0.2 percent annually through 2035.<sup>13</sup> As shown in [Table 5.5-3](#), the project's operational energy consumption at full buildout would result in an annual electricity and natural gas consumption of 5,743 MWh and 116,843 therms, respectively. This would represent a net increase of 2,675 MWh and 73,202 therms from existing conditions. [Table 5.5-3](#) also shows the net increase of operational energy consumption would result in approximately 0.0132 percent increase in electricity consumption and approximately 0.0128 percent increase in natural gas consumption over the current Countywide usage. As such, energy consumption would be significantly below CEC's forecasts and the current Countywide usage. Therefore, the project would be consistent with the CEC's energy consumption forecasts and would not require additional energy capacity or supplies (**Criterion 1** and **Criterion 2**). The project would also consume energy during the same time periods as other surrounding residential and commercial developments. As a result, the project would not result in unique or more intensive peak or base period electricity demand (**Criterion 3**).

The project would be required to comply with the most current and applicable version of the Title 24 Building Energy Efficiency Standards (commonly known as Title 24), which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting (refer to PPP EN-1 through EN-3). The project would also comply with the CALGreen Code pertaining to the installation of EV charging stations. Compliance with the most current and applicable Title 24 standards significantly reduces energy usage (**Criterion 4**).

Furthermore, the electricity provider, SCE, is subject to California's RPS. The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 60 percent of total procurement by 2030 and 100 percent of total procurement by 2045. Renewable energy is generally defined as energy that comes from resources which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. The increase in reliance of such energy resources further ensures that new development projects will not result in the waste of the finite energy resources. In compliance with Title 24, including the CALGreen Code, the project would install high efficiency lighting and energy efficient appliances. The project would also include solar ready roofs. As a result, the project would ensure energy consumption to be kept to a minimum through these components (refer to PPP EN-1) (**Criterion 5**).

Based on the analysis above, the project would not cause wasteful, inefficient, and unnecessary consumption of building energy during project operation, or preempt future energy development or future energy conservation. As such, impacts resulting from the proposed project would be less than significant.

<sup>12</sup> California Energy Commission, *2023 Integrated Energy Policy Report*, page 130, July 14, 2024.

<sup>13</sup> Based on the *2023 Integrated Energy Policy Report*, the gas forecast is updated every two years, in odd years. As such, the natural gas consumption shown here is based on the California Energy Commission, *Final 2022 Integrated Energy Policy Report Update*, page 140, May 10, 2023.



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#### *Plans, Programs, Policies:*

- PPP EN-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and the California Green Building Standards Code (CALGreen; Title 24, Part 11). The 2022 Building Energy and Efficiency Standards and 2022 CALGreen are most current standards and are updated tri-annually with a goal to achieve zero net energy for residential buildings and non-residential buildings.
- PPP EN-2 To reduce water demands and energy use associated with landscape water use, the proposed project is required to implement a landscaping palette emphasizing drought-tolerant plants and water-efficient irrigation techniques consistent with provisions of the City's Model Water Efficient Landscape Ordinance (MWELO; Ordinance No. 16-03) requirements.
- PPP EN-3 To reduce water demands and associated energy use associated with indoor water use, the proposed project is required to provide plumbing fixtures that meet the United States Environmental Protection Agency (EPA) Certified WaterSense, most current and applicable version California Green Building Standards Code (CALGreen) standards or equivalent, faucets, toilets, and other plumbing fixtures. The water conservation strategy is required to demonstrate a minimum 20 percent reduction in indoor water usage compared to baseline water demand (total expected water demand without implementation of the water conservation strategy).
- PPP EN-4 The construction contractor is required to recycle/reuse at least 65 percent of the construction material including, but not limited to, soil, mulch, vegetation, concrete, lumber, metal, and cardboard, and to use "green building materials" such as those materials that are rapidly renewable or resource-efficient, and recycled and manufactured in an environmentally friendly way, as specified in the California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program.
- PPP EN-5 Per the most current and applicable version California Green Building Standards Code (CALGreen) standards, construction of the proposed project is required to include installation of electric vehicle (EV) charging stations and designated EV parking at non-residential and residential buildings. Preferential parking for low-emitting, fuel-efficient, and carpool/car share/van vehicles is required in all parking areas.
- PPP EN-6 Construction contractors are required to minimize non-essential idling of construction equipment during construction in accordance with California Code of Regulations (CCR) Section 2449, Title 13, Article 4.8, Chapter 9.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.



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**Impact 5.5-2: The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. [Threshold E-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The City does not have an applicable local plan for renewable energy or energy efficiency. However, the project would comply with the State and regional plans for renewable energy and energy efficiency. State and regional plans for renewable energy and energy efficiency include the CEC's IEPR and Title 24 standards, including the CALGreen Code. The project would meet the most current and latest Title 24 standards for energy efficiency and incorporate all applicable energy efficiency measures (high efficiency lighting, energy efficient appliances, etc.) (refer to PPP EN-1 through EN-3). Compliance with Title 24 standards, including the CALGreen Code, would ensure the project's consistency with the IEPR building energy efficiency recommendations, which would, in turn, ensure project conformance with the State's energy reduction goals. Furthermore, due to the location of the project, although there are no local sources of energy from some renewable sources including biodiesel, biomass hydroelectric and small hydro, digester gas, fuel cells, landfill gas, municipal solid waste, ocean thermal, ocean wave and tidal current technologies, or multi-fuel facilities using renewable fuels, as discussed above, the project would include solar ready roofs and would generate renewable energy on-site through installation of solar panels, in compliance with Title 24 standards. The project site's electricity provider, SCE, is also subject to SB 100, which is required to procure eligible renewable electricity for 60 percent by December 31, 2030, and 100 percent by December 31, 2045. As such, the project would be consistent with State and local plans and regulations for renewable energy.

Therefore, the proposed project would not conflict with any State or local plan for renewable energy or energy efficiency, and impacts are less than significant in this regard.

*Plans, Programs, Policies:* Refer to PPP EN-1 through EN-3.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.5.4 Cumulative Impacts

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**Impact 5.5-3: The project would not result in a cumulatively significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. [Threshold E-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The geographic context for the cumulative analysis of electricity consumption is SCE's service area and the geographic context for the cumulative analysis of natural gas consumption is SoCalGas' service area. While the geographic context for transportation-related energy use is more difficult to define, it is meaningful to consider the project in the context of countywide consumption. Growth within these areas is



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anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

Buildout of the project and additional growth forecasted to occur in the SCE and SoCalGas service areas would increase electricity and natural gas consumption. Therefore, the project and related projects would cumulatively increase the need for electrical and natural gas supplies and infrastructure capacity, potentially including new or expanded electrical and natural gas facilities. However, as discussed above, the project's electricity demand would not significantly increase SCE's total electricity demand for its service population, and the project's natural gas demand would be nominal compared to SoCalGas' total natural gas demand for its service population. Although future developments would result in the use of renewable and nonrenewable electricity and natural gas resources during construction and operation, which could limit future availability, the use of such resources would be on a relatively small scale given the sizes and types of uses proposed by the related projects and would be reduced by measures being similarly implemented for the project. In addition, SCE and SoCalGas implement long-range planning methods that would account for regional and local growth expectations for their respective service areas. Furthermore, other future development projects and related projects would be expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and Title 24 standards, and incorporate mitigation measures, as necessary. As such, the project's contribution to cumulative impacts related to the wasteful, inefficient, and unnecessary use of electricity and natural gas would not be cumulatively considerable and, therefore, would be less than significant.

Buildout of the project, the related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. As analyzed above, project transportation fuel usage would represent a small percentage of total fuel consumption within Orange County. As with the project, other future development projects would be expected to reduce VMT by encouraging the use of alternative modes of transportation by providing on-site bicycle parking spaces. As such, the project's contribution to cumulative impacts related to the wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and, therefore, would be less than significant.

As discussed, the project would increase electricity and natural gas demands on-site compared to existing conditions. However, the project would be required to comply with PPP EN-1 through EN-6 related to compliance with the Title 24 and CALGreen Standards. As the project would result in less than significant impacts in this regard, the project's cumulative impacts would not be cumulatively considerable.

***Plans, Programs, Policies:*** Refer to PPP EN-1 through EN-6.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.



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**Impact 5.5-4: The proposed project, in combination with related projects, would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. [Threshold E-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The related projects within the project vicinity and future development projects would be required to comply with the CALGreen Code, and the Title 24 Standards. As related projects would be required to meet the same energy consumption standards, there would be no significant cumulative impacts with regard to consistency with applicable State and regional plans for renewable energy and energy conservation plans. Therefore, the project's contribution to cumulative impacts related to consistency with adopted energy conservation plans or state/local energy standards for renewable energy or energy efficiency would not be cumulatively considerable and, therefore, would be less than significant.

Furthermore, the project and other cumulative projects in the vicinity would be subject to the most current version of the Title 24 and CALGreen Standards pursuant to PPP EN-1 through PPP EN-3. As the project would result in less than significant impacts in regard to conflicting with State or local plans for renewable energy or energy efficiency, the project's cumulative impacts would not be cumulatively considerable. Impacts would be less than significant.

*Plans, Programs, Policies:* Refer to PPP EN-1 through EN-3.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.5.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to energy have been identified.



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## Chapter 5.6 Geology and Soils



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### 5.6 GEOLOGY AND SOILS

This section of the Draft EIR evaluates the potential for the project to impact geological and soil resources, paleontological resources, and unique geologic features. The analysis in this section is based in part on the following technical reports:

- *Cultural and Paleontological Resources Identification Memorandum for the Costa Mesa Hive Live Project, City Of Costa Mesa, Orange County, California* (Cultural and Paleo Resources Memo), prepared by Michael Baker International (Michael Baker), dated June 3, 2024; and
- *Geotechnical Investigation, The Hive – Proposed Multi-Family Residential Development, Susan Street and West Sunflower Street, Costa Mesa, California* (Geotechnical Investigation), prepared by NOVA Services (NOVA), dated February 29, 2024.

Complete copies of these studies are included in [Appendix E, \*Cultural and Paleontological Resources Identification Memorandum\*](#), and [Appendix F, \*Geotechnical Investigation\*](#), respectively.

#### 5.6.1 Environmental Setting

##### 5.6.1.1 REGULATORY FRAMEWORK

Refer to [Section 5.9, \*Hydrology and Water Quality\*](#), for a discussion of Federal, State, and regional laws, regulations, plans or guidelines in place to reduce impacts related to soil erosion and loss of topsoil.

##### **Federal**

##### *Earthquake Hazards Reduction Act*

The Earthquake Hazards Reduction Act was enacted in 1997 to “reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program.” It established the National Earthquake Hazard Reduction Program (NEHRP), which refined the description of agency responsibilities, program goals, and objectives. NEHRP’s mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. NEHRP designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards.

##### *Uniform Building Code*

The Uniform Building Code (UBC) is published by the International Conference of Building Officials and forms the basis for California Building Code (CBC), as well as approximately half of the state building codes in the United States. It has been adopted by the California Legislature to address the specific building conditions



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and structural requirements for California, as well as provide guidance on foundation design and structural engineering for different soil types. The UBC defines and ranks the regions of the United States according to their seismic hazard potential. There are four types of regions defined by Seismic Zones 1 through 4, with Zone 1 having the least seismic potential and Zone 4 having the highest.

#### *U.S. Geological Survey Landslide Hazard Program*

The primary objective of the U.S. Geological Survey (USGS) Landslide Hazard Program is to reduce long-term losses from landslide hazards by improving our understanding of the causes of ground failure and suggesting mitigation strategies. The Landslide Hazard Program provides information on landslide hazards, including information on current landslides, landslide reporting, real-time monitoring of landslide areas, mapping of landslides through the National Landslide Hazards Map, local landslide information, landslide education, and research. The Landslide Hazard Program works closely with States, other bureaus within the Department of the Interior, and other Federal and State agencies to reduce landslide losses.

### State

#### *Alquist-Priolo Earthquake Fault Zoning Act*

The Alquist-Priolo Earthquake Fault Zoning Act was signed into State law in 1972. Its primary purpose is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy across the trace of an active fault. The act delineates “Earthquake Fault Zones” along faults that are “sufficiently active” and “well defined.” The act also requires cities and counties withhold development permits for sites within an earthquake fault zone until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. Pursuant to this act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault.

#### *Seismic Hazard Mapping Act*

The Seismic Hazard Mapping Act (SHMA) was adopted by the State in 1990 to protect the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the SHMA is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey (CGS) prepares and provides local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. SHMA requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). In addition, the SHMA requires real estate sellers and agents at the time of sale to disclose whether a property is within a designated Seismic Hazard Zone.

#### *California Building Code*

Current law states every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the CBC within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the CBC is also known as Title 24, Part 2 of the California



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Code of Regulations. The most recent building standard adopted by the legislature and used throughout the State is the 2019 version of the CBC (effective January 1, 2020). The CBC provides minimum standards to protect property and public safety by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground shaking with specified probability of occurring at a site.

### *Natural Hazards Disclosure Act*

The Natural Hazards Disclosure Act requires sellers of real property and their agents provide prospective buyers with a “Natural Hazard Disclosure Statement” when the property being sold lies within one or more State-mapped hazard areas, including a Seismic Hazard Zone. California law also requires when houses built before 1960 are sold, the seller must give the buyer a completed earthquake hazards disclosure report and a booklet titled “The Homeowners Guide to Earthquake Safety.” This publication was written and adopted by the California Seismic Safety Commission.

### *Soils Investigation Requirements*

Requirements for soils investigations for subdivisions requiring tentative and final maps, and for other specified types of structures, are in California Health and Safety Code Sections 17953–17955 and in Section 1802 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Studies must be done as needed to evaluate slope stability, soil strength, position and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

### *California Public Resources Code*

Paleontological sites are protected under a wide variety of State policies and regulations in the California Public Resources Code. In addition, paleontological resources are recognized as nonrenewable resources and receive protection under the Public Resources Code and CEQA. Public Resources Code Division 5, Chapter 1.7, Section 5097.5, and Division 20, Chapter 3, Section 30244 states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

This statute prohibits the removal, without permission, of any paleontological site or feature from lands under the jurisdiction of the State or any city, county, district, authority, or public corporation, or any agency thereof. As a result, local agencies are required to comply with Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits)



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undertaken by others. Public Resources Code Section 5097.5 also establishes the removal of paleontological resources as a misdemeanor and requires reasonable mitigation of adverse impacts to paleontological resources from developments on public (State, county, city, and district) lands.

#### Local

##### *General Plan*

The Safety Element of the General Plan includes the following goals, objectives, and policies pertaining to geology and soils:

- **Goal S-1:** Risk Management of Natural and Human-Caused Disasters. Minimize the risk of injury, loss of life, property damage, and environmental degradation from seismic activity, geologic hazards, flooding, fire, and hazardous materials. Promote a sustainable approach to reduce impacts of natural disasters, such as flooding and fire.
  - **Objective S-1A:** Work to mitigate and prevent potential adverse consequences of natural and human-caused disasters.
    - **Policy S-1.1:** Continue to incorporate geotechnical hazard data into future land use decision-making, site design, and construction standards.
    - **Policy S-1.5:** Enforce applicable building codes relating to the seismic design of structures to reduce the potential for loss of life and property damage.
    - **Policy S-1.7:** Continue to implement the Seismic Hazard Mapping Act, which requires sites within liquefaction hazard areas to be investigated for liquefaction susceptibility prior to building construction or human occupancy.
    - **Policy S-1.8:** Consider site soils conditions when reviewing projects in areas subject to liquefaction or slope instability.

##### *Municipal Code*

Municipal Code Section 5-1, *Construction Codes Adopted*, adopts the CBC based on the International Building Code (IBC) as published by the International Code Council for the purpose of prescribing regulations for construction, demolition, occupancy, equipment use, height, and area of buildings and structures.

##### *Costa Mesa Disaster Plan*

The City of Costa Mesa's Local Hazard Mitigation Plan (LHMP) was approved by the City Council on April 4, 2023, and approved by FEMA on April 18, 2023. The LHMP provides a comprehensive assessment of the threats that the City faces from natural and human-caused hazard events and a coordinated strategy to reduce these threats. It identifies resources and information to help community members, City staff, and local officials understand local threats and make informed decisions. The LHMP can also support increased coordination



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and collaboration between the City, other public agencies, local employers, service providers, community members, and other key stakeholders.

### 5.6.1.2 EXISTING CONDITIONS

#### Geology and Subsurface Conditions

##### *Regional Geology*

The project site is located within the Peninsular Ranges Geomorphic Province of California, which stretches from the Los Angeles basin to the tip of Baja California in Mexico. This province is characterized as a series of northwest-trending mountain ranges separated by subparallel fault zones and a coastal plain of subdued landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by plutonic rocks of the western Peninsular Ranges batholith, while the coastal plain is underlain by subsequently deposited marine and nonmarine sedimentary formations. The site is located within the coastal plain portion of the province and is underlain by Quaternary, Late Holocene to Late Pleistocene alluvial deposits.

##### *Site-Specific Geology*

A subsurface investigation conducted as part of the Geotechnical Investigation indicates that the site is underlain by minor fill and alluvial deposits. These materials are presented below:

- **Fill (af):** Fill was encountered with an approximate thickness up to about three feet. The fill generally consists of slightly moist to moist, soft to stiff sandy silt and sandy clay to loose to medium dense clayey sand. There is no records regarding the placement and compaction of the fill; therefore, the fill is considered 'undocumented' and at risk for wide variations in quality.
- **Alluvium (Qa):** The site is underlain by Quaternary-aged Alluvium. The alluvium consists of olive brown and brown with variable red brown mottling, firm to stiff, sandy clay to clay and sandy silt to clayey silt. Layers of sand were observed at 25 and 40 feet.
- **Groundwater:** Groundwater was encountered between 22 and 24 feet below ground surface. Groundwater was previously observed at depths between 15 and 20 feet by a previous geotechnical consultant (NMG Geotechnical) during their exploration in 2002. According to the Geotechnical Investigation, the site is mapped with a historical groundwater depth of 10 feet.

#### Geologic Hazards

##### *Faulting and Surface Rupture*

Major known active faults in the region consist generally of overlapping, staggered, northwest striking, right-lateral, strike-slip faults. These include the San Andreas, Elsinore, and San Jacinto Faults located east of the site, and the Palos Verdes, San Pedro Basin Fault Zone, and Newport-Inglewood-Rose Canyon Fault Zone (NIRC) located to the west of the site.



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Earthquake Fault Zones have been established along known active faults in California in accordance with the Alquist-Priolo Earthquake Fault Zoning Act. The State Geologist defines an “active” fault as one which has had surface rupture within recent geologic time (i.e., Holocene time, <11,700 years before present [BP]). Earthquake Fault Zones have been delineated to encompass traces of known Holocene-active faults to address hazards associated with fault surface rupture within California. Where developments for human occupancy are proposed within these zones, the state requires detailed fault evaluations be performed so that engineering geologists can identify the locations of active faults and recommend setbacks from locations of possible surface fault rupture.

According to the Geotechnical Investigation, the project site is not located in the Alquist-Priolo Earthquake Fault Zone. No active surface faults are mapped across the site. Further, evidence of active faulting was not observed at the site during the field investigation conducted as part of the Geotechnical Investigation.

#### *Seismicity*

Although no active surface faults are mapped across the site nor evidence of active faulting was observed at the site during the field investigation, the site is located in the seismically active Southern California region and could be subjected to moderate to strong ground shaking in the event of an earthquake associated with one of the many active Southern California faults, as described above.

#### *Liquefaction and Lateral Spreading*

Liquefaction occurs when loose, saturated, generally fine sands and silts are subjected to strong ground shaking. The soils lose shear strength and become liquid, resulting in large total and differential ground surface settlements, as well as possible lateral spreading during an earthquake.

The project site is located within a State-designated zone for liquefaction; refer to the Geotechnical Investigation Figure 5-2, *California Department of Conservation Seismic Hazard Zones*. Specifically, as part of the Geotechnical Investigation, engineering analyses were performed to evaluate the potential for liquefaction at the project site if a design earthquake event were to occur. High groundwater was assumed at a depth of 10 feet bgs based historic high groundwater level. Results of the analyses indicate that on-site soils are potentially prone to liquefaction during a design earthquake event. The estimated settlement caused by soil liquefaction is on the order of 0.5 to 0.7 inches.

Lateral spreading is a phenomenon in which surface sediment moves downslope due to liquefaction in a subsurface layer. As detailed above, the project site is located within a State-designated zone for liquefaction with results of site-specific analysis indicating that some subsurface layers are potentially prone to liquefaction during an earthquake event. Since there is the potential for liquefaction to occur at the project site, lateral spreading is also possible.

#### *Landslides and Slope Stability*

According to the Geotechnical Investigation, the site is relatively level with elevations ranging from 30 feet above mean sea level (amsl) to 34 feet amsl throughout the site. Evidence of landslides, deep-seated landslides,





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or slope instabilities was not observed at the time of the field evaluation conducted as part of the Geotechnical Investigation. Additionally, there are no mapped landslides in the vicinity of the project site in both published geologic maps and the California Department of Conservation Landslide Inventory database. As such, the Geotechnical Investigation determined that the potential for landslides or slope instabilities to occur at the site is considered very low given the flat topography, and flat-lying geological structure below the site.

### *Subsidence*

Subsidence occurs when a large portion of land is displaced vertically, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content.

According to the Geotechnical Investigation, the site is not located in an area of known subsidence associated with fluid withdrawal (groundwater or petroleum). Therefore, the Geotechnical Investigation determined that the potential for subsidence to occur at the site due to the extraction of fluids is considered very low.

### *Ground Settlement and/or Collapse*

According to the Geotechnical Investigation, the site is underlain by minor undocumented fill and alluvial deposits, with surcharge fill placed as part of the development of the existing commercial structures. However, the limits of the surcharge fill are unknown and likely limited to the existing structures. The deeper portions of the alluvial deposits are considered suitable for support of structural or fill loads. The undocumented fill and the near-surface portions of the alluvium, however, is potentially compressible and unsuitable for support of structural or fill loads.

### *Expansive Soils*

Expansive soils occur when the moisture content in the soil causes swelling or shrinking as a result of cyclic wet/dry weather cycles, installation of irrigation systems, change in landscape plantings, or changes in grading. Swelling and shrinking soils can result in differential movement of structures, including floor slabs and foundations, and site work including hardscape, utilities, and sidewalks. According to the Geotechnical Investigation, on-site soils are anticipated to have a low expansion potential.

### **Groundwater**

As detailed in the Geotechnical Investigation and discussed above, groundwater was encountered between 22 and 24 feet below ground surface. Groundwater was previously observed at depths between 15 and 20 feet in 2002. According to the Geotechnical Investigation, the site is mapped with a historical groundwater depth of 10 feet. As such, although the permanent groundwater table is at deep enough levels not expected to be a constraint to development, the Geotechnical Investigation determined that groundwater seepage may develop in the future.



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#### Paleontological Resources

According to the Cultural and Paleo Resources Memo, no significant fossils have been previously recovered from the project site. However, several vertebrate and invertebrate fossils have been recovered from nearby (within five miles of the project site) exposures of rock formations anticipated also to underlie the project site. The Holocene-age deposits in the project site have low sensitivity. However, Pleistocene-age alluvial sediments may underlie these younger sediments at a relatively shallow depth. Results of records search indicate that potentially fossil-bearing units may be present in Pleistocene-age deposits. As such, the Cultural and Paleo Resources Memo concluded that sediments in the project site are considered to have paleontological sensitivity increasing with depth from low-to-high sensitivity.

#### 5.6.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- G-1 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?
- G-2 Result in substantial soil erosion or the loss of topsoil?
- G-3 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?
- G-4 Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.?
- G-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No impacts relating to Threshold G-4 were identified, as substantiated in [Section 8.0, \*Effects Found Not to Be Significant\*](#). This threshold is not addressed in the following analysis.



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### 5.6.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.6-1: Development of the proposed project would not directly or indirectly cause potential substantial adverse effects involving seismic-related hazards. [Threshold G-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Rupture of a Known Fault*

As indicated in [Section 5.6.1.2](#), the project site is not located in an Alquist-Priolo Earthquake Fault Zone. No active surface faults are mapped across the site. Further, evidence of active faulting was not observed at the site during the field investigation conducted as part of the Geotechnical Investigation. As such, the probability of fault rupture is considered low. No impacts would occur in this regard.

*Ground Shaking*

Although the proposed project would introduce new buildings and associated residents, visitors, and workers, the project itself would not exacerbate ground shaking on-site or in the area. The Southern California region regularly experiences seismic activity. As indicated in [Section 5.6.1.2](#), the primary seismic hazard at the site is the potential for moderate to severe ground shaking in response to large-magnitude earthquakes generated during the lifetime of the proposed development. However, the risk of strong ground motion is common to all construction in Southern California region and is typically mitigated through building design in accordance with the CBC. As part of the Geotechnical Investigation, a site-specific ground motion hazard analysis was performed in accordance with Chapter 21 of ASCE 7-16 to obtain site-specific seismic design acceleration parameters, the risk-targeted maximum considered earthquake response spectrum, and the design earthquake response spectrum. The site-specific seismic design parameters are presented in Table 5-2, *2022 CBC and ASCE 7-16 Site-Specific Seismic Design Parameters*, of the Geotechnical Investigation. These design requirements would minimize potential for building collapse and general building damage during seismic ground shaking. Adherence to the seismic design parameters included in the Geotechnical Investigation and CBC (refer to PPP GEO-1 and GEO-2) would be confirmed during plan check and building design review with the City of Costa Mesa. Therefore, compliance with the Geotechnical Investigation's recommendations and the CBC would ensure project implementation would not result in direct or indirect substantial adverse effects involving strong seismic ground shaking. Impacts related to seismic ground shaking would be less than significant in this regard.

*Seismic-related Ground Failure Including Liquefaction*

As indicated in [Section 5.6.1.2](#), the project site is located within a State-designated zone for liquefaction. Specifically, as part of the Geotechnical Investigation, engineering analyses were performed to evaluate the potential for liquefaction at the project site if the design earthquake event were to occur. High groundwater



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was assumed at a depth of 10 feet bgs based historic high groundwater level. Results of the analyses indicate that some subsurface layers are potentially prone to liquefaction during the design earthquake event. Further, the estimated settlement caused by soil liquefaction is on the order of 0.5 to 0.7 inches.

Future development associated with the project would be required to comply with the seismic design requirements detailed under the CBC (refer to PPP GEO-1). Furthermore, the Geotechnical Investigation includes specific design recommendations that would reduce potential liquefaction settlement impacts during an earthquake event (refer to PPP GEO-2). Adherence to the seismic design parameters included in the Geotechnical Investigation and required by the CBC (refer to PPP GEO-1 and GEO-2, respectively) would be confirmed during plan check and building design review with the City of Costa Mesa. As a result, impacts concerning seismic-related ground failure, including liquefaction would be less than significant.

#### *Landslides*

According to the Geotechnical Investigation, the site is relatively level with no evidence of landslides, deep-seated landslides, or slope instabilities observed during the field evaluation conducted as part of the Geotechnical Investigation. Additionally, there are no mapped landslides in the vicinity of the project site. As such, the Geotechnical Investigation determined that the potential for landslides or slope instabilities to occur at the site is considered very low given the flat topography, and flat-lying geological structure below the site. No impact would occur in this regard.

#### *Plans, Programs, Policies:*

PPP GEO-1 As required by Municipal Code Section 5-1, *Construction Codes Adopted*, the project is required to comply with the most recent edition of the California Building Code (CBC). Adherence to the most recent edition of the CBC would preclude significant adverse effects associated with seismic hazards.

PPP GEO-2 As required by Municipal Code Section 5-1, *Construction Codes Adopted*, the project is required to comply with the recommendations outlined in a project-specific geotechnical report, such as the *Geotechnical Investigation, The Hive – Proposed Multi-Family Residential Development, Susan Street and West Sunflower Street, Costa Mesa, California* (Geotechnical Investigation), prepared by NOVA Services (NOVA), dated February 29, 2024.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.6-2: Development of the proposed project would not result in substantial soil erosion or loss of topsoil. [Threshold G-2]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.



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### ***Impact Analysis:***

#### ***Construction***

Refer to [Section 5.9](#), Impact 5.9-1 and Impact 5.9-3 for a full discussion of the project's impacts and regulatory requirements pertaining to soil erosion during construction. The following discussion summarizes these impacts regarding geology and soil.

Site grading and project construction activities would disturb and expose soil and could, thus, accelerate erosion if effective soil erosion measures are not used. As detailed under Impact 5.9-1, construction projects of one acre or more, including the proposed project, are regulated under the Statewide Construction General Permit. Applicable projects are required to obtain coverage under the Construction General Permit by developing and implementing a Storm Water Pollution Prevention Plan (SWPPP), which estimates sediment risk from construction activities to receiving waters and specifies BMPs that would be used by the project to minimize pollution of stormwater (refer to PPP HYD-1). Categories of BMPs used in SWPPPs are described in [Table 5.9-1, \*Construction Best Management Practices\*](#), in [Section 5.9](#). Further, the project would be subject to compliance with SCA HYD-1 through SCA HYD-3, which would ensure construction BMPs are implemented to reduce potential impacts to water quality during project operations. Overall, implementation of BMPs as specified in a project-specific SWPPP (refer to PPP HYD-1) and compliance with SCA HYD-1 through SCA HYD-3 would ensure construction impacts on soil erosion or loss of topsoil would be less than significant.

#### ***Operations***

The project would be subject to Municipal Code Section 13-107, *Irrigation Requirements* (refer to PPP HYD-4), which requires irrigation systems be designed so that overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences are minimized. Automatic systems for watering cycles should be scheduled to maximize ground infiltration rates and further minimize runoff. Furthermore, in compliance with the NPDES, small MS4 post-construction control measures to minimize the potential for erosion and siltation are required. A final WQMP must be submitted and approved by the City prior to the issuance of a grading permit. The WQMP includes site design measures, source control measures, and treatment measures that minimize the potential for erosion and siltation. In addition, the WQMP must include an Operations and Management (O&M) plan and maintenance agreement for review and approval by the City to ensure the treatment measures installed at the site are maintained for perpetuity (refer to PPP HYD-6). Collectively, implementation of the BMPs outlined in the SWPPP, the erosion and sediment control plan, and the proposed landscaping and water quality design features (refer to PPP HYD-1 through PPP HYD-4, PPP HYD-6, and SCA HYD-1 through SCA HYD-3) would address the anticipated erosion impacts during project construction and operations and ensure impacts would be less than significant in this regard.

***Plans, Programs, Policies:*** Refer to [Section 5.9, \*Hydrology and Water Quality\*](#) for a discussion of PPP HYD-1 through PPP HYD-4, and PPP HYD-6.

***Standard Conditions of Approval:*** Refer to [Section 5.2, \*Air Quality\*](#), for a discussion of SCA HYD-1 through SCA HYD-3.



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**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.6-3: Development of the proposed project would not 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. [Threshold G-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

#### **Impact Analysis:**

##### **Slope Stability and Landslides**

As indicated in [Section 5.6.1.2](#) and analyzed under Impact 5.6-1, the potential for landslides or slope instabilities to occur at the site is considered very low given the flat topography, and flat-lying geological structure below the site. As such, no impact would occur in this regard.

##### **Subsidence**

As indicated in [Section 5.6.1.2](#), the site is not located in an area of known subsidence associated with fluid withdrawal (groundwater or petroleum). Therefore, the Geotechnical Investigation determined that the potential for subsidence to occur at the site due to the extraction of fluids is considered very low. No impact would occur in this regard.

##### **Liquefaction and Lateral Spreading**

As indicated in [Section 5.6.1.2](#), the project site is located within a State-designated zone for liquefaction. As there is potential for liquefaction to occur at the project site, lateral spreading is also possible.

Future development associated with the project would be required to comply with the design requirements detailed under the CBC (refer to PPP GEO-1). Furthermore, the Geotechnical Investigation includes specific design recommendations that would reduce potential liquefaction settlement impacts during an earthquake event (refer to PPP GEO-2). Adherence to the seismic design parameters included in the Geotechnical Investigation and required by the CBC (refer to PPP GEO-1 and GEO-2, respectively) would be confirmed during plan check and building design review with the City of Costa Mesa. Compliance with these existing regulations would minimize project impacts associated with lateral spreading and liquefaction. As a result, impacts in this regard would be less than significant.

##### **Ground Settlement and/or Collapse**

As indicated in [Section 5.6.1.2](#), the Geotechnical Investigation determined that differential settlement associated with the unimproved and improved portions of the site would exceed tolerances typical for the proposed structures. As such, the Geotechnical Investigation includes recommendations for remedial grading in Section 7, *Recommendations*. The grading and foundation recommendations presented in the Geotechnical Investigation



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(refer to PPP GEO-2) would minimize the impacts of settlement and/or collapse to less than significant levels. Furthermore, the seismically-induced settlement would be reduced by adhering to the seismic design parameters of the CBC (refer to PPP GEO-1). Compliance with existing regulations and implementation of recommended geotechnical grading procedures would minimize project impacts related to ground settlement and/or collapse. As such, impacts in this regard would be less than significant.

**Plans, Programs, Policies:** Refer to PPP GEO-1 and GEO-2.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.6-4: The proposed project would not create substantial risks to life and property due to expansive soils. [Threshold G-4]**

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**Level of Significance Before Mitigation:** No Impact.

**Impact Analysis:** As indicated in [Section 5.6.1.2](#), on-site soils are anticipated to have a low expansion potential. No impacts would occur in this regard.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** No Impact.

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**Impact 5.6-5: Development of the proposed project could impact unknown paleontological resources. [Threshold G-6]**

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**Level of Significance Before Mitigation:** Potentially Significant Impact.

**Impact Analysis:** As indicated in [Section 5.6.1.2](#), the project site's geology may include Pleistocene-age deposits at unknown depths, suggesting that project-related ground-disturbing activities have the potential to destroy or otherwise adversely impact significant paleontological resources below young Holocene-age soils at unknown depths within the project site. Therefore, sediments in the project site are considered to have paleontological sensitivity increasing with depth or low-to-high sensitivity.

Based on the Geotechnical Investigation and Cultural and Paleo Resources Memo, excavation may extend to a minimum depth of five feet below the existing ground surface or two feet below the bottom of the deepest footing, whichever is deeper. Horizontally, excavations should extend at least five feet outside the proposed perimeter building foundations or up to existing improvements or the limits of grading, whichever is less. As such, excavation during development of the project is expected to extend into deposits with high



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paleontological sensitivity and has the potential to encounter undocumented scientifically significant paleontological resources.

Mitigation Measure GEO-1 requires paleontological monitoring to be present if project construction occurs at depths that could encounter highly sensitive sediments for paleontological resources. Mitigation Measure GEO-2 provides procedures for construction workers to follow in the event of any fossil discovery to ensure grading is halted to assess the find for significance and any paleontological finds are properly excavated and preserved. With implementation of these mitigation measures, impacts in this regard would be reduced to less than significant levels.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

#### **Mitigation Measures:**

GEO-1 Prior to issuance of a grading permit and any ground-disturbing activities, the project applicant shall consult with a geologist or paleontologist to confirm whether anticipated grading would occur at depths that could encounter highly sensitive sediments for paleontological resources. If confirmed that underlying sediments may have high sensitivity, construction activity shall be monitored by a qualified paleontologist retained by the project applicant and a written Project Monitoring Plan (PMP) shall be submitted to the City of Costa Mesa's Development Services Director for review and approval. The monitoring plan shall include monitor contact information, specific procedures for field observation, diverting and grading to protect finds, and procedures to be followed in the event of significant finds. The paleontologist shall have the authority to halt construction during construction activity. Because the project area is immediately underlain by Holocene sediments (low sensitivity) and the depth of these sediments is unknown, spot-check monitoring shall be conducted to identify potential fossils and the lithological transition to Pleistocene sediments. If Pleistocene-aged sediments are discovered at depth, monitoring shall transition to full-time as ground-disturbing activities occur at or below this identified depth because these Pleistocene units have been identified as having high sensitivity for paleontological resources.

GEO-2 In the event of any fossil discovery, regardless of depth or geologic formation, construction work shall halt within a 50-foot radius of the find until a qualified paleontologist retained by the project applicant can determine its significance. Significant fossils shall be recovered, prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility in accordance with the standards of the Society of Vertebrate Paleontology (2010). The most likely repository is the Natural History Museum of Los Angeles County (NHMLAC). The repository shall be identified, and a curatorial arrangement shall be signed prior to the collection of the fossils.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.





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### 5.6.4 Cumulative Impacts

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**Impact 5.6-6 Development of the proposed project and related projects would not result in cumulatively considerable geology and soils impacts. [Thresholds G-1 through G-4]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* For the purposes of geology and soils, cumulative impacts are considered for cumulative projects outlined in [Table 4-2, Related Projects](#). The cumulative projects' regional geologic setting and regional seismicity would be similar; however, the local geologic setting, surficial geology, and subsurface soil conditions would vary according to site.

Geology and soils impacts related to the proposed project would be specific to the project site and its users and would not be common or contribute to the impacts (or shared with, in an additive sense) on other sites. Compliance with applicable State and local building regulations would be required of all development in the City. Individual projects would be designed and built in accordance with applicable standards in the CBC and the existing building regulations (refer to PPP GEO-1 and PPP GEO-2), including pertinent seismic design criteria. Site-specific geologic hazards would be addressed by the engineering geologic report and/or geotechnical report required for each building. These geologic investigations would identify the specific geologic and seismic characteristics on a site and provide guidelines for engineering design and construction to maintain the structural integrity of proposed structures and infrastructure.

As concluded in Impacts 5.6-1 through 5.6-4, compliance with the CBC, Municipal Code, and the Geotechnical Investigation's recommendations for design and construction would ensure potential impacts to the proposed project concerning exposure to strong seismic ground shaking, secondary seismic hazards (i.e., liquefaction and seismically induced settlement), and unstable/expansive soils would be less than significant. Therefore, the project's incremental effects involving exposure of people and structures to potential substantial adverse effects involving strong seismic ground shaking, seismic-related ground failure, unstable geologic units or soils, or expansive soils would not be cumulatively considerable.

Construction activities associated with cumulative development could also result in soil erosion or loss of topsoil. The degree of impact would depend upon each respective cumulative site's topography and on-site soils' susceptibility to erosion. The potential for erosion would be evaluated on a project-by-project basis through site-specific soil investigations. As discussed above, implementation of the BMPs outlined in the SWPPP, the erosion and sediment control plan, and the proposed landscaping and water quality design features (refer to PPP HYD-1 through PPP HYD-4, PPP HYD-6, and SCA HYD-1 through SCA HYD-3) would address the anticipated erosion impacts during project construction and operations and ensure impacts would be less than significant in this regard. Therefore, the project's incremental effects involving erosion and loss of topsoil would not be cumulatively considerable.

*Plans, Programs, Policies:* Refer to PPP GEO-1 and GEO-2 as detailed above. Additionally, refer to [Section 5.9, Hydrology and Water Quality](#) for a discussion of PPP HYD-1 through PPP HYD-4, and PPP HYD-6.



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**Standard Conditions of Approval:** Refer to Section 5.2, *Air Quality*, for a discussion of SCA HYD-1 through SCA HYD-3.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.6-7      Development of the proposed project and related cumulative projects could result in cumulatively considerable impacts to paleontological resources. [Threshold G-6]**

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**Level of Significance Before Mitigation:** Potentially Significant Impact.

**Impact Analysis:** Cumulative impacts to paleontological resources would occur when the impacts of the proposed project, in conjunction with other projects and development in the City, result in cumulatively considerable impacts to paleontological resources. Like the proposed project, the related cumulative projects identified in Table 4-2 could encounter undiscovered paleontological resources where grading occurs in native soils. As concluded in Impact 5.6-5, project excavation may extend into deposits with high paleontological sensitivity and has the potential to encounter undocumented scientifically significant paleontological resources. However, with implementation of Mitigation Measures GEO-1 and GEO-2, project impacts to paleontological resources would be reduced to less than significant levels.

Thus, the proposed project, combined with other related cumulative projects, would not cause a cumulatively considerable significant impact to previously undiscovered paleontological resources.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** Refer to Mitigation Measures GEO-1 and GEO-2.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

### 5.6.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to geology and soils have been identified.



## Chapter 5.7 Greenhouse Gas Emissions



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## 5. Environmental Analysis

### 5.7 GREENHOUSE GAS EMISSIONS

This section of the Draft EIR evaluates greenhouse gas (GHG) emissions associated with the proposed project and analyzes project compliance with applicable regulations. Consideration of the project's consistency with applicable plans, policies, and regulations, as well as consideration of the introduction of new sources of GHGs, is included in this section. GHG technical data is included as [Appendix C, \*Air Quality/Greenhouse Gas Emissions/Energy Data\*](#).

#### 5.7.1 Environmental Setting

##### 5.7.1.1 GREENHOUSE GASES AND CLIMATE CHANGE

###### Global Climate Change – Greenhouse Gases

The natural process through which heat is retained in the troposphere is called the “greenhouse effect.”<sup>1</sup> The greenhouse effect traps heat in the troposphere through a three-fold process as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHG in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This “trapping” of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

The most abundant GHGs are water vapor and carbon dioxide (CO<sub>2</sub>). Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-radiate long wave radiation. GHGs normally associated with development projects include the following:<sup>2</sup>

- Water Vapor (H<sub>2</sub>O). Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, it does not contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The Intergovernmental Panel on Climate Change (IPCC) has not determined a GWP for water vapor.
- Carbon Dioxide (CO<sub>2</sub>). Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO<sub>2</sub> emissions from fossil fuel combustion across most end-use sectors due in part to increased energy use from the continued rebound of economic activity after the height of the COVID-19

<sup>1</sup> The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

<sup>2</sup> All GWPs are given as 100-year GWP. Generally, GWPs were obtained from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4), with the addition of GWPs from the IPCC's Fifth Assessment Report for fluorinated GHGs that did not have GWPs in the AR4.



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### GREENHOUSE GAS EMISSIONS

pandemic.<sup>3</sup> Carbon dioxide is the most widely emitted GHG and is the reference gas (GWP of 1) for determining GWPs for other GHGs.

- Methane (CH<sub>4</sub>). Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The United States' top three methane sources are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, used for space and water heating, steam production, and power generation. The GWP of methane is 25.
- Nitrous Oxide (N<sub>2</sub>O). Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. The GWP of nitrous oxide is 298.
- Hydrofluorocarbons (HFCs). Typically used as refrigerants for both stationary refrigeration and mobile air conditioning, use of HFCs for cooling and foam blowing is increasing, as the continued phase out of chlorofluorocarbons (CFCs) and HCFCs gains momentum. The 100-year GWP of HFCs ranges from 12 for HFC-161 to 14,800 for HFC-23.
- Perfluorocarbons (PFCs). PFCs are compounds consisting of carbon and fluorine and are primarily created as a byproduct of aluminum production and semiconductor manufacturing. PFCs are potent GHGs with a GWP several thousand times that of CO<sub>2</sub>, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years). The GWP of PFCs ranges from 7,390 to 12,200.
- Sulfur hexafluoride (SF<sub>6</sub>). SF<sub>6</sub> is a colorless, odorless, nontoxic, nonflammable gas. SF<sub>6</sub> is the most potent GHG that has been evaluated by the IPCC with a GWP of 22,800. However, its global warming contribution is not as high as the GWP would indicate due to its low mixing ratio compared to CO<sub>2</sub> (4 parts per trillion [ppt] in 1990 versus 365 ppm, respectively).

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone (O<sub>3</sub>) depleters; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

- Hydrochlorofluorocarbons (HCFCs). HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year GWPs of HCFCs range from 77 for HCFC-123 to 2,310 for HCFC-142b.

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<sup>3</sup> United States Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2022, 2024*, [https://www.epa.gov/system/files/documents/2024-04/us-ghg-inventory-2024-main-text\\_04-18-2024.pdf](https://www.epa.gov/system/files/documents/2024-04/us-ghg-inventory-2024-main-text_04-18-2024.pdf), accessed August 5, 2024.



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- 1,1,1 trichloroethane. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The GWP of methyl chloroform is 146 times that of CO<sub>2</sub>.
- Chlorofluorocarbons (CFCs). CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the U.S. Environmental Protection Agency's (EPA) Final Rule (57 Federal Register [FR] 3374) for the phase out of O<sub>3</sub> depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with 100-year GWPs ranging from 4,750 for CFC-11 to 14,400 for CFC-13.

### Emissions Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on federal, State, and local GHG emission inventories. However, because GHGs persist for a long time in the atmosphere, accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

#### *United States GHG Emissions*

In 2022, the United States emitted approximately 6,343 million metric tons CO<sub>2</sub> equivalent (MTCO<sub>2e</sub>), and 5,486 million MTCO<sub>2e</sub> (MMTCO<sub>2e</sub>) after accounting for sequestration from the land sector.<sup>4</sup> Total gross U.S. emission decreased by 3.0 percent from 1990 to 2022, down from a high of 15.2 percent above 1990 levels in 2007. Gross emissions increased from 2021 to 2022 by 0.2 percent. Net emissions (including sinks) were 5,489.0 MMTCO<sub>2e</sub> in 2022. Overall, net emissions increased by 1.3 percent from 2021 to 2022 and decreased by 16.7 percent from 2005 levels. Between 2021 and 2022, the increase in total GHG emissions was driven largely by an increase in CO<sub>2</sub> emissions from fossil fuel consumption across most end-use sectors due in part to increased energy use from the continued rebound of economic activity after the height of the COVID-19 pandemic.

#### *Climate Change in California*

##### *Greenhouse Gases*

Based on the CARB California Greenhouse Gas Inventory for 2000-2021, California produced 381.3 million metric tons of CO<sub>2e</sub> in 2021, which is 12.6 MMTCO<sub>2e</sub> higher than 2020 levels.<sup>5</sup> The decrease in emissions during 2020 is likely due to the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 38.2 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 19.4 percent of the State's GHG emissions, while electric power accounts for approximately 16.4 percent. The magnitude of California's total GHG emissions is due in part to its large size and population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, the State of

<sup>4</sup> United States Environmental Protection Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2022*, published April 2024.

<sup>5</sup> California Air Resource Board, *California Greenhouse Gas Emissions from 2000 to 2021: Trends of Emissions and Other Indicators*, December 14, 2023.



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California achieved its 2020 GHG emissions reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMTCO<sub>2</sub>e. The annual 2030 Statewide target emissions level is 260 MMTCO<sub>2</sub>e.

#### *Climate Change Impacts*

Potential impacts of climate change in California may include loss in water supply from reduced snowpack; sea level rise; and an increase in extreme heat days per year, large forest fires, and drought years. Below is a summary of some of the potential effects that could be experienced in California due to climate change.

#### *Air Quality*

Scientists project that the annual average maximum daily temperatures in California could rise by 2.4 to 3.2°C in the next 50 years and by 3.1 to 4.9°C in the next century. Higher temperatures are conducive to air pollution formation, and rising temperatures could lead to worsened air quality in California. As temperatures have increased in recent years, the area burned by wildfires throughout the State has increased, and wildfires have occurred at higher elevations in the Sierra Nevada Mountains. Severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks.

#### *Water Supply*

The average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea levels rose over 0.15 meter along the Central and Southern California coasts. The Sierra snowpack provides most of California's water supply as snow that accumulates during wet winters is released slowly during the dry months of spring and summer. A warmer climate is predicted to reduce the fraction of precipitation that falls as snow and the amount of snowfall at lower elevations, thereby reducing the total snowpack. Year-to-year variability in Statewide precipitation levels has increased since 1980, meaning that wet and dry precipitation extremes have become more common. The overall impact of climate change on future precipitation trends and water supplies in California is uncertain, although projections indicate that the average spring snowpack in the Sierra Nevada and other mountain catchments in Central and Northern California will decline by approximately 66 percent from its historical average by 2050.

#### *Hydrology and Sea Level Rise*

Climate change could affect the intensity and frequency of storms and flooding and induce substantial sea level rise in the coming century. The rate of increase of global mean sea levels between 1993 to 2020, observed by satellites, is approximately 3.3 millimeters (mm) per year, double the 20th century trend of 1.6 mm per year. A rise in sea levels could erode 31 to 67 percent of Southern California beaches and cause flooding of approximately 370 miles of coastal highways during 100-year storm events. This would also jeopardize California's water supply due to saltwater intrusion and induce groundwater flooding and/or exposure of buried infrastructure. Furthermore, increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.





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### *Agriculture*

California's agricultural industry produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts. Higher CO<sub>2</sub> levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent, which would increase water demand as hotter conditions lead to the loss of soil moisture. In addition, crop yield could be threatened by water-induced stress and extreme heat waves, and plants may be susceptible to new and changing pest and disease outbreaks. Temperature increases could also change the time of year that certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality.

### *Ecosystems and Wildlife*

The annual average maximum daily temperatures in California could rise by 4.4 to 5.8 degrees Fahrenheit (°F) in the next 50 years and by 5.6 to 8.8°F in the next century. Rising temperatures resulting from climate change could have four major impacts on plants and animals related to (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of non-native species within communities; and (4) ecosystem processes, such as carbon cycling and storage. Increases in wildfire would further remove sensitive habitat, increased severity in droughts would potentially starve plants and animals of water, and sea level rise would affect sensitive coastal ecosystems.

### 5.7.1.2 REGULATORY BACKGROUND

#### **Federal**

To date, no national standards have been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

#### *Energy Independence and Security Act of 2007*

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.



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#### *U.S. Environmental Protection Agency Endangerment Finding*

The EPA authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, and SF<sub>6</sub>) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and the EPA's assessment of the scientific evidence that form the basis for the EPA's regulatory actions.

#### *Federal Vehicle Standards*

In response to the U.S. Supreme Court ruling discussed above, the George W. Bush Administration issued Executive Order 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO<sub>2</sub> in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO<sub>2</sub> emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO<sub>2</sub> emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program.



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In March 2021, The EPA and NHTSA adopted the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. The SAFE Vehicles Rule sets tough but feasible fuel economy and CO<sub>2</sub> standards that increase 1.5 percent in stringency each year from model years 2021 through 2026. These standards apply to both passenger cars and light trucks and will continue the nation's progress toward energy independence and CO<sub>2</sub> reduction, while recognizing the realities of the marketplace and consumers' interest in buying vehicles that meet all their diverse needs.

### *Presidential Executive Order 13783*

Presidential Executive Order 13783, Promoting Energy Independence and Economic Growth (March 28, 2017), orders all federal agencies to apply cost-benefit analyses to regulations of GHG emissions and evaluations of the social cost of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O.

### **State**

Various Statewide and local initiatives to reduce the State's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is under way, and there is a real potential for severe adverse environmental, social, and economic effects in the long term.

### *Executive Order S-1-07*

Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of Statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32. The development of CARB's 2017 Scoping Plan Update has identified the LCFS as a regulatory measure to reduce GHG emissions to meet the 2030 emissions target. In calculating Statewide emissions and targets, the 2017 Scoping Plan Update has assumed the LCFS be extended to an 18-percent reduction in carbon intensity beyond 2020. On September 27, 2018, CARB approved a rulemaking package that amended the Low Carbon Fuel Standard to relax the 2020 carbon intensity reduction from 10 percent to 7.5 percent and to require a carbon intensity reduction of 20 percent by 2030. It is acknowledged that on December 15, 2022, CARB released the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier.

### *Executive Order S-3-05*

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

- State GHG emissions reduced to 2000 levels by 2010;
- State GHG emissions reduced to 1990 levels by 2020; and
- State GHG emissions reduced to 80 percent below 1990 levels by 2050.



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The Executive Order directed the secretary of the California Environmental Protection Agency (Cal/EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary also submits biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts.

#### *Executive Order B-30-15*

EO B-30-15 was passed by the State legislature on April 29, 2015, which added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. All State agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

#### *Executive Order S-13-08*

Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of the State's first climate adaptation strategy. This Executive Order results in consistent guidance from experts on how to address climate change impacts in the State of California.

#### *Senate Bill 100 (SB 100)*

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

#### *Assembly Bill 1493*

AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State." To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 and adoption of 13 CCR Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger



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vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. The near-term standards were intended to achieve a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards were intended to achieve a reduction of about 30 percent.

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

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

### *Executive Order B-55-18*

EO B-55-18 (September 2018) establishes a statewide policy for the State to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB will work with relevant State agencies to ensure that future scoping plans identify and recommend measures to achieve the carbon neutrality goal.

### *Senate Bill 32 (SB 32)*

Signed into law on September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions. AB 197 also added two members of the legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and toxic air contaminants from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the scoping plan.

### *CARB Scoping Plan*

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve the California GHG reductions required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California would implement to reduce the projected 2020 "Business-as-Usual" (BAU) emissions to 1990 levels, as required by AB 32. These strategies are intended to reduce carbon dioxide equivalent (CO<sub>2</sub>e) emissions by 174 million metric tons. This reduction of 42 million MTCO<sub>2</sub>e, or almost ten percent from 2002 to 2004 average emissions, would be required despite the population and economic growth forecasted through 2020.



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CARB's Scoping Plan calculates 2020 BAU emissions as those expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to 2004 to forecast emissions to 2020. When CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

AB 32 requires CARB to update the Scoping Plan at least once every five years. CARB adopted the first major update to the Scoping Plan on May 22, 2014. The updated Scoping Plan summarizes recent science related to climate change, including anticipated impacts to California and the levels of GHG reduction necessary to likely avoid risking irreparable damage. It identifies the actions California has already taken to reduce GHG emissions and focuses on areas where further reductions could be achieved to help meet the 2020 target established by AB 32. The Scoping Plan update also looks beyond 2020 toward the 2050 goal, established in Executive Order S-3-05, and observes that "a mid-term Statewide emission limit will ensure that the State stays on course to meet our long-term goal." The Scoping Plan Update did not establish or propose any specific post-2020 goals, but identified such goals in water, waste, natural resources, clean energy, transportation, and land use.

On January 20, 2017, CARB released the proposed Second Update to the Scoping Plan, which identifies the State's post-2020 reduction strategy. The Second Update was finalized in November 2017 and approved on December 14, 2017, and reflects the 2030 target of a 40 percent reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. The 2017 Scoping Plan Update establishes a new Statewide emissions limit of 260 million MTCO<sub>2e</sub> for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030.

On December 15, 2022, CARB released the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which identifies the strategies achieving carbon neutrality by 2045 or earlier. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes. The 2022 Scoping Plan was developed to achieve carbon neutrality by 2045 through a substantial reduction in fossil fuel dependence, while at the same time increasing deployment of efficient non-combustion technologies and distribution of clean energy. The plan would also reduce emissions of short-lived climate pollutants (SLCPs) and would include mechanical CO<sub>2</sub> capture and sequestration actions, as well as emissions and sequestration from natural and working lands and nature-based strategies. Under 2022 Scoping Plan, by 2045, California aims to cut GHG emissions by 85 percent below 1990 levels, reduce smog-forming air pollution by 71 percent, reduce the demand for liquid petroleum by 94 percent compared to current usage, improve health and welfare, and create millions of new jobs. This plan also builds upon current and previous environmental justice efforts to integrate environmental justice directly into the plan, to ensure that all communities can reap the benefits of this transformational plan. Specifically, this plan:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.



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- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands (NWL) to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

### *Senate Bill 375*

Acknowledging the relationship between land use planning and transportation sector GHG emissions, SB 375 was passed by the State Assembly on August 25, 2008, and signed by the Governor on September 30, 2008. The legislation links regional planning for housing and transportation with the GHG reduction goals outlined in AB 32. Reductions in GHG emissions can be achieved by, for example, locating employment opportunities close to transit. Under SB 375, each Metropolitan Planning Organization (MPO) is required to adopt a Sustainable Communities Strategy (SCS) to encourage compact development that reduces passenger vehicle miles traveled (VMT) and trips so the region can meet a target, created by CARB, for reducing GHG emissions. If the SCS is unable to achieve the regional GHG emissions reduction targets, then the MPO is required to prepare an alternative planning strategy that shows how the GHG emissions reduction target can be achieved through alternative development patterns, infrastructure, and/or transportation measures.

### *Assembly Bill 1279*

The California Global Warming Solutions Act of 2006 designates the CARB as the state agency charged with monitoring and regulating sources of emissions of GHGs. The state board is required to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to ensure that statewide GHG emissions are reduced to at least 40% below the 1990 level by 2030. The act requires the state board to prepare and approve a scoping plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions and to update the scoping plan at least once every 5 years.

AB 1279 would declare the policy of the state both to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85 percent below the 1990 levels. AB



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1279 would require the state board to work with relevant state agencies to ensure that updates to the scoping plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable carbon dioxide removal solutions and carbon capture, utilization, and storage technologies in California, as specified. AB 1279 would require the state board to submit an annual report, as specified.

#### *Senate Bill 350*

SB 350, the Clean Energy and Pollution Reduction Act, was signed into law on October 7, 2015. SB 350 updates and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California’s renewable portfolio standard from 33 to 50 percent; and
- Increase energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard is regulated by the California Public Utilities Commission (CPUC) for the private utilities and by the California Energy Commission (CEC) for municipal utilities. Each utility must submit a procurement plan showing the purchase of clean energy to displace other non-renewable resources.

The 50 percent increase in energy efficiency in buildings must be achieved through the use of existing energy efficiency retrofit funding and regulatory tools already available to State energy agencies under existing law. The addition made by SB 350 requires State energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

#### *Building Energy Efficiency Standards*

The 2022 California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6), commonly referred to as “Title 24,” became effective on January 1, 2023. In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2022 Title 24 standards encourage efficient electric heat pumps, establish electric-ready requirements for new homes, expand solar photovoltaic and battery storage standards, strengthen ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Title 24 standards.

#### *Green Building Standards*

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





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to live and work; (3) reduce energy and water consumption; and (4) respond to the environmental directives of the administration. CALGreen requires that new buildings employ water efficiency and conservation, increase building system efficiencies (e.g., lighting, heating/ventilation and air conditioning [HVAC], and plumbing fixtures), divert construction waste from landfills, and incorporate electric vehicles (EV) charging infrastructure. There is growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

### Regional

#### *Southern California Association of Governments Regional Transportation Plan/Sustainable Communities Strategy*

SCAG formally adopted the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS) on September 3, 2020, to provide a roadmap for sensible ways to expand transportation options, improve air quality, and bolster Southern California's long-term economic viability. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. These performance goals were adopted to help focus future investments on the best-performing projects, as well as different strategies to preserve, maintain, and optimize the performance of the existing transportation system. The 2020-2045 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation to help the region meet its regional VMT and GHG reduction goals, as required by the State.

The most recent 2024-2050 RTP/SCS (Connect SoCal 2024) was adopted by SCAG's Regional Council in April 2024. The Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. The Connect SoCal 2024 sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce GHG emissions from automobiles and light-duty trucks and achieve the GHG emissions reduction target for the region set by the CARB. In addition, the Connect SoCal 2024 is supported by a combination of transportation and land use strategies that outline how the region can achieve California's GHG emission reduction goals and federal Clean Air Act requirements. These are articulated in a set of Regional Strategic Investments, Regional Planning Policies, and Implementation Strategies. The Regional Planning Policies are a resource for County Transportation Commissions (CTCs) and local jurisdictions, who can refer to specific policies to demonstrate alignment with the Connect SoCal 2024 when seeking resources from State or federal programs. The Implementation Strategies articulate priorities for SCAG efforts in fulfilling or going beyond the Regional Planning Policies.



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#### Local

##### *General Plan*

The 2015-2035 Costa Mesa General Plan (General Plan) establishes the long-range planning and policy direction that guides change and preserves the qualities that define our community. The General Plan sets forth the Vision for Costa Mesa for the next two decades. The Land Use and Conservation Elements of the General Plan include the following objective and policies related to GHG within the City:

- **Objective LU-4A.** Encourage new development and redevelopment that protects and improves the quality of Costa Mesa's natural environment and resources.
  - **Policy LU-4.6:** Incorporate the principles of sustainability into land use planning, infrastructure, and development processes to reduce greenhouse gas emissions consistent with State goals.
- **Objective CON-4.A:** Pursue the prevention of the significant deterioration of local and regional air quality.
  - **Policy CON-4.A.5:** Encourage compact development, infill development, and a mix of uses that are in proximity to transit, pedestrian, and bicycling instructors.
  - **Policy CON-4.A.6:** Enhance bicycling and walking infrastructure, and support public bus service, pursuant to Circulation Element's goals, objectives, and policies.
  - **Policy CON-4.A.7:** Encourage installation of renewable energy devices for businesses and facilities and strive to reduce community-wide energy consumption.

#### 5.7.1.3 EXISTING CONDITIONS

The project site is currently developed with the Hive Creative Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). Table 5.7-1, *Existing Greenhouse Gas Emissions*, details GHG emissions associated with the existing uses. As shown in Table 5.7-1, the existing land uses at the project site emit approximately 4,178.27 MTCO<sub>2</sub>e per year.



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**Table 5.7-1 Existing Greenhouse Gas Emissions**

Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	CO <sub>2</sub> e
	Metric Tons per year <sup>1</sup>				
<b>Direct Emissions</b>					
Mobile Source	3,007.00	0.15	0.13	5.47	3,054
Area Source	3.49	<0.01	<0.01	0.00	3.50
Refrigerants	0.00	0.00	0.00	0.07	0.07
Total Direct Emissions <sup>2</sup>	3,010.49	0.15	0.13	5.54	3,057.57
<b>Indirect Emissions</b>					
Energy	972.00	0.07	0.01	0.00	975.00
Solid Waste	63.00	1.00	0.02	0.00	95.2
Water Demand	14.40	1.44	0.00	0.00	50.5
Total Indirect Emissions <sup>2</sup>	1,049.40	2.51	0.03	0.00	1,120.70
<b>Total Existing Emissions<sup>2</sup></b>	<b>4,059.89</b>	<b>2.66</b>	<b>0.16</b>	<b>5.54</b>	<b>4,178.27</b>

Notes:

<sup>1</sup> Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.

<sup>2</sup> Totals may be slightly off due to rounding.

Refer to Appendix C, *Air Quality/Greenhouse Gas Emissions/Energy*, for assumptions used in the analysis.

### 5.7.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- GHG-1 Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
- GHG-2 Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

### 5.7.3 Environmental Impacts

#### 5.7.3.1 METHODOLOGY

Global CO<sub>2</sub> emissions from all sectors have significantly increased since 1850. The majority of this increase has resulted from increased fossil fuel consumption and industrial emissions. Agriculture, deforestation, and other land-use changes have been the second-largest contributors.<sup>6</sup> As a result, the study area for climate change and the analysis of GHG emissions is broad. However, the study area is also limited by CEQA Guidelines Section 15064.4(b), which directs lead agencies to consider an “indirect physical change” only if that change is a reasonably foreseeable impact, which may be caused by the project.

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project

<sup>6</sup> United States Environmental Protection Agency, *Global Greenhouse Gas Emissions Overview*, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>, accessed August 8, 2024.



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exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

However, CEQA Guidelines Section 15064.4 does not establish a threshold of significance. CEQA Guidelines Section 15064.6 provides lead agencies the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, if any threshold chosen is supported by substantial evidence. The City of Costa Mesa has not adopted a numerical significance threshold or climate action plan (CAP). Similarly, the South Coast Air Quality Management District (SCAQMD), the Governor's Office of Planning and Research (OPR), CARB, California Air Pollution Control Officers Association (CAPCOA), or any other State or applicable regional agency has yet to adopt a numerical significance threshold for assessing GHG emissions that is applicable to the project. The SCAQMD formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, and was proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is the lead agency as of the last Working Group meeting (Meeting No.15) held in September 2010.<sup>7</sup> However, the proposed threshold was based on the State's GHG emissions reduction goal identified in AB 32 for the year 2020, which has been outdated, and SCAQMD never adopted the threshold.

Impacts of climate change are experienced on a global scale regardless of the location of GHG emission sources, and therefore, numerical significance threshold for individual development projects is speculative. Throughout the State, air districts are moving from numerical significance threshold to qualitative significance threshold that focuses on project features to reduce GHG emissions or consistency with GHG reduction plans. For example, in the Bay Area Air Quality Management District (BAAQMD) 2022 CEQA Guidelines, the GHG thresholds of significance are either whether land use projects include certain project design elements related to buildings and transportation or whether the project is consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b). This is a major update to BAAQMD's 2017 CEQA Guidelines, where a numerical significance threshold was required. To reduce GHG emissions impact, it is more effective for development projects to include project features that directly or indirectly reduce GHG emissions, than relying on a numerical significance threshold, which highly depends on the type and size of the development.

Therefore, the significance of the project's potential impacts regarding GHG emissions and climate change will be assessed solely on its consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change and the project's ability to incorporate sustainable features and strategies in its design to reduce GHG emissions. The analysis has also quantified the project's GHG emissions for informational purposes.

It should be noted that individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of

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<sup>7</sup> South Coast Air Quality Management District, *Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans*, December 5, 2008.



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climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. According to CEQA Guidelines Section 15064(h)(1), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects. Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans, and plans or regulations for the reduction of GHG emissions. Therefore, a lead agency can make a finding of less-than-significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

Appendix C provides detailed methodology and modeling assumptions for the project. GHG emissions from area sources, refrigerant, stationary sources, vehicular traffic (mobile source), energy consumption, water demand, and solid waste were calculated using the California Emissions Estimator Model Version 2022.1 (CalEEMod). Based on SCAQMD guidance, construction emissions were amortized over 30 years (a typical project lifetime) and added to the project's total operational emissions.

### 5.7.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.7-1: Implementation of the proposed project would not generate a net increase in GHG emissions that would have a significant impact on the environment. [Threshold GHG-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Construction*

The proposed project would involve the demolition of existing buildings and practice field and the construction of a multi-phase residential community. Construction of the proposed project would generate temporary GHG emissions primarily from construction equipment, construction worker trips to and from the project site, and heavy trucks to transport demolition debris, excavated soil, and building materials. Construction GHG emissions are typically summed and amortized over the lifetime of a project (conservatively assumed to be 30 years) and then added to the operational emissions. The proposed project would be constructed over three phases and there would be overlaps between architectural coating of the last phase and the demolition and grading activities of each following phase as noted in Table 5.7-2, Construction Greenhouse Gas Emissions. As shown below, the proposed project's construction would result in approximately 5,901.90 MTCO<sub>2e</sub> of GHG



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emissions. Amortized over a 30-year period per the SCAQMD guidance, the proposed project would generate 196.73 MTCO<sub>2e</sub> per year of GHG emissions.

**Table 5.7-2 Construction Greenhouse Gas Emissions**

Emissions by Year	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	CO <sub>2e</sub>
2026 (Phase 1)	580.00	0.02	0.02	0.40	588.00
2027 (Phase 1)	758.00	0.02	0.03	0.62	769.00
2028 (Phase 1 and 2 Overlapping)	574.00	0.02	0.02	0.32	582.00
2029 (Phase 2)	596.00	0.02	0.02	0.26	602.00
2030 (Phase 2)	29.90	<0.01	<0.01	0.02	30.00
2031 (Phase 2 and 3 Overlapping)	580.00	0.02	0.02	0.40	588.00
2032 (Phase 3)	805.00	0.02	0.02	0.41	813.00
2033 (Phase 3)	596.00	0.02	0.02	0.26	602.00
2034 (Phase 3)	29.90	<0.01	<0.01	0.02	30.00
<b>Total Project</b>	<b>5,825.70</b>	<b>0.19</b>	<b>0.23</b>	<b>3.64</b>	<b>5,901.90</b>
<b>Total Amortized</b>	<b>194.19</b>	<b>0.01</b>	<b>0.01</b>	<b>0.12</b>	<b>196.73</b>

Notes:

<sup>1</sup> Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.

<sup>2</sup> Totals may be slightly off due to rounding.

Refer to Appendix C for assumptions used in the analysis.

#### Operation

Operation of the proposed project would generate direct GHG emissions associated with area sources (such as landscape maintenance), mobile sources, refrigerants, and stationary sources (such as emergency generators). Indirect emission from the proposed project would include emission from energy consumption, water demand, and solid waste generation. As with the calculation of existing emissions, the most recent version of CalEEMod was used to calculate project-related GHG emissions. Mobile emissions are based primarily upon *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California* (Traffic Study) prepared by Linscott, Law & Greenspan, Engineers on January 9, 2025. Under the existing (baseline) condition, the project site generates 2,733 trips per day, and under the proposed project condition, the project would generate 4,948 trips per day. Therefore, the project would result in a net increase of 2,215 trips per day.

Annual operational emissions and amortized construction emissions from the proposed project are presented in Table 5.7-3, Long-term Operational Greenhouse Gas Emissions. Development of the proposed project would contribute to global climate change through direct and indirect GHG emissions from land uses associated with the proposed project.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

**Table 5.7-3 Long-term Operational Greenhouse Gas Emissions**

Source	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Refrigerants	CO <sub>2</sub> e
	Metric Tons per year <sup>1,2</sup>				
<b>Phase 1</b>					
<b>Direct Emissions</b>					
Construction (amortized over 30 years)	55.77	<0.01	<0.01	0.04	56.57
Mobile Source	1,696	0.08	0.07	2.12	1,720
Area Source	73.50	<0.01	<0.01	0.00	73.50
Refrigerants	0.00	0.00	0.00	0.46	0.46
Stationary Source	872	0.01	<0.01	0.00	873
<b>Total Direct Emissions<sup>2</sup></b>	<b>2,697.27</b>	<b>0.10</b>	<b>0.08</b>	<b>2.62</b>	<b>2,723.53</b>
<b>Indirect Emissions</b>					
Energy	486.00	0.04	0.00	0.00	488.00
Water Demand	24.60	0.39	0.01	0.00	37.30
Solid Waste	21.10	2.11	0.00	0.00	73.90
<b>Total Indirect Emissions<sup>2</sup></b>	<b>531.70</b>	<b>2.54</b>	<b>0.01</b>	<b>0.00</b>	<b>599.20</b>
<b>Total Phase 1 Emissions</b>	<b>3,322.73 MTCO<sub>2</sub>/year</b>				
<b>Emissions during Existing Uses (Existing Buildings Demolished during Construction Phase 1 and 2)</b>					
<b>2,753.14 MTCO<sub>2</sub>/year</b>					
<b>Net Increase from Existing Conditions</b>					
<b>569.59 MTCO<sub>2</sub>/year</b>					
<b>Phase 1 through Phase 2</b>					
<b>Direct Emissions</b>					
Construction (amortized over 30 years)	73.76	<0.01	<0.01	0.05	74.86
Mobile Source	3,161.00	0.14	0.13	2.79	3,205.00
Area Source	94.50	<0.01	<0.01	0.00	94.60
Refrigerants	0.00	0.00	0.00	0.92	0.92
Stationary Source	1,744.00	0.02	0.01	0.00	1,746.00
<b>Total Direct Emissions</b>	<b>5,073.26</b>	<b>0.17</b>	<b>0.15</b>	<b>3.76</b>	<b>5,121.38</b>
<b>Indirect Emissions</b>					
Energy	1,364.00	0.09	0.01	0.00	1,369.00
Water Demand	50.30	0.82	0.02	0.00	76.70
Solid Waste	44.00	4.39	0.00	0.00	154.00
<b>Total Indirect Emissions</b>	<b>1,458.30</b>	<b>5.30</b>	<b>0.03</b>	<b>0.00</b>	<b>1,599.70</b>
<b>Total Phase 1 through Phase 2 Emissions</b>	<b>6,721.08 MTCO<sub>2</sub>/year</b>				
<b>Baseline Emissions<sup>3</sup></b>	<b>4,178.27 MTCO<sub>2</sub>/year</b>				
<b>Net Increase from Existing Conditions during Phase 1 through Phase 2</b>	<b>2,542.81 MTCO<sub>2</sub>/year</b>				
<b>Phase 1 through Phase 3 (Full Buildout)</b>					
<b>Direct Emissions</b>					
Construction (amortized over 30 years)	194.19	0.01	0.01	0.12	196.73
Mobile Source	4,664.00	0.19	0.18	2.75	4,726.00
Area Source	257.00	0.01	<0.01	0.00	257.00
Refrigerants	0.00	0.00	0.00	1.45	1.45
Stationary Source	1,711.00	0.03	0.02	0.00	1,718.00
<b>Total Direct Emissions</b>	<b>6,826.19</b>	<b>0.24</b>	<b>0.21</b>	<b>4.32</b>	<b>6,899.18</b>
<b>Indirect Emissions</b>					
Energy	2,006.00	0.14	0.01	0.00	2,013.00
Water Demand	79.60	1.29	0.03	0.00	121.00
Solid Waste	69.60	6.96	0.00	0.00	244.00
<b>Total Indirect Emissions</b>	<b>2,155.20</b>	<b>8.39</b>	<b>0.04</b>	<b>0.00</b>	<b>2,378.00</b>
<b>Total Phase 1 through Phase 3 Emissions</b>	<b>9,277.18 MTCO<sub>2</sub>/year</b>				
<b>Baseline Emissions<sup>3</sup></b>	<b>4,178.27 MTCO<sub>2</sub>/year</b>				
<b>Net Increase from Existing Conditions</b>	<b>5,098.91 MTCO<sub>2</sub>/year</b>				

**Notes:**

<sup>1</sup> Emissions calculated using California Emissions Estimator Model Version 2022.1 (CalEEMod) computer model.

<sup>2</sup> Totals may be slightly off due to rounding.

<sup>3</sup> Net increase is calculated by total project-related emissions minus existing conditions; refer [Table 5.7-1](#).

Refer to Appendix C for assumptions used in the analysis.



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### GREENHOUSE GAS EMISSIONS

As shown in [Table 5.7-3](#), at full buildout, the total project-related GHG emissions from direct and indirect sources combined would result in a net increase of 5,098.91 MTCO<sub>2</sub> per year over the existing conditions. As demonstrated in the analysis of Impact 5.7-2 below, the proposed project would be consistent with the Connect SoCal 2024 and 2022 Scoping Plan. As the project is consistent with these GHG reduction plans, the project would be consistent with the State's long-term goal to achieve statewide carbon neutrality (zero-net emissions). As such, the impacts would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.7-2: Implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. [Threshold GHG-2]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** The project's GHG plan consistency analysis is based on the project's consistency with Connect SoCal 2024, and 2022 Scoping Plan. Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. The 2022 Scoping Plan contains the GHG reductions, technology, and clean energy mandated by statutes.

#### SCAG RTP/SCS Consistency Analysis

Connect SoCal 2024 was approved by SCAG's Regional Council in April 2024. Connect SoCal 2024 outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. Connect SoCal 2024 Chapter 3, *The Plan*, outlines the Implementation Strategies organized within the pillars of mobility, communities, environment, and economy. [Table 5.7-4, Consistency With Connect SoCal 2024](#), provides a project consistency analysis with applicable Implementation Strategies. As shown therein, the proposed project would be consistent with the GHG emission reduction strategies contained in the Connect SoCal 2024.





## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

**Table 5.7-4 Consistency with Connect SoCal 2024**

Reduction Strategy	Project Consistency Analysis
<p><b>Mobility Implementation Strategies</b></p> <ul style="list-style-type: none"> <li>▪ Transit and Multimodal Integration</li> <li>▪ Transit/Rail. Through land use planning, support residential development along high-frequency transit corridors and around transit/rail facilities and centers.*</li> <li>▪ Active Transportation.</li> <li>▪ Support community-led active transportation and safety plans, projects and programs (e.g., Safe Routes to Schools)*</li> <li>▪ Expand the region’s networks of bicycle and pedestrian facilities. This includes creating more low stress facilities, such as separated bikeways and bike paths, slow streets, and open streets.*</li> </ul>	<p><b>Consistent.</b> The project proposes to demolish the existing Hive Creative Office Campus and Los Angeles Chargers practice field and construct a new multi-phased master planned residential community. The project site is located near two bus stops served by the Orange County Transportation Authority (OCTA). Furthermore, the proposed project would provide public open space areas including a rear paseo adjacent to the Rail Trail, landscaped perimeter, public plaza, general amenity space, bicycle storage space, and retail space, which would also encourage multimodal transportation. As such, the proposed project would be consistent with this reduction strategy.</p>
<p><b>Communities Implementation Strategies</b></p> <ul style="list-style-type: none"> <li>▪ Priority Development Areas</li> <li>▪ Support the development of housing in areas with existing and planned infrastructure and availability of multimodal options, and where a critical mass of activity can promote location efficiency.*</li> <li>▪ Housing the Region</li> <li>▪ Provide technical assistance for jurisdictions to complete and implement their housing elements and support local governments and Tribal Entities to advance housing production.</li> <li>▪ 15-Minutes Communities</li> <li>▪ Develop technical-assistance resources and research that support 15-minute communities across the SCAG region by deploying strategies that include, but are not limited to, redeveloping underutilized properties and increasing access to neighborhood amenities, open space and urban greening, job centers and multimodal mobility options.*</li> <li>▪ Identify and pursue funding programs and partnerships for local jurisdictions across the region to realize 15-minute communities.*</li> </ul>	<p><b>Consistent.</b> The proposed project would construct a new multi-phased master planned residential community near several existing commercial land uses. The project would increase the City’s housing stock by providing multi-family residential housing in areas with adequate public utilities and services and close to major employment centers. Furthermore, the project would propose 335,958 square feet of open space. Thus, the proposed project would be consistent with this reduction strategies.</p>
<p><b>Environment Implementation Strategies</b></p> <ul style="list-style-type: none"> <li>▪ Sustainable Development</li> <li>▪ Research the availability of resources that can support the development of water and energy-efficient building practices, including green infrastructure.</li> <li>▪ Clean Transportation</li> <li>▪ Facilities development of EV Charging infrastructure through public-private partnerships</li> <li>▪ Support the deployment of clean transit and technologies to reduce greenhouse gas emissions as part of the CARB innovative clean technology (ICT) rule.</li> </ul>	<p><b>Consistent.</b> PPP EN-1 would require the project to comply with the most recent available California Building Energy and Efficiency standards and the CALGreen requirements. The proposed project would install high efficiency lighting, solar ready roofs, and energy efficient appliances. Furthermore, the project would install low-flow fixtures, water-efficiency irrigation, and draught tolerant landscape. The project would also be required to comply with PPP EN-2 and EN-3 to reduce water demand and associated energy use associated with landscape water use and indoor water use. Overall, the proposed project would support sustainable development that reduces energy consumption and GHG emissions. The proposed project would be consistent with this reduction strategy.</p> <p><b>Consistent.</b> The proposed project would install bicycle parking stalls and electric vehicle (EV) charging stations in accordance with Title 24 standards. PPP EN-5 would implement EV charging stations and preferential parking for low emitting, fuel efficient vehicles on-site. As such, the proposed project would encourage clean transportation. Therefore, the proposed project would be consistent with this strategy.</p>



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

**Table 5.7-4, continued**

Reduction Strategy	Project Consistency Analysis
<ul style="list-style-type: none"> <li>▪ Climate Resilience</li> <li>▪ Support integration of climate vulnerability assessments into infrastructure planning and delivery for implementing agencies.</li> <li>▪ Collaborate with partners to foster adoption of systems and technologies that can reduce water demand and/or increase water supply, such as alternative groundwater recharge technologies, stormwater capture system, urban cooling infrastructure and greywater usage systems.</li> </ul>	<p><b>Consistent.</b> The proposed project would implement PPP EN-1 that requires the project to comply with the most recent available California Building Energy and Efficiency standards and the CALGreen requirements, which would help reduce energy and water consumption and reduce GHG emissions. Overall, the proposed project would support climate change resilience and local policies for efficient development that reduces energy consumption and GHG emissions. The proposed project would be consistent with this reduction strategy.</p>
<b>Economy Implementation Strategies</b>	
<ul style="list-style-type: none"> <li>▪ Manage the implementation and transition to near-zero and zero-emission technologies for medium- and heavy-duty vehicles and supporting infrastructure.</li> </ul>	<p><b>Consistent.</b> The proposed multi-phased residential community would generate minimal medium- and heavy-duty vehicle trips, if any. As mentioned above, the proposed project would be located near bus stops, provide bicycle parking, electric vehicle charging stations, and vanpool/carpool parking, which would promote near-zero and zero-emissions vehicle trips. As such, the project would not conflict with the strategy.</p>
<p>Notes:</p>	
<p>* (Asterisks) denote quantified GHG emission reduction strategies that help to reach SCAG's GHG reduction target set by CARB.</p>	
<p>Source: Southern California Association of Governments, <i>Connect SoCal 2024, Chapter 3, The Plan</i>, April 2024.</p>	

### 2022 Scoping Plan Consistency Analysis

The 2022 Scoping Plan identifies reduction measures necessary to achieve the goal of carbon neutrality by 2045 or earlier. Actions that reduce GHG emissions are identified for each AB 32 inventory sector. Provided in [Table 5.7-5, \*Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors\*](#), is an evaluation of applicable reduction actions/strategies by emissions source category to determine how the proposed project would be consistent with or exceed reduction actions/strategies outlined in the 2022 Scoping Plan.

**Table 5.7-5 Consistency with the 2022 Scoping Plan: AB 32 Inventory Sectors**

Actions and Strategies	Project Consistency Analysis
<b>Smart Growth/Vehicle Miles Traveled (VMT)</b>	
<p>Reduce VMT per capita to 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045.</p>	<p><b>Consistent.</b> The proposed project would install bicycle parking stalls and electric vehicle (EV) charging stations in accordance with Title 24 standards. Furthermore, the project site is located near two bus stops served by the OCTA. There is one bus stop along Harbor Boulevard, approximately 0.25 miles west, and another bus stop along Fairview Road, approximately 0.35 miles east. The proposed project is also located within a High Quality Transit Area (HQTA), which is within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. In addition, the proposed project would propose public right-of-way improvements including sidewalks, and drive approaches<sup>1</sup> would be constructed to the City's standards, which would encourage pedestrian mobility to reduce overall VMT. PPP EN-5 would implement EV charging stations and preferential parking for low emitting, fuel efficient vehicles on-site. As such, the proposed project would encourage alternative modes of transportation and would include land uses that would reduce total VMT. Thus, the proposed project would be consistent with the action.</p>



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

Table 5.7-5, continued

Actions and Strategies	Project Consistency Analysis
<b>Smart Growth/Vehicle Miles Traveled (VMT)</b>	
<b>New Residential and Commercial Buildings</b>	
All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed Statewide by 2030.	<b>Consistent.</b> The City of Costa Mesa has not adopted an ordinance or program requiring the use of all electric appliances in new developments. Additionally, the City also does not have any regulation that requires an all-electric development. However, if regulations related to all electric development are adopted in the future, the proposed project would comply with such regulations. Furthermore, PPP EN-1 would require the project to comply with the most current California Building Energy and Efficiency standards and the most current CALGreen requirements. Although not adopted yet, it is most likely that the 2025 Title 24 standards and CALGreen Code that would be effective on January 1, 2026, would require all-electric appliances in new residential developments. The project would be required to incorporate all-electric appliances for buildings with permits that would be issued on or after January 1, 2026. As such, the proposed project would be consistent with this action.
<b>Construction Equipment</b>	
Achieve 25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045.	<b>Consistent.</b> The City of Costa Mesa has not adopted an ordinance or program requiring electricity-powered construction equipment. However, if adopted, the proposed project would be required to comply with such regulation. As such, the proposed project would be consistent with this action.
<b>Non-Combustion Methane</b>	
Divert 75 percent of organic waste from landfills by 2025.	<b>Consistent.</b> SB 1383 establishes targets to achieve a 50-percent reduction in the level of Statewide organic waste disposal from 2014 levels by 2020 and a 75-percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The proposed project would comply with local and regional regulations and recycle or compost 75 percent of waste by 2025 pursuant to SB 1383. As such, the proposed project would be consistent with this action.
Footnote: 1 The drive approach is in the public right-of-way, between the edge of pavement and the sidewalk.	
Sources: California Air Resources Board, 2022 Scoping Plan, November 16, 2022. Knowledge Base, <i>What is difference between a driveway and drive approach?</i> <a href="https://warrenmi.qscend.com/311/knowledgebase/article/555">https://warrenmi.qscend.com/311/knowledgebase/article/555</a> , accessed August 8, 2024.	

### Conclusion

In summary, the proposed project’s characteristics render it consistent with Statewide, regional, and local climate change mandates, plans, policies, and recommendations. More specifically, the GHG plan consistency analysis provided above demonstrates that the proposed project would comply with the regulations and GHG reduction goals, policies, actions, and strategies outlined in the Connect SoCal 2024, and 2022 Scoping Plan. Consistency with these plans would reduce the impact of the proposed project’s incremental contribution to GHG emissions. Further, the proposed project would not conflict with applicable Statewide action measures. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

**Plans, Programs, Policies:** Refer to Section 5.4, Energy, for PPP EN-1 through PPP EN-3 and PPP EN-5.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



## 5. Environmental Analysis GREENHOUSE GAS EMISSIONS

### 5.7.4 Cumulative Impacts

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**Impact 5.7-3:** Greenhouse gas emissions generated by the project and other related cumulative projects would not have a significant cumulative impact on global climate change or could conflict with an applicable greenhouse gas reduction plan, policy, or regulation. [Threshold GHG-1 and GHG-2]

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* Project-related GHG emissions are not confined to a particular air basin; instead, GHG emissions are dispersed worldwide. No single project is large enough to result in a measurable increase in global concentrations of GHG emissions. Therefore, impacts identified under Impact 5.7-1 and Impact 5.7-2 are not project-specific impacts to global climate change, but the proposed project's contribution to this cumulative impact. Impact 5.7-2 concludes that the project would be consistent with applicable measures in the Connect SoCal 2024, and 2022 Scoping Plan. Thus, the project would not cumulatively contribute to significant GHG impacts and impacts in this regard would be less than significant.

*Plans, Programs, Policies:* Refer to [Section 5.4](#) for PPP EN-1 through PPP EN-3 and PPP EN-5.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.7.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to greenhouse gas emissions have been identified.



## Chapter 5.8 Hazards and Hazardous Materials



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## 5. Environmental Analysis

### 5.8 HAZARDS AND HAZARDOUS MATERIALS

This section evaluates the potential impacts of the proposed project on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. The analysis in this section is based, in part, upon the *Report of Phase I Environmental Site Assessment and Additional Environmental Services, The Hive, 3333, 3335, and 3337 South Susan Street, Costa Mesa, Orange County, California, 92626* (Phase I ESA), prepared by Targus Associates, LLC, dated September 28, 2018. A complete copy of this study is included in [Appendix G, Phase I Environmental Site Assessment Report](#). Based on a follow up letter dated December 10, 2024, as included in [Appendix G](#), it is acknowledged that the existing condition (primarily consist of office use) as described in Sections 2.1.2 and 2.1.3 of the Phase I ESA has remained consistent from 2018 to 2024.

For the purpose of this analysis, the term “hazardous material” refers to both hazardous substances and hazardous waste. A material is defined as “hazardous” if it appears on a list of hazardous materials prepared by a Federal, tribal, State, or local regulatory agency, or if it possesses characteristics defined as “hazardous” by such an agency. A “hazardous waste” is a solid waste that exhibits toxic or hazardous characteristics (i.e., ignitability, corrosivity, reactivity, and/or toxicity).

#### 5.8.1 Environmental Setting

##### 5.8.1.1 REGULATORY BACKGROUND

Federal, State, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

##### **Federal**

###### *Toxic Substances Control Act*

The Toxic Substances Control Act (TSCA) of 1976 provides the United States Environmental Protection Agency (EPA) with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (LBP). Title IV of the TSCA directs EPA to regulate LBP hazards.

TSCA Sections 402 and 404 require those engaged in lead abatements, risk assessments, and inspections in homes or child-occupied facilities (such as day care centers and kindergartens) built prior to 1978 be trained and certified in specific practices to ensure accuracy and safety. TSCA Section 403, *Residential Hazard Standards for Lead in Paint, Dust and Soil*, sets standards for dangerous levels of lead in paint, household dust, and residential soil.

###### *Residential Lead-Based Paint Hazard Reduction Act*

The purposes of the Residential Lead-Based Paint Hazard Reduction Act are to:



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### HAZARDS AND HAZARDOUS MATERIALS

- Develop a national strategy to build the infrastructure necessary to eliminate LBP hazards in all housing as expeditiously as possible;
- Reorient the national approach to the presence of LBP in housing to implement, on a priority basis, a broad program to evaluate and reduce LBP hazards in the Nation's housing stock;
- Encourage effective action to prevent childhood lead poisoning by establishing a workable framework for LBP hazard evaluation and reduction and by ending the current confusion over reasonable standards of care;
- Ensure the existence of LBP hazards is taken into account in the development of Federal, State, and local housing policies and in the sale, rental, and renovation of homes and apartments;
- Mobilize national resources expeditiously, through a partnership among all levels of government and the private sector, to develop the most promising, cost-effective methods for evaluating and reducing LBP hazards;
- Reduce the threat of childhood lead poisoning in housing owned, assisted, or transferred by the Federal Government; and
- Educate the public concerning the hazards and sources of LBP poisoning and steps to reduce and eliminate such hazards.

#### *Comprehensive Environmental Response, Compensation and Liability Act*

The Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) is a law developed to protect the water, air, and soil resources from the risks created by past chemical disposal practices. This law is also referred to as the Superfund Act and regulates sites on the National Priority List (also known as Superfund sites). This law (U.S. Code Title 42, Chapter 103) provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified.

#### *Emergency Planning and Community Right-To-Know Act*

In 1986, Congress passed the Superfund Amendments and Reauthorization Act (SARA). Title III of this regulation is called the "Emergency Planning and Community Right-to-Know Act of 1986" (EPCRA). EPCRA requires the establishment of State commissions, planning districts, and local committees to facilitate the preparation and implementation of emergency plans. Under its requirements, local emergency planning committees (LEPCs) are responsible for developing a plan for preparing for and responding to a chemical emergency, including:

- An identification of local facilities and transportation routes where hazardous materials are present.





## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

- The procedures for immediate response in case of an accident (this must include a community-wide evacuation plan).
- A plan for notifying the community that an incident has occurred.
- The names of response coordinators at local facilities.
- A plan for conducting drills to test the plan.

The emergency plan is reviewed by the State Emergency Response Commission and publicized throughout the community. The LEPC is required to review, test, and update the plan each year. The Orange County Health Care Agency (OCHCA) Environmental Health Division is responsible for coordinating hazardous material and disaster preparedness planning and appropriate response efforts with city departments and local and State agencies. The goal is to improve public and private sector readiness and to mitigate local impacts resulting from natural or man-made emergencies.

Another purpose of EPCRA is to inform communities and citizens of chemical hazards in their areas. Sections 311 and 312 of EPCRA require businesses to report to State and local agencies the location and quantities of chemicals stored on-site. Under Section 313 of EPCRA, manufacturers are required to report chemical releases for more than 600 designated chemicals. In addition to chemical releases, regulated facilities are also required to report off-site transfers of waste for treatment or disposal at separate facilities, pollution prevention measures, and chemical recycling activities. The EPA maintains the Toxic Release Inventory database that documents the information regulated facilities are required to report annually.

### *Resource Conservation and Recovery Act*

The Resource Conservation and Recovery Act (RCRA) is the principal Federal law that regulates generation, management, and transportation of hazardous waste. Hazardous waste management includes the treatment, storage, or disposal of hazardous waste.

### *Clean Water Act*

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the Waters of the United States<sup>1</sup> and gives the EPA the authority to implement pollution control programs, such as setting wastewater standards for the industry. Under the CWA, the EPA has developed national water quality criteria recommendations for pollutants in surface waters. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the Nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the Nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires States to establish site-specific

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<sup>1</sup> Waters of the United States generally include surface waters—lakes, rivers streams, bays, the ocean, dry streambeds, wetlands, and storm sewers that are tributary to any surface water body.



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### HAZARDS AND HAZARDOUS MATERIALS

water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and recognized the need for planning to address nonpoint sources of pollution.

Several sections of the CWA are discussed in [Section 5.9, \*Hydrology and Water Quality\*](#), of this Draft EIR.

#### *Hazardous Waste Operations and Emergency Response Standards*

The Occupational Safety and Health Administration (OSHA) issued the Hazardous Waste Operations and Emergency Response (HAZWOPER) standards, 29 Code of Federal Regulations (CFR) 1910.120 and 29 CFR 1926.65, to protect workers and enable them to handle hazardous substances safely and effectively. The latter standard is for the construction industry and is identical to 29 CFR 1910.120.

The HAZWOPER standard covers employers performing the following general categories of work operations:

- Hazardous waste site cleanup operations;
- Operations involving hazardous waste that are conducted at treatment, storage, and disposal (TSD) facilities; and
- Emergency response operations involving hazardous substance releases.

The HAZWOPER standards provide information and training criteria to employers, emergency response workers, and other workers potentially exposed to hazardous substances to improve workplace safety and health and reduce workplace injuries and illnesses from exposures to hazardous substances. It is critical that employers and their workers understand the scope and application of HAZWOPER and can determine which sections apply to their specific work operations.

#### *Title 40 Code of Federal Regulations, Section 61 Subpart M*

Title 40 CFR Section 61 Subpart M, *National Emissions Standards for Asbestos*, sets forth emissions standards for asbestos from demolition and renovation activities, and for waste disposal from such activities.

#### *Title 40 Code of Federal Regulations, Section 761.61*

Title 40 CFR Section 761.61, *PCB Remediation Waste*, provides cleanup and disposal options for PCB remediation waste. Any person cleaning up and disposing of PCBs managed under Title 40 CFR Section 761.61 is required to do so based on the concentration at which the PCBs are found. This section does not prohibit any person from implementing temporary emergency measures to prevent, treat, or contain further releases or mitigate migration to the environment of PCBs or PCB remediation waste.

#### *Title 29 Code of Federal Regulations, Section 1926.62*

Title 29 CFR Section 1926.62, *Lead*, sets standards for occupational health and environmental controls for lead exposure in construction, regardless of the lead content of paints and other materials. The standards include requirements addressing exposure assessment, methods of compliance, respiratory protection, protective



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clothing and equipment, hygiene facilities and practices, medical surveillance, medical removal protection, employee information and training, signs, recordkeeping, and observation and monitoring.

### *U.S. Environmental Protection Agency's Lead Renovation, Repair and Painting Program Rules*

EPA's 2008 *Lead-Based Paint Renovation, Repair and Painting (RRP) Rule* (as amended in 2010 and 2011) aims to protect the public from LBP hazards associated with renovation, repair, and painting activities. These activities can create hazardous lead dust when surfaces with lead paint, even from many decades ago, are disturbed. The rule requires workers to be certified and trained in the use of lead-safe work practices, and requires renovation, repair, and painting professionals to be EPA-certified. These requirements became fully effective April 22, 2010.

### *Federal Air Regulations, Part 77*

The Federal Aviation Administration (FAA) is charged with the review of construction activities that occur in the vicinity of airports. Their role in reviewing these activities is to ensure new structures do not result in hazards to navigation and thus derogate the safety of the National Airspace System. The regulations contained in Federal Aviation Regulation (FAR) Part 77 are designed to ensure no hazards are allowed to exist that would endanger the public. Proposed structures are also evaluated against Terminal En Route Procedures (TERPS), which ensure a structure does not adversely impact flight procedures. The construction of tall structures, such as buildings, construction cranes, and cell towers, in the vicinity of an airport can be hazardous to the navigation of airplanes. The FAA, through FAR Part 77, established a method of identifying surfaces that should be free from penetration by obstructions in order to maintain sufficient airspace around airports. FAR Part 77, in effect, identifies the maximum height at which a structure would be considered an obstacle at any given point around an airport. The extent of the off-airport coverage needing to be evaluated for tall-structure impacts can extend miles from an airport facility. In addition, FAR Part 77 establishes standards for determining whether objects constructed near airports would be considered obstructions in navigable airspace, sets forth notice requirements of certain types of proposed construction or alterations, and provides for aeronautical studies to determine the potential impacts of a structure on the flight of aircraft through navigable airspace.

## **State**

### *Hazardous Materials Release Notification*

Many State statutes require emergency notification of a hazardous chemical release. These include, but are not limited to:

- California Health and Safety Codes Sections 25270.8 and 25507;
- Vehicle Code Section 23112.5;
- Public Utilities Code Section 7673 (PUC General Orders #22-B, 161);
- Government Code Sections 51018, 8670.25.5(a);
- Water Codes Sections 13271 and 13272; and



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- California Labor Code Section 6409.1(b)10.

Requirements for immediate notification of all significant spills or threatened releases cover owners, operators, persons in charge, and employers. Notification is required regarding significant releases from facilities, vehicles, vessels, pipelines, and railroads. In addition, all releases that result in injuries or harmful exposure to workers must be immediately reported to the California Occupational Safety and Health Administration (Cal OSHA) pursuant to the California Labor Code Section 6409.1(b).

#### *Department of Toxic Substances Control*

The responsibility for implementation of RCRA was given to California EPA's Department of Toxic Substances Control (DTSC) in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals. Hazardous wastes regulated by California, but not by EPA, are called "non-RCRA hazardous wastes."

#### *Hazardous Materials Business Plans*

Both the Federal government (through the CFR) and the State of California (through the California Health and Safety Code) require all businesses that handle more than a specified amount, or "reporting quantity," of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its Certified Unified Program Agency (CUPA). According to OCHCA guidelines, the preparation, submittal, and implementation of a business plan is required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.

Business plans must include an inventory of the hazardous materials at the facility. Businesses must update the whole plan at least every three years and the chemical portion every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify the procedures for immediate notification of all appropriate agencies and personnel, identification of local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

OCHCA currently reviews submitted business plans and updates. Businesses that handle hazardous materials are required by law to provide an immediate verbal report of any release or threatened release of hazardous materials if there is a reasonable belief the release or threatened release poses a significant present or potential hazard to human health and safety, property, or the environment. OCHCA is also charged with the responsibility of conducting compliance inspections of regulated facilities in Orange County.

#### *California Accidental Release Prevention Program*

The California Accidental Release Prevention Program (CalARP) became effective on January 1, 1997, in response to Senate Bill (SB) 1889 (Chapter 715, Statutes of 1996). CalARP aims to be proactive and therefore



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requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors present at a business and the measures that can be implemented to reduce this accident potential. This requirement is coupled with the requirements for preparation of hazardous materials business plans under the Unified Program, implemented by the CUPA.

### *California Code of Regulations, Title 22, Division 4.5*

Title 22, Division 4.5 of the California Code of Regulations (CCR) sets forth the requirements for hazardous-waste generators; transporters; and owners or operators of treatment, storage, or disposal facilities. These regulations include the requirements for packaging, storing, labeling, reporting, and general management of hazardous waste prior to shipment. In addition, the regulations identify standards applicable to transporters of hazardous waste. These regulations specify the requirements for transporting shipments of hazardous waste, including manifesting, vehicle registration, and emergency accidental discharges during transportation.

### *California Fire Code*

The 2013 California Fire Code (CCR Title 24 Part 9) sets requirements pertaining to fire safety and life safety, including for building materials and methods, fire protection systems in buildings, emergency access to buildings, and handling and storage of hazardous materials.

### *California Building Code*

Per CCR Title 24, Part 2, Section 907.2.11.2, smoke alarms shall be installed and maintained on the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms, in each room used for sleeping purposes, and in each story within a dwelling unit. The smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. Smoke alarms shall receive their primary power from the building wiring and shall be equipped with a battery backup.

### *California Health and Safety Code, Sections 17920.10 and 105255*

California Health and Safety Code Sections 17920.10 and 105255 require lead hazards to be contained during demolition activities. Lead hazards refer to deteriorated LBP, lead-contaminated dust, lead-contaminated soil, or disturbing lead-based paint without containment.

### *California Code of Regulations: Worker Safety Standards: Asbestos and Lead*

CCR Title 8 Section 1529 sets forth worker safety standards for lead exposure for employees conducting demolition, construction, and renovation work, including painting and decorating.

CCR Title 8 Section 1532.1 sets forth worker safety standards for activities involving construction, demolition, renovation, and maintenance.



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#### Regional

##### *South Coast Air Quality Management District*

South Coast Air Quality Management District (SCAQMD) Rule 1403 governs the demolition of buildings containing asbestos materials. Rule 1403 specifies work practices with the goal of minimizing asbestos emissions during building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing material (ACM). The requirements for demolition and renovation activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage and disposal requirements for ACM waste.

#### Local

##### *City of Costa Mesa General Plan*

The Safety Element and Land Use Element of the *City of Costa Mesa General Plan* (General Plan) include the following goals, objectives, and policies pertaining to hazards and hazardous materials within the City:

- **Goal S-2:** High Level of Police and Fire Services and Emergency Preparedness.
  - **Objective S-2A:** Plan, promote, and demonstrate a readiness to respond and reduce threats to life and property through traditional and innovative emergency services and programs.
    - **Policy S-2.13:** Continue to consult with the County of Orange in the implementation of the Orange County Hazardous Waste Management Plan.
    - **Policy S-2.14:** Ensure that appropriate in-depth environmental analysis is conducted for any proposed hazardous waste materials treatment, transfer, and/or disposal facility.
    - **Policy S-2.15:** Continue to consult with the County of Orange to identify and inventory all users of hazardous materials and all hazardous waste generators, and prepare clean-up action plans for identified disposal sites.
    - **Policy S-2.16:** Require the safe production, transportation, handling, use, and disposal of hazardous materials that may cause air, water, or soil contamination.
    - **Policy S-2.17:** Encourage best practices in hazardous waste management, and ensure consistency with City, County, and Federal guidelines, standards, and requirements.
    - **Policy S-2.18:** Consult with Federal, State, and local agencies and law enforcement to prevent the illegal transportation and disposal of hazardous waste.



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- **Goal LU-3:** Development that Maintains Neighborhood Integrity and Character.
  - **Objective LU-3A:** Establish policies, standards, and procedures to minimize blighting influences, and maintain the integrity of stable neighborhoods.
    - **Policy LU-3.13:** Prohibit construction of buildings which would present a hazard to air navigation, as determined by the Federal Aviation Administration (FAA).
    - **Policy LU-3.15:** The City will ensure that development proposals, including the construction or operation of a heliport or helistop comply fully with permit procedures under State law, including referral of the project to the ALUC by the applicant, and with all conditions of approval imposed or recommended by the Federal Aviation Administration, ALUC, and Caltrans, including the filing of Form 7480-1 (Notice of Landing Area Proposed) with the FAA. This requirement shall be in addition to all other City development requirements.
    - **Policy LU-3.16:** The City shall refer certain projects to the Airport Land Use Commission for Orange County, as required by Section 21676 of the California Public Utilities Code to determine consistency of the project(s) with the Airport Environs Land Use Plan for John Wayne Airport.

### *City of Costa Mesa Fire Prevention Program*

The City of Costa Mesa Fire Prevention Program develops and enforces local fire, life safety, property, and environmental protection standards; enforces State-adopted fire and life safety codes; reviews building construction plans; conducts building construction and business inspections; investigates citizen complaints; manages the City's hazardous materials disclosure program; provides training to department personnel in regard to fire and life safety codes; and assists professional trades with technical fire code requirements and department public education efforts.

### 5.8.1.2 EXISTING CONDITIONS

#### Existing and Former On-Site Uses

According to the Phase I ESA, the project site has historically been used for agricultural purposes from prior to 1938 through the 1990s. In 2003, construction of the Hive Creative Office Campus and former Los Angeles Chargers practice field was completed. The Phase I ESA indicates additional renovations occurred in 2015 and 2016.

#### *Past Agricultural Activities*

Sites previously used for agricultural purposes have the potential to contain pesticide residues of certain persistence in soil at concentrations that are considered to be hazardous. Commonly used pesticides prior to 1973 include dichlorodiphenyldichloroethane (DDD), dichlorodiphenyltrichloroethane (DDT), and dichlorodiphenyldichloroethylene (DDE), all of which are of certain persistence in soil.



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According to the Phase I ESA, the project site contains low concentrations of residual agrochemicals and/or associated components, including DDE, toxaphene, and arsenic. However, the residual agrochemicals and/or associated chemicals did not exceed screening values for commercial/industrial uses established within the EPA's Preliminary Remediation Goals and background concentrations.<sup>2</sup> Further, the 14.25-acre project site was graded for development of the Hive Creative Office Campus in 2003. As such, residual, persistent, or immobile pesticides are not expected to remain concentrated on-site at the ground surface.

#### *Existing Buildings*

Structures constructed between the 1940s and the 1970s may be associated with hazardous building materials (e.g., asbestos-containing material [ACM], LBP). Additionally, PCBs were used extensively as coolants in hydraulic systems and as dielectric fluids in electrical equipment as well as many other applications before 1979. Typically, hydraulic systems and electrical equipment are expected to be on most urban land uses such as commercial uses.

Existing commercial structures on the project site appear to have been constructed in 2003 (with additional renovations in 2015 and 2016); however (although unlikely), suspect ACMs, LBPs, PCBs, among other building materials with hazardous potential, may still be present within on-site structures.

#### *Suspect Asbestos-Containing Materials (ACMs)*

Asbestos is a strong, incombustible, and corrosion-resistant material, which was used in many commercial products prior to the 1940s and up until the early 1970s. If inhaled, asbestos fibers can result in serious health problems. The California Division of Occupational Safety and Health (Cal/OSHA) asbestos construction standard (Title 8, CCR, Section 1259) defines ACM as material containing more than one percent asbestos. Suspect materials that may contain ACMs include, but may not be limited to, various wall and ceiling systems (including wallboard, joint compound, and texture), numerous colors and patterns of sheet flooring (linoleum) and floor tile with floor tile mastic, caulking, thermal system insulation, and ceiling tiles. According to the Phase I ESA, the suspect ACM was observed to be in good condition and non-friable with the exception of the ceiling tiles which were friable but in good condition.

#### *Lead-Based Paints (LBPs)*

Lead has long been used as a component of paint, primarily as a pigment and for its ability to inhibit and resist corrosion. Over time, as concern over the health effects associated with lead began to grow, health and environmental regulations were enacted to restrict the use of lead in certain products and activities in the U.S. In the last 25 years, LBPs, leaded gasoline, leaded can solder, and lead-containing plumbing materials were among the products that were gradually restricted or phased out of use. Due to the commercial nature of the existing Hive Creative Office Campus (constructed date of 2003); LBPs are not anticipated to occur on-site.

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<sup>2</sup> Preliminary Remedial Goals refers to the average concentration of a chemical in an exposure area that would yield the specified target risk in an individual who is exposed at random within the exposure area. Thus, if an exposure area has an average concentration above the Preliminary Remedial Goals, some level of remediation is needed.





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### *Polychlorinated Biphenyls (PCBs)*

According to the EPA, PCBs were domestically manufactured from 1929 until fabrication was banned in 1979 by the TSCA, with some products and processes excluded from the ban by regulation. PCBs were used extensively as coolants in hydraulic systems and as dielectric fluids in electrical equipment as well as many other applications. However, PCBs may still be present in products and materials produced before 1979 (including oil used in motors and hydraulic systems) or in excluded manufacturing processes, as defined in 40 CFR 761.3, and can still be released into the environment, where they do not readily break down. PCBs have been identified as probable human carcinogens and cause a variety of noncancer health effects as well. According to the Phase I ESA, four pad-mounted electrical transformers that may contain PCBs were observed on the project site. The transformers were in good physical condition and displayed no visible evidence of leakage. Further, according to the Phase I ESA, the transformers were new at the time of construction regarding the Hive Creative Office Campus.

### *Hydraulic Elevators/Equipment*

According to the Phase I ESA, hydraulic elevators are located on the second floor of each building associated with the Hive Creative Office Campus. The elevators are considered to function properly and have not been subject to repair for fluid loss or removed from service up until at least the time of preparation of the Phase I ESA. Sump inlets are located within each of the elevator pits and observed to be in good condition (including no staining, strong, pungent, or noxious odors, or evidence of improper disposal). It should be noted that the Phase I ESA noted that these sump inlets are regularly maintained for overflow and pumped out every few years as needed.

### *Storage Tanks*

One bi-fuel emergency generator with a 200-gallon diesel, double-walled belly storage tank was observed on-site. According to the Phase I ESA, the emergency generator is fueled by natural gas with a diesel startup system. No evidence of spills, stains, releases, or odors were observed in the vicinity of the on-site generator. Additionally, no evidence of drains, cracked concrete, or other observable pathways to the subsurface were identified. It should be noted that two, five-gallon buckets of liquid (labeled non-hazardous material) were observed in the emergency generator enclosure; however, these chemicals were requested to be collected and transferred off-site by OCHCA. No evidence of a release was noted.

### *Petroleum Products*

Small quantities of paints and cleaning supplies were noted in on-site janitorial closets. A two-gallon gasoline tank was observed in the emergency generator enclosure. The chemicals were observed in closed containers without apparent leakage or spills.

### *Maintenance Services*

Lawn care and pest control activities occur on-site; however no chemicals typically associated with land care or pest control activities were reported or observed during the field survey conducted as part of the Phase I ESA.



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#### Potential Soil and Soil Gas Contamination from Current and Former On-Site Activities

##### *Soil*

According to the Phase I ESA, prior on-site subsurface investigations were conducted by Gale/Jordan Associates, Inc (G/Ja). A total of ten hand augured soil borings to a maximum depth of five feet below ground surface. Soil samples were collected from each of the test borings (at an approximate depth of one-foot) and analyzed for volatile organic compounds (VOCs), total recoverable petroleum hydrocarbons (TRPH), organochlorine pesticides, herbicides, and CCR Title 22 metals. G/Ja reported that no apparent discoloration was observed during the on-site drilling activities and groundwater was not encountered in the borings.

DDE and DDT were detected at concentrations in soil below residential Preliminary Remedial Goals, Total Threshold Limit Concentrations (TTLC), and 10 times the Soluble Threshold Limit Concentrations (STLC); toxaphene was detected at concentrations above residential Preliminary Remedial Goals (below commercial Preliminary Remedial Goals) but below TTLCs and STLCs; TRPH at one location considered to be low (39 milligrams per kilograms [mg/kg]); and arsenic at a concentration above its residential Preliminary Remedial Goals and STLC. Arsenic concentrations were retested and determined to be in line with expected State background levels. Further, as part of the Phase I ESA, Targus Associates, LLC determined that the 14.25-acre project site was graded for development of the Hive Creative Office Campus in 2003. As such, residual, persistent, or immobile pesticides, including toxaphene, are not expected to remain concentrated on-site at the ground surface. Other detected metal were below their respective screening criteria. No VOCs or herbicides were detected. As such, hazards associated with existing soil and soil gas are not anticipated on-site.

##### *Soil Gas*

According to the Phase I ESA, a review of current and historical operations both on-site and in the surrounding properties did not identify a soil vapor encroachment condition at the project site.

#### Potential Soil and Soil Gas Concerns from Off-Site Properties

Surrounding off-site properties within the project area have handled/stored/transported hazardous materials that could have affected groundwater and associated soil gas at the project site.

##### *Former LA Times*

According to the Phase I ESA, the former LA Times property located at 1275 West Sunflower Avenue, approximately 15 feet west of the project site, is listed in numerous regulatory listings. According to the Phase I ESA, the former LA Times property contains a southwest groundwater gradient and depth to groundwater between 10 to 20 feet below ground surface. Affected media includes soil, soil vapor, and groundwater, the majority of which impact the facility building to the west of the former LA Times. Petroleum-based impacts were identified along the eastern perimeter of the former LA Times; however, numerous borings/wells along this area (west of the project site boundary) along with the direction of the groundwater gradient, indicate the former LA Times property does not represent a potential concern regarding soil, soil vapor, and groundwater, in connection with the project site.



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### *Rail Trail (Former Southern Pacific Railroad)*

The Rail Trail (formerly a portion of the Southern Pacific Railroad) is located adjacent to the west of the project site. The Rail Trail has been previously disturbed and improved with a public trail (as part of the development associated with The Press), which is already constructed and in operation. According to the Phase I ESA, the Rail Trail does not constitute a suspect recognized environmental condition (REC). As such, hazardous material associated with this former railroad right-of-way are not anticipated and do not represent a potential concern regarding soil, soil vapor, and groundwater, in connection with the project site.

### **Emergency Response Planning**

The Costa Mesa Disaster Plan serves as the community's Emergency Operations Plan (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 EOP identifies key personnel and agencies in the Costa Mesa Emergency Management Organization that are organized to protect life and property in the community. The EOP also identifies sources of outside support that may be provided by State and Federal agencies, the private sector, and through mutual aid by other jurisdictions. In addition, the EOP specifies emergency operations to be implemented during an emergency, assigns responsibilities, and provides an explanation of how the plan is to be administered. These activities involve a number of City departments and facilities, including the Police Department, Fire Department, public health officials, and care and shelter operations.

The City's emergency evacuation routes are shown in the General Plan Safety Element Figure S-9, *Public Safety Facilities and Emergency Evacuation Routes*; as depicted, the nearest designated emergency evacuation route is Fairview Road (to the east of the project site) and Harbor Boulevard (to the west of the project site). The Police Chief coordinates all emergency evacuation activities and issues evacuation orders based on information gathered from emergency experts. Evacuation operations are also managed by law enforcement agencies, highway/road/street departments, and public and private transportation providers.

### **5.8.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- HAZ-2 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.
- HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of an existing or proposed school.



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- HAZ-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.
- HAZ-5 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 result in a safety hazard or excessive noise for people residing or working in the project area.
- HAZ-6 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- HAZ-7 Expose people or structures, either directly or indirectly, to a significant risk or loss, injury, or death involving wildland fires.

Impacts relating to thresholds HAZ-1, HAZ-3, HAZ-4, HAZ-5, and HAZ-7 were determined to be less than significant or no impact, as substantiated in [Section 8.0, \*Effects Found Not to Be Significant\*](#). These thresholds are not addressed in the following analysis.

### 5.8.3 Environmental Impacts

#### 5.8.3.1 METHODOLOGY

The Phase I ESA was conducted in general accordance with the requirements of 40 CFR Part 312, *Standards and Practices for All Appropriate Inquiries*, as required under Sections 101(35)(B)(ii) and (iii) of CERCLA. The purpose of conducting an all appropriate inquiries investigation into the previous ownership and uses of a property is to meet the provisions necessary for the landowner, contiguous property owner, and/or bona fide prospective purchaser to qualify for certain landowner liability protections under CERCLA.

The purpose of the Phase I ESA was to identify evidence or indications of RECs. RECs are defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property:

- Due to release to the environment;
- Under conditions indicative of a release to the environment; or
- Under conditions that pose a material threat of a future release to the environment.

Additionally, an Historical REC (HREC) is a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. Controlled REC (CREC) is defined as a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of



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required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

### 5.8.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.8-1: Project construction and operations would not create a significant hazard through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. [Threshold HAZ-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

#### *Impact Analysis:*

##### *Construction*

Construction of the proposed project would involve demolition, grading, and construction of new buildings. Potentially hazardous materials used during construction include substances such as paints, sealants, lubricants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. The materials used, however, would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short-term and would cease upon completion of construction.

##### *Disturbance of Existing Soils*

According to the Phase I ESA, the project site contains low concentrations of residual agrochemicals and/or associated components, including DDE, toxaphene, and arsenic. However, the residual agrochemicals and/or associated chemicals did not exceed screening values for commercial/industrial Preliminary Remedial Goals and background concentrations. Further, the 14.25-acre project site was graded for development of the Hive Creative Office Campus in 2003. As such, residual, persistent, or immobile pesticides are not expected to remain concentrated on-site at the ground surface. Further, no soil, soil vapor, and groundwater at the project site are anticipated to be of concern as a result of the former LA Times property to the west of the project site. Last, no concerns associated with residual contamination along the adjacent Rail Trail (formerly a portion of the Southern Pacific Railroad) are anticipated. As such, potential impacts regarding accidental conditions associated with existing contamination to soil, soil vapor, and groundwater would be less than significant in this regard.

##### *Demolition of On-Site Buildings*

Existing commercial structures on the project site appear to have been constructed in 2003 (with additional renovations in 2015 and 2016). Due to the age of existing buildings (2003+), ACMs, LBPs, and PCBs are unlikely. Nonetheless, should the contractor suspect any ACMs, LBPs, PCBs, or other hazardous building materials, the contract would be required to comply with existing laws and regulations pertaining to the disturbance and removal of such materials.



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The EPA specifies that ACM classified as friable, or that could become friable, is to be removed prior to renovation or demolition activities. According to the EPA, nonfriable ACM represents a minimal hazard to the occupants of a building as long as the material is in a generally undamaged condition and used for its intended purpose. In addition, the National Emission Standards for Hazardous Air Pollutants and SCAQMD require that both friable ACM and nonfriable ACM that could become friable be removed prior to renovation or demolition activities (refer to PPP HAZ-1).

In addition to ACMs, it is possible that LBPs were used historically on-site. As such, demolition of the existing buildings have the potential to expose and disturb LBPs. Abatement of all hazardous materials encountered during building demolition would be required to be conducted in accordance with the applicable laws and regulations, including those of DTSC, EPA, OSHA, Cal/OSHA, and SCAQMD (refer to PPP HAZ-1).

Four pad-mounted electrical transformers that may contain PCBs were observed on the project site. In the event PCBs are encountered during removal of on-site electrical transformers, the local purveyor (i.e., Southern California Edison) would be required to remove such hazardous materials (containing less than 50 parts per million [ppm] of PCB concentrations) pursuant to existing Federal and State regulations (refer to PPP HAZ-2).

Compliance with existing regulations would ensure the safe handling, treatment, removal, and disposal of ACMs, LBP, and PCBs. As such, impacts pertaining to demolition of the existing building would be less than significant.

#### *Operations*

Operation of the proposed residential, retail, and recreational uses would involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, the project would be required to comply with the California Building Code, California Fire Code, as well as other Federal, State, and local regulations related to the protection of the public's health and safety. Upon compliance with the existing State and local procedures, long-term impacts regarding hazardous materials during project operations would be less than significant.

#### *Plans, Programs, Policies:*

PPP HAZ-1 A comprehensive asbestos and lead-based paint (LBP) survey shall be conducted at the project site. Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing material (ACM) or LBP shall be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District's (SCAQMD's) Rule 1403
- California Health and Safety Code (Section 39650 et seq.)
- The California Occupational Safety and Health Administration (Cal/OSHA) Administration Regulations (California Code of Regulations [CCR] Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])



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- Code of Federal Regulations (CFR) (Title 40, Part 61 [asbestos]; Title 40, Part 763 [asbestos]; Title 40, Part 745 [lead]; and Title 29, Part 1926 [asbestos and lead])
- U.S. Environmental Protection Agency's (EPA's) Lead Renovation, Repair and Painting Program Rules and Residential Lead-Based Paint Disclosure Program
- Sections 402, 404, and 403, as well as Title IV of the Toxic Substances Control Act (TSCA)

PPP HAZ-2 The removal of other hazardous materials, such as polychlorinated biphenyls (PCBs) containing less than 50 parts per million (ppm) of PCB concentrations, shall be completed by the local purveyor (i.e., Southern California Edison) in accordance with applicable regulations pursuant to 40 Code of Federal Regulations (CFR) 761 (PCBs) by workers with HAZWOPER training, as outlined in 29 CFR 1910.120 and 8 California Code of Regulations (CCR) 5192.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.8-2: Project development could affect the implementation of an emergency responder or evacuation plan. [Threshold HAZ-6]**

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**Level of Significance Before Mitigation:** Potentially Significant Impact.

**Impact Analysis:** As shown on General Plan Safety Element Figure S-9, *Public Safety Facilities and Emergency Evacuation Routes*, the nearest designated emergency evacuation route is Fairview Road (to the east of the project site) and Harbor Boulevard (to the west of the project site). Construction activities would not result in any lane closures along Fairview Road and Harbor Boulevard. Further, operations of the proposed project would not impede emergency evacuation along these routes either. As such, the proposed project would not physically interfere with an adopted emergency response plan or emergency evacuation plan, including the City's EOP. It is acknowledged that project construction activities could result in temporary partial lane closures to street traffic along Sunflower Avenue, Susan Street, and South Coast Drive as a result of utility improvements. While temporary lane closures may be required, at least one travel lane in each direction would remain open. In order to ensure that proposed construction activities on local roads do not interfere with emergency access, the contractor would be required to notify the Costa Mesa Police Department, Costa Mesa Fire Department, the City of Costa Mesa Public Services Director, as well as relevant departments associated with the City of Santa Ana, of construction activities that would impede movement (such as road or lane closures) along Sunflower Avenue, Susan Street, and South Coast Drive (Mitigation Measure HAZ-1). Compliance with Mitigation Measure HAZ-1 would allow for uninterrupted emergency access to evacuation routes. Thus, project impacts with regard to interfering with an emergency responder or evacuation plan would be reduced to less than significant levels.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.



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### HAZARDS AND HAZARDOUS MATERIALS

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:**

HAZ-1 At least three business days prior to any lane closure, the construction contractor shall notify the Costa Mesa Police Department and Costa Mesa Fire Department, along with the City of Costa Mesa Public Services Director, as well as relevant departments associated with the City of Santa Ana, of construction activities that would impede movement (such as road or lane closures), to allow for uninterrupted emergency access of evacuation routes.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

#### 5.8.4 Cumulative Impacts

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**Impact 5.8-3: Construction and operation of the proposed project and related projects would not result in a cumulatively considerable impact through reasonably foreseeable upset and accident conditions involving the release of hazardous materials. [Threshold HAZ-2]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative projects could result in the increase in handling of hazardous materials, potential for accidental conditions, or an increase in the transport of hazardous materials, particularly during site disturbance and demolition activities. However, with compliance with applicable laws and regulations, including those of DTSC, EPA, OSHA, Cal/OSHA, and SCAQMD (refer to PPP HAZ-1 and PPP HAZ-2), these impacts would be minimized. Compliance with all applicable Federal and State laws and regulations related to the handling of hazardous materials would reduce the likelihood and severity of accidents.

As discussed in Impact 5.8-1, the proposed project would not have a significant impact involving the potential for accidental conditions during project construction and operation. As such, the project would not result in cumulatively considerable impacts regarding potential upset and accidental conditions.

**Plans, Programs, Policies:** Refer to PPP HAZ-1 and PPP HAZ-2.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.8-4: Development of the proposed project and related projects could affect the implementation of an emergency responder or evacuation plan. [Threshold HAZ-6]**

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**Level of Significance Before Mitigation:** Potentially Significant Impact.





## 5. Environmental Analysis HAZARDS AND HAZARDOUS MATERIALS

**Impact Analysis:** Cumulative projects in the area would be analyzed for impairment of emergency access vehicles and consistency with the City's EOP on a project-by-project basis and would be required to comply with all City roadway design standards to ensure adequate emergency access.

As concluded in Impact 5.8-2, the proposed project would result in temporary lane closures. However, with implementation of Mitigation Measure HAZ-1, impacts in this regard would be reduced to less than significant and would not be cumulatively considerable.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** Refer to Mitigation Measure HAZ-1.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

### 5.8.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to hazards and hazardous materials have been identified.



## 5. Environmental Analysis

### HAZARDS AND HAZARDOUS MATERIALS

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## Chapter 5.9 Hydrology and Water Quality



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## 5. Environmental Analysis

### 5.9 HYDROLOGY AND WATER QUALITY

This section of the Draft EIR evaluates the potential for the project to impact hydrology and water quality. Hydrology is related to the distribution and circulation of water, both on land and underground. Water quality is related to the quality of surface water and groundwater. Surface water includes lakes, rivers, streams, and creeks; groundwater is under the Earth's surface.

The analysis in this section is based in part on the following information:

- *The Hive Live Preliminary Water Quality Management Plan* (Preliminary WQMP), FUSCOE Engineering Incorporated, April 4, 2024 (refer to [Appendix H, \*Hydrology and Water Quality Studies\*](#));
- *Hive Live 3333 Susan Street, Costa Mesa, CA 92626, Preliminary Drainage Analysis* (Preliminary Hydrology Report), FUSCOE Engineering Incorporated, April 2024 (refer to Attachment G of the Preliminary WQMP provided in [Appendix H](#));
- *MesaWater District Water Supply Assessment Hive Live Development* (WSA), West and Associates Engineering, Inc., July 2024 (refer to [Appendix K, \*Water Supply Assessment\*](#)); and
- C0510-24-01: 3333 Susan Street (Costa Mesa Hive Live) Water Services Questionnaire, MesaWater District, August 13, 2024 (refer to [Appendix L, \*Public Services and Utilities Correspondence\*](#)).

#### 5.9.1 Environmental Setting

##### 5.9.1.1 REGULATORY BACKGROUND

###### Federal

###### *Clean Water Act*

The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1972. The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the Waters of the United States<sup>1</sup> and gives the U.S. Environmental Protection Agency (EPA) the authority to implement pollution control programs, such as setting wastewater standards. The statute's goal is to end all discharges entirely and to restore, maintain, and preserve the integrity of the Nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the Nation's waters. The CWA sets water quality standards for all contaminants in surface waters and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges, requires states to establish site-specific water quality standards for navigable bodies of water, and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA also funded the construction of sewage treatment plants and

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<sup>1</sup> Waters of the United States generally include surface waters (e.g., lakes, rivers streams, bays, the ocean, dry streambeds, wetlands, and storm sewers) that are tributary to any surface water body.



## 5. Environmental Analysis

### HYDROLOGY AND WATER QUALITY

recognized the need for planning to address nonpoint sources of pollution. The following CWA sections assist in ensuring water quality in surrounding water bodies:

- Section 208 requires the use of best management practices (BMPs) to control the discharge of pollutants in stormwater during construction.
- Section 303(d) requires creation of a list of impaired water bodies by states, territories, and authorized tribes; evaluation of lawful activities that may impact impaired water bodies;<sup>2</sup> and preparation of plans to improve the quality of these water bodies. Water bodies on the list do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution-control technology.
- Section 402(p) establishes a framework to control water pollution by regulating point source discharges under the National Pollutant Discharge Elimination System (NPDES) permit program. Point source discharges are readily identifiable, discrete inputs where waste is discharged to receiving waters from a pipe or drain. Nonpoint discharges occur over a wide area and are associated with particular land uses (such as urban runoff from streets and stormwater from construction sites).

#### *National Pollution Discharge Elimination System*

Under the NPDES program (CWA Section 402), all facilities that discharge pollutants from any point source into Waters of the United States must have a NPDES permit. The term “pollutant” broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTWs), industrial facilities, and urban runoff. It is acknowledged that the NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation. Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. The NPDES program issues two basic permit types: individual and general.

The NPDES program has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 100,000 or more must file for and obtain a NPDES permit.

#### *National Dam Safety Act of the Federal Emergency Management Agency*

The National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. As the lead Federal agency for the National Dam Safety Program (NDSP), the Federal Emergency Management Agency (FEMA) is responsible for coordinating efforts to secure the safety of dams throughout the United States. NDSP targets the improvement of dams and the safety of those who live in surrounding communities.

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<sup>2</sup> Impaired water bodies are water bodies that do not meet, or are not expected to meet, water quality standards.



## 5. Environmental Analysis HYDROLOGY AND WATER QUALITY

### *National Flood Insurance Program*

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 are intended to reduce the need for large, publicly funded flood control structures and disaster relief by restricting development on floodplains.

The National Flood Insurance Program (NFIP) provides a means for property owners to financially protect themselves from flood damage. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the program. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. The County of Orange and City of Costa Mesa are participants and must adhere to the NFIP.

Through its Flood Hazard Mapping Program, FEMA identifies flood hazards, assesses flood risks, and partners with states and communities to provide accurate flood hazard and risk data. Flood Hazard Mapping is an important part of the NFIP, as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. A FIRM is an official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

A Special Flood Hazard Area (SFHA) is an area within a floodplain having a one percent or greater chance of flood occurrence within any given year (commonly referred to as the 100-year flood zone). SFHAs are delineated on flood hazard boundary maps issued by FEMA. The Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 make flood insurance mandatory for most properties in SFHAs.

### **State**

#### *Porter-Cologne Water Quality Control Act*

The Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.) is the basic water quality control law for California. Under this act, the State Water Resources Control Board (SWRCB) has ultimate control over State water rights and water quality policy. In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The State is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs) carries out the regulation, protection, and administration of water quality in each region. Each RWQCB is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's groundwater and surface water, and local water quality conditions and problems.

#### *General Construction Permit*

Pursuant to the CWA, in 2022, the SWRCB issued a Statewide NPDES General Permit for stormwater discharges from construction sites (Order WQ 2022-0057-DWQ, NPDES No. CAS000002). Under this Statewide General Construction Permit, discharges of stormwater from construction sites with a disturbed area of one or more acres are required to obtain coverage. Coverage by the Statewide General Construction Permit



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### HYDROLOGY AND WATER QUALITY

is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the Statewide General Construction Permit must ensure a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect stormwater runoff. It must also contain a visual monitoring program, a chemical monitoring program for “nonvisible” pollutants to be implemented if there is a failure of BMPs, and a monitoring plan if the site discharges directly to a water body listed on the State’s 303(d) list of impaired waters.

#### *Sustainable Groundwater Management Act*

The Sustainable Groundwater Management Act (SGMA) established a framework for sustainable, local groundwater management. SGMA requires groundwater-dependent regions to halt overdraft and bring basins into balanced levels of pumping and recharge. With passage of the SGMA, the Department of Water Resources (DWR) launched the Sustainable Groundwater Management Program to implement the law and provide ongoing support to local agencies around the State. The SGMA:

- Establishes a definition of “sustainable groundwater management;”
- Requires a Groundwater Sustainability Plan be adopted for the most important groundwater basins in California;
- Establishes a timetable for adoption of Groundwater Sustainability Plans;
- Empowers local agencies to manage their groundwater basins sustainably;
- Establishes basic requirements for Groundwater Sustainability Plans; and
- Provides for a limited State role.

#### *California Geological Survey Tsunami Inundation Maps*

A tsunami is a sea wave generated by an earthquake, landslide, volcanic eruption, or even by a large meteor hitting the ocean. The California Geological Survey provides geologic and seismic expertise to the public, other State government offices, and local government agencies. The California Geological Survey works with the California Emergency Management Agency and the University of Southern California Tsunami Research Center to produce Statewide tsunami inundation maps. These maps, which were prepared to assist cities and counties in identifying their tsunami hazard, are used by coastal communities to prepare emergency evacuation plans.

### **Regional**

#### *Santa Ana River Basin Watershed Management Area Water Quality Control Plan*

The City is in the Santa Ana River Basin in the Upper Santa Ana Watershed. The *Water Quality Control Plan for the Santa Ana River Basin (Region 8)* (Basin Plan) was last updated by the Santa Ana RWQCB in June 2019. The





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Basin Plan gives direction on the beneficial uses of the State waters in Region 8 (Chapter 3); describes the water quality that must be maintained to support such uses (Chapter 4); and provides programs, projects, and other actions necessary to achieve the standards established by the Santa Ana RWQCB.

### *North and Central Orange County Integrated Regional Water Management Plan*

The *North and Central Orange County Watershed Management Area Integrated Regional Water Management Plan* (IRWMP) was prepared to identify and implement water management solutions on a regional scale. Agencies, organizations, and stakeholders collaborated to identify water resource needs, develop goals to improve water resource management, and evaluate projects for increased regional self-reliance.

The goals of the IRWMP are to increase water supply, protect water quality, enhance the environment and habitat, provide flood risk management, improve the quality of life, and address climate change. The IRWMP accomplishes these goals through an established process of ranking projects to help further State and regional goals.

### *Orange County Water District Groundwater Management Plan*

The goal of the *Orange County Water District Groundwater Management Plan* (OCWD GMP) is to provide a planning framework to operate and manage the groundwater basin in a sustainable manner to ensure a long-term reliable supply for beneficial uses among all stakeholders in the Orange County Groundwater Basin (OC Basin). The purpose of the OCWD GMP is to develop consensus among stakeholders on issues and solutions related to groundwater; build relationships among stakeholders within the OC Basin and between local, State, and Federal agencies; and define actions for developing project and management programs to ensure the long-term sustainability of groundwater resources in the OC Basin.

### *Orange County MS4 Permit*

MS4 permits are issued by local RWQCBs to provide the means to address stormwater quality issues specific to the local watershed or region. MS4 permits require permittees to develop and implement a stormwater management program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). The stormwater management program or Drainage Area Management Plan, as it is referred to in the Orange County MS4 Permit (Order No. R8-2009-0030, as amended by Order No. R8-2010-0062 [NPDES Permit No. CAS618030]), must specify BMPs approved by the Santa Ana RWQCB. Since the Orange County MS4 Permit has expired and was administratively extended, a tentative regional permit (Order No. R8-2024-0001, NPDES No. CAS618000) has been released for public review. The MS4 permit requirements in effect during the final design phase for the project will be addressed.

The proposed project and its facilities would discharge into the MS4 within the jurisdiction of Costa Mesa. Pursuant to the Orange County MS4 Permit, the City is responsible for controlling or limiting urban pollutants generated by post-construction activities from reaching their MS4s. The proposed project is, therefore, subject to the requirements of the Orange County MS4 Permit (Santa Ana Region) as it is applied by the permittee and its co-permittees.



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#### *De Minimis Waste Discharge Requirements for the Santa Ana Region*

Order No. R8-2020-0006, NPDES No. CAG998001, includes general waste discharge requirements for discharges to surface waters that pose an insignificant (de minimis) threat to water quality and regulates dewatering discharges for the Santa Ana Region. The Order regulates proposed groundwater-related discharges and/or de minimis discharges within the San Diego Creek/Newport Bay Watershed that do not contain nutrients, selenium, and other pollutants of total maximum daily load (TMDL) concern at levels that pose a threat to water quality. Construction dewatering wastes, among other wastewater discharges, are regulated under the Statewide General Construction Permit.

#### *Model Water Quality Management Plan (WQMP) and Technical Guidance Document (TGD)*

Model Water Quality Management Plan (WQMP), dated May 2011) and Technical Guidance Document (TGD) (dated December 2013) have been developed to aid the County of Orange, the Orange County Flood Control District, and cities of Orange County (the Permittees) and development project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that qualify as Priority Projects. The criteria for defining a “Priority Project” is provided in the Model WQMP and TGD.

The Model WQMP and TGD describe the process that Permittees employ for developing a WQMP for individual new development and significant redevelopment projects. A WQMP is a plan for minimizing the adverse effects of urbanization on site hydrology, runoff flow rates and pollutant loads. A WQMP, consistent with the Model WQMP and TGD, is required by the National Pollutant Discharge Elimination System (NPDES) permit administered by the Regional Water Quality Control Board.

### Local

#### *General Plan*

The Conservation Element and Safety Element of the General Plan include the following goals, objectives, and policies pertaining to hydrology and water quality:

- **Goal CON-3: Improved Water Supply and Quality.** Pursue a multijurisdictional approach to protecting, maintaining, and improving water quality and the overall health of the watershed. A comprehensive, integrated approach will ensure compliance with federal and State standards, and will address a range of interconnected priorities, including water quality and runoff; stormwater capture, storage, and flood management techniques that focus on natural drainage; natural filtration and groundwater recharge through green infrastructure and habitat restoration; and water recycling and conservation.
- **Objective CON-3.A:** Work towards the protection and conservation of existing and future water resources by recognizing water as a limited resource that requires conservation.
- **Policy CON-3.A.5:** Work with public and private property owners to reduce stormwater runoff in urban areas to protect water quality in storm drainage channels, the Santa Ana River, and other local water courses that lead to the Pacific Ocean.



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- **Policy CON-3.A.6:** Continue to develop strategies to promote stormwater management techniques and storm drain diversion programs that collectively and naturally filter urban runoff.
  - **Policy CON-3.A.7:** Continue to comply with the National Pollutant Discharge Elimination System Program (NPDES) by participating in the Countywide Drainage Area Management Plan (DAMP), which stipulates water quality requirements for minimizing urban runoff and discharge from new development and requires the provisions of applicable Best Management Practices (BMP).
  - **Policy CON-3.A.8:** Require that all applicable development projects be reviewed with regards to requirements of both the on-site Water Quality Management Plan and State requirements for runoff and obtaining a Storm Water Pollution Prevention Plan (SWPPP) permit.
- **Goal S-1:** Risk Management of Natural and Human-Caused Disasters. Minimize the risk of injury, loss of life, property damage, and environmental degradation from seismic activity, geologic hazards, flooding, fire, and hazardous materials. Promote a sustainable approach to reduce impacts of natural disasters, such as flooding and fire.
- **Objective S-1A:** Work to mitigate and prevent potential adverse consequences of natural and human-caused disasters.
    - **Policy S-1.9:** Continue to consult with appropriate local, State, and federal agencies to maintain the most current flood hazard and floodplain information; use the information as a basis for project review and to guide development in accordance with federal, State, and local standards.
    - **Policy S-1.10:** Regularly review and update Article 10 - Floodway and Floodplain Districts of the City's Municipal Code consistent with federal and State requirements.
    - **Policy S-1.11:** Improve and maintain local storm drainage infrastructure in a manner that reduces flood hazards.
    - **Policy S-1.14:** Minimize flood hazard risks to people, property, and the environment by addressing potential damage tsunamis and sea level rise.
    - **Policy S-1.15:** Consult with regional agencies and study strategies that employ engineering defensive methods along the Santa Ana River that limit potential flooding hazards from sea level rise.
    - **Policy S-1.16:** Develop emergency response, early warning notification, and evacuation plans for areas that are within dam inundation areas, where feasible.



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### HYDROLOGY AND WATER QUALITY

#### *Municipal Code*

The Municipal Code addresses hydrology and water quality issues through Section 8-32, *Control of Urban Runoff*, and Article 10, *Floodway and Floodplain Districts*. The City's irrigation requirements are regulated through Section 13-107, *Irrigation Requirements*.

Municipal Code Section 8-32 mandates all new development within the City is undertaken in accordance with the County's DAMP and any conditions and requirements established by the City of Costa Mesa Development Services Department and the Public Services Department. Prior to issuance of a grading permit, building permit, or non-residential plumbing permit for any new development or significant redevelopment, the Development Services Department and the Public Services Department must review the project plans and impose terms, conditions, and requirements on a project in accordance with Municipal Code Section 8-32.

According to Municipal Code Title 13, Chapter 5, Article 10, floodway and floodplain districts and regulations are intended to be applied to those areas of the City which, under present conditions, are subject to periodic flooding and accompanying hazards.

Municipal Code Section 13-107 requires irrigation systems be designed so that overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences are minimized. Automatic systems for watering cycles should be scheduled to maximize ground infiltration rates and further minimize runoff.

#### **5.9.1.2 EXISTING CONDITIONS**

##### **Regional Drainage**

The City is located within the Santa Ana River Hydrologic Unit. This unit covers an area of approximately 2,700 square miles, which is within most of the Santa Ana RWQCB's jurisdictional area and includes portions of Orange, Los Angeles, Riverside, and San Bernardino counties. Within this hydrologic unit, the City encompasses both the Santa Ana River Watershed (northern portion) and the Newport Bay Watershed (southern portion). The project site is in the Santa Ana River Watershed, which covers approximately 210 square miles within the County. This watershed contains the Santa Ana River and Santiago Creek.<sup>3</sup> The Santa Ana River passes about one mile west of the project site; refer to Exhibit 3-2, *Local Vicinity*.

The City provides storm drain service to the majority of the City and has approximately 42 miles of storm drains and 1,165 catch basins. City staff is responsible for inspection, maintenance, and repair of the City's storm drain system.<sup>4</sup> This includes clearing blocked drains, removing debris from storm drain/catch basins structures, and cleaning and repairing damaged drain pipes. The objective is to reduce debris and pollution from reaching the ocean in compliance with the NPDES. The Orange County Resources and Development

<sup>3</sup> Santa Ana Watershed Project Authority (SAWPA), 2024, Maps, <https://sawpa.gov/owow/dci-program/maps/>. Accessed on July 15, 2024.

<sup>4</sup> City of Costa Mesa, *Street and Storm Drain Maintenance*, <https://www.costamesaca.gov/government/departments-and-divisions/public-works/maintenance-services/street-and-storm-drain-maintenance#:~:text=Costa%20Mesa%20has%20approximately%2042,the%20City's%20storm%20drain%20system>, accessed August 19, 2024.



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Management Department maintains the regional drainage facilities in the City, including the Santa Ana River and San Diego Creek.

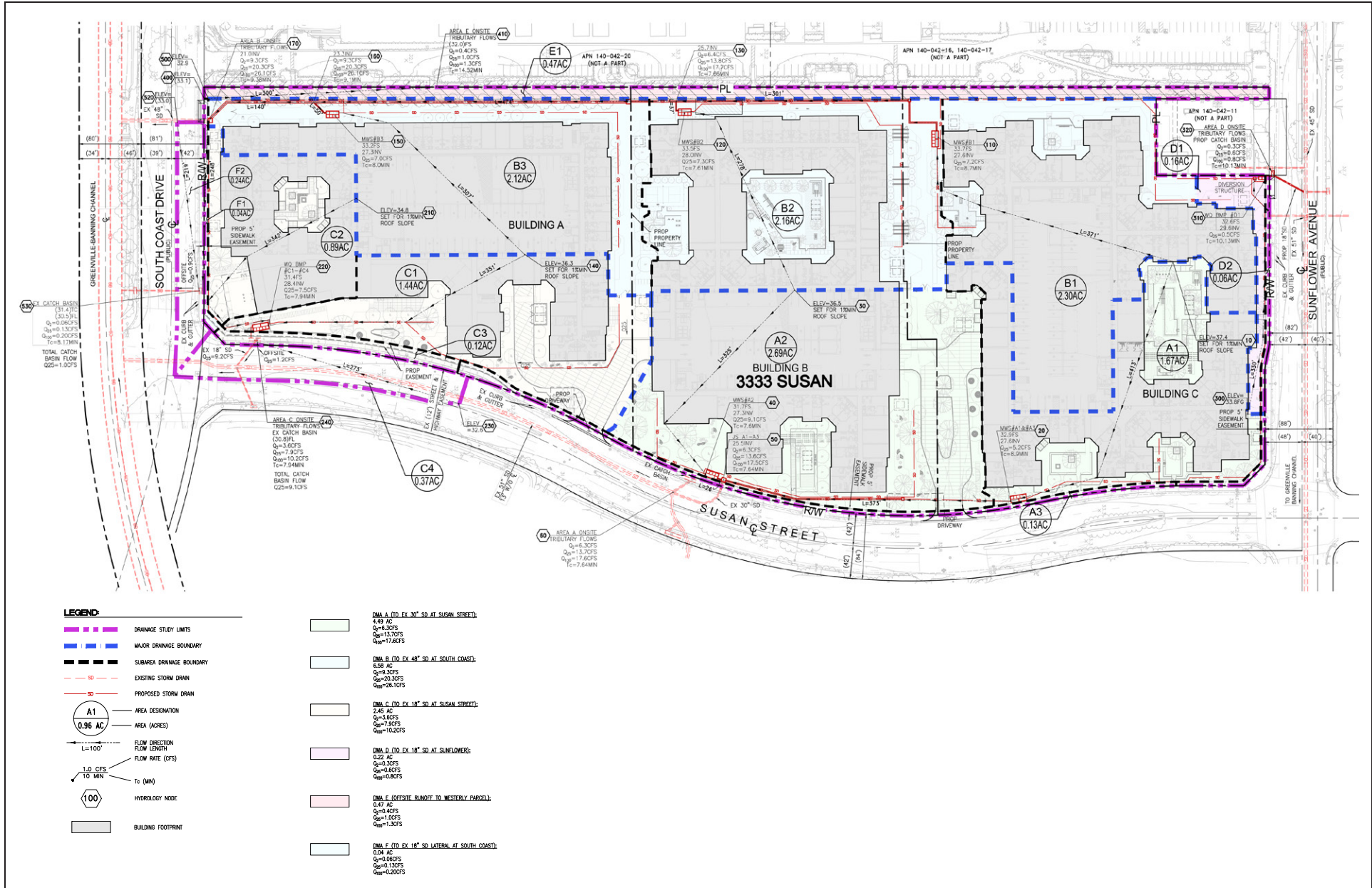
### Local Drainage

The existing site consists of commercial structure, football field, and a surface parking lot. Approximately 10 percent of the site is pervious (62,327 square feet), and the remaining 90 percent is impervious (560,947 square feet).

### Existing Conditions

As shown in [Exhibit 5.9-1, \*Drainage Management Areas\*](#), the site is currently divided into six drainage management areas (DMA):

- DMA A (approximately 4.49 acres) refers to the northeast on-site area, which consists of the existing office building, the eastern portion of the commercial building, parking lot, curbs, gutters, and landscaping. Runoff is currently conveyed through existing curbs and gutters which would be captured by on-site storm drain inlets and bioswales. These storm drain inlets and bioswales connect to the existing storm drain system (30-inch storm drain at Susan Street) which connects to the existing 51-inch storm drain main along Susan Street.
- DMA B (approximately 6.58 acres) refers to the western on-site area, which consists of the existing buildings at the center of the site, the western half of the existing football field, parking lots, and landscaping. Runoff is currently conveyed through existing curbs and gutters and are captured on-site through drain inlets or bioswales. Runoff is then conveyed to an existing storm drain lateral on the western portion of the site which ties to the existing 48-inch storm drain at the right of way. This storm drain eventually connects to the Greenville banning channel downstream.
- DMA C (approximately 2.45 acres) refers to the southeast on-site area, which consists of the eastern half of the football field, sidewalk, and landscaping. Runoff is currently captured on-site through storm drain systems which connects to existing public catch basins along Susan Street. This catch basin has an existing 18-inch storm drain lateral which connects to the 51-inch storm drain main along Susan Street. This 51-inch storm drain main connects to the Greenville banning channel downstream.
- DMA D (approximately 0.22 acre) refers to the northern on-site area, which includes private drive aisles and landscaping. Runoff currently flows towards Sunflower Avenue and is captured by an existing catch basin located next to the existing driveway at Sunflower. This catch basin has a storm drain lateral that connects to the existing 51-inch storm drain main along Sunflower Avenue.
- DMA E (approximately 0.47 acre) refers to the western on-site area which includes half of the recently paved pathway and landscaping. The proposed project would have emergency fire access roads on DMA E. Runoff currently flows towards The Rail Trail to the west.



Source: Fuscoe Engineering, September 2024



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- DMAE F (approximately 0.04 acre) refers to the southern on-site area which includes the proposed sidewalk easement towards Soth Coast Drive. Runoff currently flows into the existing catch basin at South Coast Drive which has an existing 18-inch storm drain lateral that eventually connects to the Greenville banning channel downstream.

### Surface Water Quality

The Greenville banning channel, Santa Ana River Reach 1, and Santa Ana Delhi Channel, and the Newport Slough receive runoff from the project site. The Santa Ana Delhi Channel is on the CWA Section 303(d) List of Water Quality Limited Segments for Enterococcus, Fecal Coliform, and Total Coliform.<sup>5,6</sup> There are no 303(d) listed impairments for the Greenville banning channel, Santa Ana River Reach 1, and Newport Slough. According to the Basin Plan, the following beneficial uses are identified for the Santa Ana River Reach 1:

- **Municipal and Domestic Supply (MUN):** MUN waters are used for community, military, municipal, or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
- **Water Contact Recreation (REC1):** REC1 waters are used for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses may include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
- **Non-contact Water Recreation (REC2):** REC2 waters are used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, and aesthetic enjoyment in conjunction with the above activities.
- **Warm Freshwater Habitat (WARM):** WARM waters support warmwater ecosystems that may include, but are not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
- **Wildlife Habitat (WILD):** WILD waters support wildlife habitats that may include, but are not limited to, the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.

Beneficial uses identified for the Newport Slough include MUN, REC1, REC2, and WILD, as well as the following:

- **Commercial and Sportfishing (COMM):** COMM waters are used for commercial or recreational collection of fish or other organisms, including those collected for bait. These uses may include uses involving organisms intended for human consumption.

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<sup>5</sup> California State Water Resources Control Board, [https://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2012.shtml](https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml), accessed August 20, 2024.

<sup>6</sup> Enterococcus, Fecal Coliform, and Total Coliform are indicators of the presence of fecal material in water.



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### HYDROLOGY AND WATER QUALITY

- **Rare, Threatened or Endangered Species (RARE):** RARE waters support the habitats necessary for the survival and successful maintenance of plant or animal species designated under State or Federal law as rare, threatened, or endangered.
- **Marine Habitat (MAR):** MAR waters support marine ecosystems that include, but are not limited to, preservation and enhancement of marine habitats, vegetation (e.g., kelp), fish, and shellfish, and wildlife (e.g., marine mammals and shorebirds).
- **Estuarine Habitat (EST):** EST waters support estuarine ecosystems, which may include, but are not limited to, preservation and enhancement of estuarine habitats, vegetation, fish, and shellfish, and wildlife (e.g., waterfowl, shorebirds, and marine mammals).

### Groundwater

Extensive portions of the County are underlain by deep deposits of permeable, water-bearing sedimentary geologic strata. Groundwater occurs in semi-consolidated to moderately consolidated sand, gravel, and silt occurring in aquifers extending from approximately 40 to over 2,500 feet below ground surface (bgs) in Costa Mesa. Depths to the uppermost aquifer vary throughout the City from approximately 40 feet bgs in the northern portions to over 100 feet bgs near the coast. Groundwater is present at depths of less than 40 feet bgs along the Santa Ana River.

Groundwater for Costa Mesa is withdrawn from the OC Basin. The OCWD manages the amount and quality of groundwater in the OC Basin.<sup>7</sup> The Mesa Water District (MWD) supplies water to the City and operates seven clear-water wells that pump water from 200-600 feet below the surface and two deep-water wells that pumps water from 1,200 feet below the surface. As of fiscal year 2019 to 2020, MWD relies on approximately 16,118 acre-feet per year (AFY) of groundwater from the OC Basin. This source of supply meets approximately 94 percent of MWD's total annual demand.

Groundwater was encountered at the site at depths ranging from 22 to 24 feet bgs. Additionally, the Preliminary Hydrology Report specifies the historic high perched groundwater depth is approximately 10 feet bgs; refer to Attachment G of [Appendix H](#).

### Groundwater Quality

Salinity and nitrates are significant water quality problems in many parts of Southern California, including Orange County. Salinity is a measure of the dissolved particles and ions in water, which can be measured as total dissolved solids (TDS) or electrical conductivity (EC). OCWD continuously monitors the levels of TDS in wells throughout the OC Basin. TDS currently has a California Secondary Maximum Contaminant Level (MCL) of 500 milligrams per liter (mg/L). The portions of the OC Basin with the highest levels are generally located in the cities of Irvine, Tustin, Yorba Linda, Anaheim, and Fullerton. There is also a broad area in the central portion of the OC Basin where TDS ranges from 500 to 700 mg/L. Sources of TDS include the water

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<sup>7</sup> Mesa Water District, *2020 Urban Water Management Plan*, <https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.





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supplies used to recharge the OC Basin and on-site wastewater treatment systems, also known as septic systems. The TDS concentration in the OC Basin is expected to decrease over time as the TDS concentration of water used to recharge the OC Basin is approximately 50 mg/L.

Nitrates are one of the most common and widespread contaminants in groundwater supplies, originating from fertilizer use, animal feedlots, wastewater disposal systems, and other sources. The MCL for nitrate in drinking water is set at 10 mg/L. OCWD regularly monitors nitrate levels in groundwater and works with producers to treat wells that have exceeded safe levels of nitrate concentrations. OCWD manages the nitrate concentration of water recharged by its facilities to reduce nitrate concentrations in groundwater. This includes the operation of the Prado Wetlands, which was designed to remove nitrogen and other pollutants from the Santa Ana River before the water is diverted to be percolated into OCWD's surface water recharge system.<sup>8</sup>

### Flooding Hazards

#### *Federal Emergency Management Agency Flood Zone*

According to the FEMA FIRM No. 06059C0258J, the project site is located in Zone X, which indicates an area of minimal flood hazard, not within a 100-year flood zone. However, it is acknowledged the site is an area of reduced flood risk due to the levees on the Santa Ana River and may be exposed to flood risk if overtopping of the levee occurs (FEMA 2024b).

#### *Dam Inundation*

The project site is in the dam inundation area for the Prado Dam and Santiago Creek Dam; refer to General Plan Safety Element Figure S-6, *Dam Inundation Areas*. The Prado Dam is approximately 20.5 miles northeast from the project site. Although the dam was designed in the 1930s, risk of inundation as a result of dam failure has decreased due to the Seven Oaks Dam, which was completed in November 1999 and is located approximately 40 miles upstream on the Santa Ana River. During a flood, Seven Oaks Dam would store water destined for Prado Dam for as long as the reservoir pool at Prado Dam is rising. When the flood threat at Prado Dam has passed, the Seven Oaks Dam would begin to release its stored flood water at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to the County. The Prado Dam has been designed to protect against a 100-year flood (or a one percent chance event).

The Santiago Creek Dam is 12 miles northeast of the project site. The dam is located near the City of Irvine and was constructed in 1931. Santiago Creek Dam is jointly owned by the Irvine Ranch Water District (IRWD) and Serrano Water District. The dam is inspected twice a year by the California Division of Safety of Dams (DSOD). DSOD deemed the dam safe for continued use. In addition to State-mandated inspections, IRWD retains geotechnical consultants that specialize in dams to perform an extra semi-annual inspection of the dam. IRWD staff visually inspect the dam daily and have caretakers who live on-site and also observe the dam daily. Measurements of drain flows, monitoring wells, and piezometers are taken monthly. Piezometers are used to

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<sup>8</sup> Mesa Water District, *2020 Urban Water Management Plan*, <https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.



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measure groundwater and other fluid pressure levels. Dam crest survey markers, which give the ability to measure horizontal or vertical movement of the dam, are measured by a licensed surveyor annually.<sup>9</sup>

#### *Tsunamis*

Tsunamis are large ocean waves caused by underwater seismic activity. When tsunamis hit the coast, they can cause considerable damage to property and put the public at risk. The project site is located approximately 4.5 miles inland from the Pacific Ocean. According to the California Department of Conservation, the project site is not within a tsunami hazard zone.<sup>10</sup>

#### *Seiches*

A seiche is a surface wave created in an enclosed or partially enclosed body of water, which can be compared to the back-and-forth sloshing in a bathtub. Seiches usually occur as a result of earthquake activity. According to the General Plan EIR, the absence of any large bodies of water within Costa Mesa and the location of high bluffs adjacent to Newport Bay preclude the possibility of damage from seiches in the City, including the project site.

### 5.9.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- HYD-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- HYD-2 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- HYD-3 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 a 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.

<sup>9</sup> Irvine Ranch Water District, *Dam Safety Program*, [https://www.irwd.com/images/pdf/construction/DSP\\_Guidelines\\_-\\_July\\_2023.pdf](https://www.irwd.com/images/pdf/construction/DSP_Guidelines_-_July_2023.pdf), June 2023.

<sup>10</sup> Department of Conservation, *California Tsunami Maps*, <https://www.conservation.ca.gov/cgs/tsunami/maps>, accessed August 20, 2024.



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- iv) Impede or redirect flood flows.
- HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- HYD-5 Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

No impacts relating to Threshold HYD-4 were identified, as substantiated in [Section 8.0, \*Effects Found Not to Be Significant\*](#), of this Draft EIR. This threshold is not addressed in the following analysis.

### 5.9.3 Environmental Impacts

#### 5.9.3.1 METHODOLOGY

The Preliminary Hydrology Report and Preliminary WQMP analyzed drainage and water quality impacts on-site; refer to [Appendix H](#). The proposed condition rational method peak flows included in the Preliminary Hydrology Report were analyzed using the Advance Engineering Software package for Orange County (Version 21), which complies with the *Orange County Hydrology Manual, 1996, Addendum No. 1, 85 Percent Upper Confidence Level Procedure*. The analysis evaluated 25- and 100-year storm events consistent with City requirements. The Preliminary WQMP was prepared to comply with the water quality requirements of the local NPDES Stormwater Program to meet the City's MS4 Permit requirements.

#### 5.9.3.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.9-1: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. [Threshold HYD-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* Urban runoff resulting from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, soil, and animal waste. This runoff can flow directly into local streams or lakes or into storm drains and continue through pipes until it is released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats. As discussed, the project site is a tributary to Greenville banning channel, Santa Ana River Reach 1, and the Newport Slough. The Newport Slough is



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listed on the CWA Section 303(d) List of Water Quality Limited Segments for Indicator Bacteria. There are no 303(d) listed impairments for the Greenville banning channel and the Santa Ana River Reach 1.<sup>11</sup>

#### Construction

##### *General Construction Permit*

Construction activities associated with the proposed project may impact water quality due to sheet flow, causing erosion of exposed soils. Project construction is expected to generate sediment, nutrients, metals, trash and debris, and oil and grease. Nutrients include nitrogen and phosphorus.

In order to reduce short-term water quality impacts, construction and demolition activities would require compliance with the Construction Stormwater General Permit Order 2022-0057-DWQ, which requires the preparation and implementation of a SWPPP pursuant to PPP HYD-1. The SWPPP would specify BMPs to be implemented to minimize demolition- and construction-related stormwater pollution impacts. Categories of BMPs included in SWPPPs are described in Table 5.9-1, *Construction Best Management Practices*. Compliance with the SWPPP and implementation of BMPs would ensure impacts associated with demolition and construction activities are minimized.

Further, the project would be subject to compliance with SCA HYD-1 through SCA HYD-3, which would ensure construction BMPs are implemented to minimize potential impacts to water quality. With the implementation of the SWPPP and BMPs during all construction activities and compliance with the City’s erosion and sediment control requirements, the impact to water quality during construction activities would be less than significant.

**Table 5.9-1 Construction Best Management Practices**

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Consists of using project scheduling and planning to reduce soil or vegetation disturbance (particularly during the rainy season), preventing or reducing erosion potential by diverting or controlling drainage, as well as preparing and stabilizing disturbed soil areas.	Scheduling, preservation of existing vegetation, hydraulic mulch, hydroseeding, soil binders, straw mulch, geotextile and mats, wood mulching, earth dikes and drainage swales, velocity dissipation devices, slope drains, streambank stabilization, compost blankets, soil preparation/roughening, and non-vegetative stabilization
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Silt fence, sediment basin, sediment riprap, check dam, fiber rolls, gravel bag berm, street sweeping and vacuuming, sandbag barrier, straw bale barrier, storm drain inlet protection, manufactured linear sediment controls, compost socks and berms, and biofilter bags
Wind Erosion Controls	Consists of applying water or other dust palliatives to prevent or minimize dust nuisance.	Dust control soil binders, chemical dust suppressants, covering stockpiles, permanent vegetation, mulching, watering, temporary gravel construction, synthetic covers, and minimization of disturbed area
Tracking Controls	Minimize the tracking of soil off-site by vehicles.	Stabilized construction roadways and construction entrances/exits, and entrance/outlet tire wash.

<sup>11</sup> California State Water Resource Control Board, *2020-2022 California Integrated Report*, [https://www.waterboards.ca.gov/water\\_issues/programs/water\\_quality\\_assessment/2020\\_2022\\_integrated\\_report.html](https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2020_2022_integrated_report.html), accessed August 21, 2024.



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**Table 5.9-1, continued**

Category	Purpose	Examples
Non-Storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	Water conservation practices, temporary stream crossings, clear water diversions, illicit connection/discharge, potable and irrigation water management, and the proper management of the following operations: paving and grinding, dewatering, vehicle and equipment cleaning, fueling and maintenance, pile driving, concrete curing, concrete finishing, demolition adjacent to water, material over water, and temporary batch plants.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Stockpile management, spill prevention and control, solid waste management, hazardous waste management, contaminated soil management, concrete waste management, sanitary/septic waste management, liquid waste management, and management of material delivery storage and use.

Source: CASQA 2023.

### *Construction Dewatering Discharge*

As previously noted, perched groundwater on-site is shallow and groundwater was encountered between 22 and 24 feet bgs with a historic high of 10 feet. The proposed project would excavate to a minimum of five feet bgs or two feet below the bottom of the deepest footing, whichever is deeper. Based on existing groundwater level, perched groundwater is not expected to be encountered during excavation. However, in the unlikely event in which groundwater is present above the proposed excavated bottom, the Preliminary Geotechnical Investigation indicates temporary dewatering would be required to maintain a safe working environment during excavation and construction activities. The Preliminary Geotechnical Investigation also recommends a qualified dewatering consultant be retained to design the dewatering system. If dewatering discharge is piped to an infiltration basin during construction, compliance with the Statewide General Construction Permit Attachment G Dewatering Requirements (Order No. Order WQ 2022-0057-DWQ, NPDES No. CAS000002) would be required. If dewatering discharge is piped to storm drains, the requirements of the De Minimis Waste Discharge Requirements for the Santa Ana Region (Order No. R8-2020-0006, NPDES No. CAG998001) would govern dewatering activities during construction. Compliance with Order No. 2003-0003-DWQ/Order No. R8-2015-0004, NPDES No. CAG998001 would ensure project construction dewatering would not cause State waste discharge and Federal NPDES permit requirements to be exceeded. A less than significant impact would occur in this regard.

### *Operations*

Project operations would alter the existing land uses of the project site and, consequently, alter the potential pollutant sources generated at the site. Operational activities are expected to generate similar types of pollutants that construction would, although with a reduced possibility of sediment pollution, as well as pathogens and pesticides.

### *Low-Impact Development BMPs*

Low-impact development (LID) is an approach to land development (or redevelopment) that works with nature to manage and treat stormwater as close to its source as possible. LID employs principles such as preserving



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and recreating natural landscape features to minimize effective imperviousness and create functional, appealing site drainage that treats stormwater as a resource rather than a waste product. There are many practices that have been used to adhere to these principles, including bioretention facilities, rain gardens, vegetated rooftops, rain barrels, and permeable pavements. By implementing LID principles and practices, water can be managed in a way that reduces the impact of built areas and promotes the natural movement of water within an ecosystem or watershed. Applied on a broad scale, LID can maintain or restore a watershed's hydrologic and ecological functions. The project is required to infiltrate, harvest and use, evapotranspire, or biotreat/biofilter the 85th percentile, 24-hour storm event, which constitutes the design capture volume.

Based on the analysis presented in the Preliminary WQMP, it is infeasible to infiltrate, harvest and use, or evapotranspire the 85th percentile, 24-hour storm event. Specifically, it was determined that the surface soils located on the project site are comprised of cohesive soils that has a very low infiltration rate of less than the minimum 0.3 inches per hour requirement. Additionally, infiltration into the cohesive soils would result in clogging and mounding. Additionally, for harvest and use to be feasible, the system must be designed with a storage volume equal to the design capture volume from the tributary area and achieve a 40 percent capture volume. Due to the drawdown being greater than 30 days, harvest and use would be infeasible due to the insufficient water demand during the wet season to drawdown the water quality volume. As such, the project proposes biofiltration. The Preliminary WQMP includes seven proposed modular wetlands systems (MWS) (PPP HYD-5). MWS are highly effective at removing sediments, oil and grease, and trash and debris, and moderately to highly effective at removing nutrients and pathogens/bacteria. MWS use multi-stage treatment processes, including screening media filtration, settling, and biofiltration. The pretreatment chamber contains the first three stages of treatment and includes a catch basin inlet filter to capture trash, debris, gross solids, and sediments; a settling chamber for separating out larger solids; and a media filter cartridge for capturing fine sediment, metals, nutrients, and bacteria. Runoff then flows through the wetland chamber. As stormwater passes down through the planting soil, pollutants are filtered, adsorbed, biodegraded, and sequestered by the soil and plants. The discharge chamber at the end of the unit collects treated flows and discharges back into the storm drain system. Compliance with the design recommendations identified in the Preliminary WQMP would be required based on PPP HYD-5.

#### *Site Design BMPs*

Site design BMPs reduce post-project runoff by implementing design features with performance standards that minimize impervious areas and using infiltration features and/or detention/retention basins, as appropriate. In conformance with PPP HYD-2 and PPP HYD-3, the Preliminary WQMP discusses the applicability of the following BMPs:

- **Minimize Impervious Areas.** The project would increase impervious surfaces compared to existing conditions however, the project would incorporate landscaping throughout the site. Specifically, landscaping would be included along the perimeter of buildings, within common areas, and within court yards.
- **Maximize Natural Infiltration Capacity:** Infiltration would not be recommended due to the close proximity of groundwater (at depths ranging from 22 to 24 feet bgs) and high historic groundwater levels



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(10 feet bgs). Additionally, the project site is located in close proximity to selenium containment area (situated approximately three miles to the east of the project site).

- **Preserve Existing Drainage Pattern and Time of Concentration.** Existing drainage patterns would be maintained. Low flows would be routed to seven Modular Wetland Unit systems for water quality treatment via biofiltration. High flows would bypass this system via interna weir bypasses within the units.
- **Disconnect Impervious Surfaces:** The project would include landscaping adjacent to sidewalks and between the proposed buildings.
- **Revegetate Disturbed Areas:** There are no existing vegetated or sensitive areas to preserve on the site and all disturbed areas would be either paved or landscaped.
- **Use Xeriscape Landscaping:** Xeriscape landscaping would not be proposed for the project. However, native and/or tolerant landscaping would be incorporated in accordance with the City guidelines.

### *Source Control BMPs*

#### Structural Source Control BMPs

Structural source control BMPs are used in a project's design to both minimize runoff and keep pollutants from entering runoff.

The Preliminary WQMP prescribes the following structural source control BMPs, which also ensure compliance with PPP HYD-2 and PPP HYD-3:

- **Provide storm drain system stenciling and signage:** Major storm drain inlets within the project site would be stenciled with the phrase "No Dumping – Drains to Ocean" to alert the public to the destination of pollutants discharged into stormwater. Stencils would be placed prior to the release of certificate of occupancy. The Property Owner/Owner Representative would be required to inspect stenciling on an annual basis (no later than October 1<sup>st</sup>) and re-stencil as necessary.
- **Design and construct trash and waste storage areas to reduce pollution:** All trash and waste containers would have lids or tarps to minimize direct precipitation into the containers. The trash storage would be designed in accordance with City standards and would be walled, roofed, and have gates.
- **Use efficient irrigation systems and landscape design, water conservation, smart controllers, and source control:** The Property Owner/Owner Representative would be responsible for the installation and maintenance of all common landscape areas utilizing similar planting materials and similar water requirements to reduce excessive irrigation runoff. Additionally, the Property Owner/Owner Representative would be responsible for implementing all efficient irrigation systems for common area landscaping such as water sensors and programmable irrigation cycles in compliance with water efficiency guidelines. These systems would be required to be tested twice per year and water used for testing/flushing shall not be discharged to storm drain systems.



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#### Nonstructural Source Control BMPs

Nonstructural source control BMPs are activities and practices that reduce the potential for pollutants to contaminate runoff. The Preliminary WQMP specifies the following nonstructural source control BMPs for use in the proposed project, which also ensure compliance with PPP HYD-2 and PPP HYD-3:

- **Education for Property Owners, Tenants, and Occupants:** Educational materials would be provided to tenants, including brochures and restrictions to reduce pollutants from reaching the storm drain system. Tenants would be provided with these materials by the property management prior to occupancy, and periodically thereafter.
- **Activity Restrictions:** The tenants would be informed of activity restrictions to protect water quality through lease terms or other effective measure. Restrictions include prohibiting vehicle maintenance or vehicle washing.
- **Common Area Landscape Management:** Maintenance of common area landscape would be consistent with the City's requirement. Fertilizer and/or pesticide usage would be consistent with the County Management Guidelines for Use of Fertilizers. Maintenance of common area landscape includes mowing, weeding, and debris removal on a weekly basis. Trimming, replanting, and replacement of mulch would be performed on an as-needed basis. All waste from maintenance would be disposed in accordance with local regulations. Temporary stockpiles of materials during maintenance would be placed away from water sources and storm drain inlets.
- **BMP Maintenance:** The developer would be responsible for regular maintenance activities. All records of maintenance activities are required to be recorded and presented upon request.
- **Common Area Litter Control:** The developer would implement trash pickup and sweeping of litter in common areas on a weekly basis. They would also note improper disposal of materials by the public to be reported for investigation.
- **Employee Training:** All employees and all contractors would require training to ensure that they are aware of maintenance activities that may result in pollutants reaching storm drains. Concepts can include, but are not limited to, training on the proper storage and use of fertilizers and pesticides, or training on implementation of hazardous spill contingency plans.
- **Common Area Catch Basin Inspection:** All on-site catch basin inlets and drainage facilities would be inspected and maintained by the developer at least once a year, prior to rainy season, no later than October 1st of each year.
- **Street Sweeping Private Streets and Parking Lots:** The developer would be responsible for sweeping of parking areas. Specifically, on-site parking lots, drive aisles, and the parking structure basement level would be swept on a monthly basis, at minimum.





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Post-project water quality impacts would be less than significant after construction, operation, and maintenance of the BMPs specified in the Preliminary WQMP.

### ***Plans, Programs, Policies:***

- PPP HYD-1 National Pollutant Discharge Elimination System (NPDES): General Permit for Storm Water Discharges Associated with the Construction and Land Disturbance Activities, NPDES No. CAS000002. Compliance requires filing a Notice of Intent (NOI), a Risk Assessment, a Site Map, a Storm Water Pollution Prevention Plan (SWPPP) with associated best management practices (BMPs), an annual fee, and a signed certification statement.
- PPP HYD-2 Orange County MS4 Permit (R8-2009-0030, as amended by Order No. R8-2010-0062, or most recent): The MS4 Permit requires new development and redevelopment projects to:
- Control contaminants into storm drain systems;
  - Educate the public about stormwater impacts;
  - Detect and eliminate illicit discharges;
  - Control runoff from construction sites; and
  - Implement best management practices (BMPs) and site-specific runoff controls and treatments for new development and redevelopment.
- PPP HYD-3 As required by Municipal Code Section 8-32, *Control of Urban Runoff*, the proposed project would be undertaken in accordance with the County's *Drainage Area Management Plan* (DAMP) and any conditions and requirements established by the Development Services Department and the Public Services Department, which are reasonably related to the reduction or elimination of pollutants in stormwater runoff from the project site. Prior to the issuance of a grading permit, building permit, or non-residential plumbing permit for any new development, or significant redevelopment, the Development Services Department and Public Services Department would review the project plans and impose terms, conditions, and requirements on the project in accordance with Municipal Code Section 8-32.
- PPP HYD-5 As required by Municipal Code Section 8-32, the project is required to comply with the recommendations outlined in the *Preliminary Water Quality Management Plan* (Preliminary WQMP), prepared by Urban Resource Corporation on April 30, 2019. A final WQMP must be submitted and approved by the City prior to the issuance of a grading permit. The WQMP includes site design measures, source control measures, and treatment measures that minimize the potential for erosion and siltation. In addition, the WQMP must include an operations and maintenance (O&M) plan and maintenance agreement for review and approval by the City to ensure the treatment measures installed at the site are maintained for perpetuity.



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#### *Standard Conditions of Approval:*

- SCA HYD-1 South Coast Air Quality Management District (SCAQMD) Rule 403 would be adhered to, ensuring the cleanup of construction-related dirt on approach routes to the project site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile, or disturbed surface area beyond the property line of the emission sources. Particulate matter deposits on public roadways are also prohibited.
- SCA HYD-2 Adequate watering techniques would be employed to partially mitigate the impact of construction-generated dust particulates. Portions of the project site that are undergoing earth moving operations would be watered such that a crust is formed on the ground surface and then watered again at the end of the day.
- SCA HYD-3 Grading operations would be suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

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**Impact 5.9-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. [Threshold HYD-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The project site overlies the OC Basin and is currently largely covered with impervious surfaces. According to the DWR, the OC Basin is identified as a Medium priority basin (DWR 2019). OCWD manages the OC Basin through its GMP, which sets forth basin management goals and objectives and describes how the OC Basin is managed. The OCWD GMP's goals are: 1) to protect and enhance the groundwater quality of the OC Basin; 2) to protect and increase the sustainable yield of the OC Basin in a cost-effective manner; and 3) to increase the efficiency of OCWD operations.

#### *Construction*

Groundwater underlies the project site at depths ranging from 22 to 24 feet bgs with a historic high level of 10 feet bgs. Based on existing groundwater level, perched groundwater is not expected to be encountered during excavation. However, in the unlikely event in which groundwater is present above the proposed excavated bottom, the Preliminary Geotechnical Investigation indicates temporary dewatering would be required to maintain a safe working environment during excavation and construction activities. The Preliminary Geotechnical Investigation also recommends a qualified dewatering consultant be retained to design the dewatering system. As previously discussed, due to the cohesive soils located on-site, infiltration would not be feasible. As such, dewatering would be required to be pumped into storm drains. If dewatering discharge is piped to storm drains, the requirements of the De Minimis Waste Discharge Requirements for the Santa Ana Region (Order No. R8-2020-0006, NPDES No. CAG998001) would govern dewatering activities during



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construction. However, construction activities would be temporary in nature and would not result in a substantial depletion of groundwater supplies that could result in a lowering of the groundwater table. Therefore, impacts to groundwater supplies during construction would be less than significant upon conformance with applicable regulations.

### *Operations*

The proposed project lies within MWD's water service area. Implementation of the proposed project would lead to an increased demand in water, and, therefore, would lead to an increase in groundwater pumping. According to MWD's *2020 Urban Water Management Plan (UWMP)*, local groundwater provides approximately 94 percent of the City's total supply. The UWMP indicates the MWD would have sufficient water supplies to meet demands in single dry years and multiple dry years (that is, five consecutive dry years) over the period of 2025-2045 (MWD 2020). Specifically, the UWMP indicates an increase demand of 992-acre foot of water demand from the year 2030 to 2035. According to the WSA prepared for the proposed project, the full buildout of the development would consume up to 326,200 gallons of water per day or approximately 366 acre foot per year. As such, the water consumption buildout of the proposed project is within the projected water demand increase from the year 2030 to 2035. Therefore, impacts to groundwater supplies during project operations would be less than significant.

In addition to water use consideration, the project site is not located within a local groundwater recharge area, and no groundwater extraction would occur as part of operations of the project. Thus, the project would not result in any groundwater extraction or depletion of groundwater supplies during operations and is not anticipated to interfere with the OCWD GMP. Impacts would be less than significant in this regard.

***Plans, Programs, Policies:*** No PPPs are applicable to this threshold of significance.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.9-3:** The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site. [Thresholds HYD-3 (i) and HYD-3(iii)]

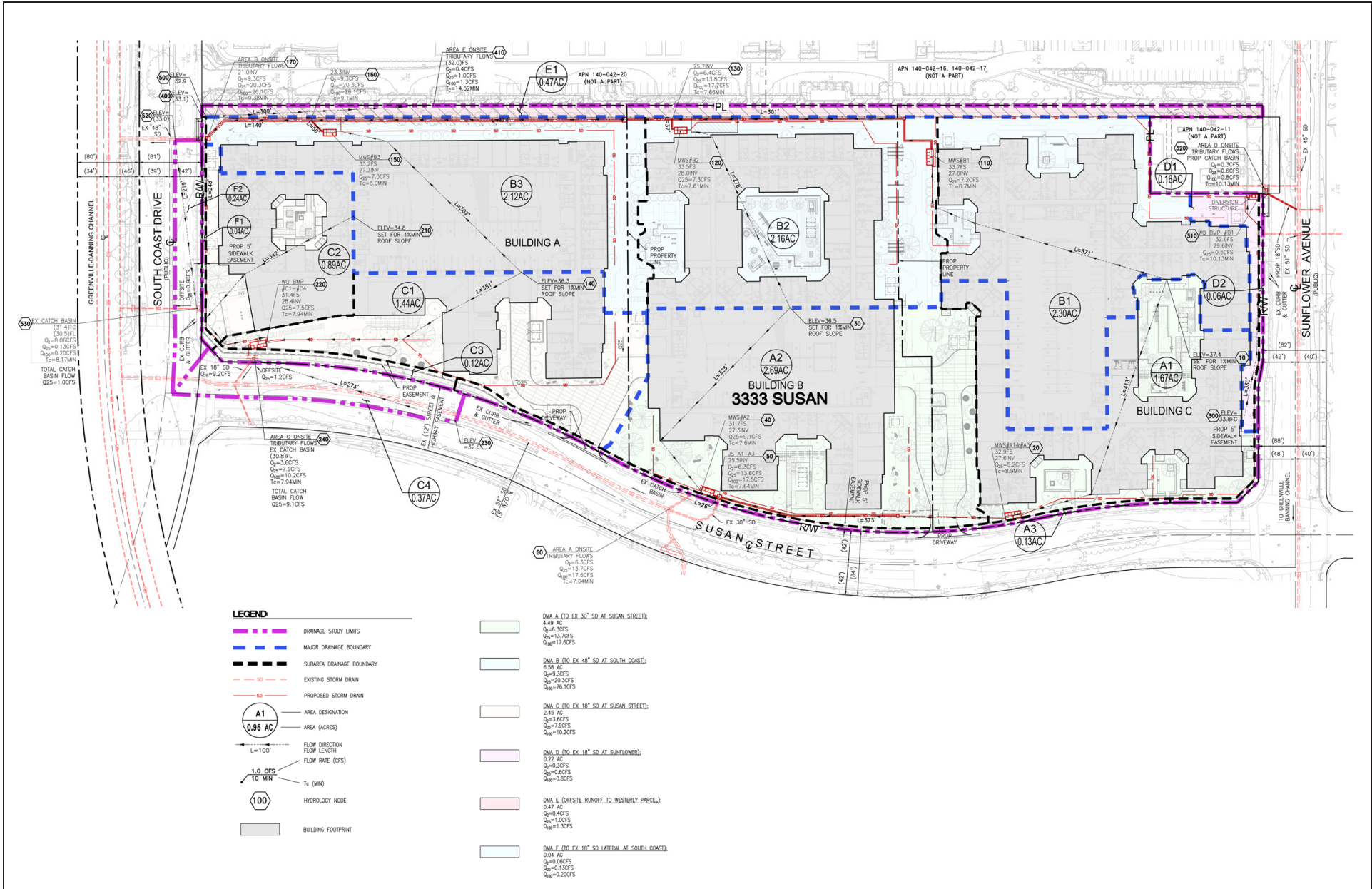
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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

### ***Impact Analysis:***

#### ***Proposed Drainage***

As shown in Exhibit 5.9-2, Proposed Drainage, on-site storm drains would connect to existing storm drain lines along Susan Street and Sunflower Street, and ultimately draining to the Greenville banning channel.



Source: Fuscoe Engineering, September 2024



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Additionally, [Exhibit 5.9-1](#) displays the surface flows of the proposed project. The following discusses the proposed project's drainage patterns:

The proposed DMA A, located on the northeastern portion of the project site, consist of the east half of proposed buildings B and C, drive aisles, pathway, and landscaping; refer to [Exhibit 5.9-2](#). DMA A would have on-site drains that flows into a MWS for runoff to be treated. The MWS would have an internal diversion system where low flow would be routed internally to a biofiltration media while high flows would bypass this biofiltration media into a private storm drain outfall. The MWS would be connected to an existing 30-inch storm drain at the right-of-way at Susan Street, which would then connect to a 51-inch storm drain main along Susan Street downstream. A portion of the runoff from DMA A would be collected by an existing catch basin that flows towards the existing 51-inch storm drain main along Susan Street.

The proposed DMA B, located on the western portion of the project site, consist of the western portions of buildings A, B, and C; refer to [Exhibit 5.9-2](#). Similar to DMA A, flows in DMA B would flow into several on-site catch basins and into proposed MWS units. The MWS would connect to an existing 48-inch storm drain at the right-of-way which eventually connects to the Greenville banning channel downstream.

The proposed DMA C, located on the southeast portion of the project, consist of the south and east part of building A, drive aisles, pathways, and landscaping; refer to [Exhibit 5.9-2](#). Flows from DMA C would flow into on-site drains that connects into an MWS. The MWS would tie to an existing catch basin at the right-of-way along Susan Street. The catch basin has an existing 18-inch storm drain lateral, which connects to the 51-inch storm drain main along Susan Street. A small portion of DMA C would consist of the proposed sidewalk easement that would have runoff flow into the existing catch basin at Susan Street.

The proposed DMA D, located on the northern portion of the project site, consist of landscaping, drive aisles, and walkway; refer to [Exhibit 5.9-2](#). DMA D would have area drains and on-site catch basins that convey flows into a private storm system. There would be a diversion structure downstream of the private storm system where flows would be routed to an MWS. The treated runoff from the MWS would then flow to a relocated catch basin along Sunflower Avenue, which connects to the existing 51-inch storm drain main. A small portion of DMA D would consist of the proposed sidewalk easement area that would have runoff flow into the new catch basin at Sunflower Street.

The proposed DMA E, located on the western portion of the project site, consist of half of recently paved pathway and landscaping refer to [Exhibit 5.9-2](#). DMA E would have similar drainage patterns to the existing conditions. and no site disturbance is anticipated at DMA E Runoff from DMA E would flow towards to adjacent property, similar to the existing condition.

The proposed DMA F, located on the southernly portion of the project site, consists of the proposed sidewalk easement towards South Coast Drive. Drainage in DMA F would flow into the existing catch basin at South Coast Drive which has an existing 18-inch storm drain lateral that eventually connects to the Greenville banning channel.

As discussed above, stormwater at the project site would be conveyed into on-site drains, then to one of the seven proposed MWS, and ultimately drain into the two existing on-site main storm drain lines (51-inch storm



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drain main along Sunflower Avenue or 51-inch storm drain main along Susan Street). DMA E would not have on-site drains, but would have a drainage pattern similar to existing conditions. Therefore, the proposed project would not substantially alter the existing drainage pattern of the site or area. The peak flow rates for the 25- and 100-year storms under existing and proposed conditions are provided in [Table 5.9-2, Existing and Proposed Drainage Conditions](#).

**Table 5.9-2 Existing and Proposed Drainage Conditions**

	Peak Drainage Q <sub>2</sub> (cfs)	Peak Drainage Q <sub>25</sub> (cfs)	Peak Drainage Q <sub>100</sub> (cfs)
<b>DMA A</b>			
Existing Conditions	6.9	15.2	19.6
Proposed Conditions	6.3	13.7	17.6
Percent Change	-8.7%	-9.9%	-10.2%
<b>DMA B</b>			
Existing Conditions	9.8	21.5	27.7
Proposed Conditions	9.3	20.3	26.1
Percent Change	-5.1%	-5.6%	-5.8%
<b>DMA C</b>			
Existing Conditions	3.0	6.6	8.5
Proposed Conditions	3.6	7.9	10.2
Percent Change	20.0%	19.7%	20.0%
<b>DMA D</b>			
Existing Conditions	0.3	0.6	0.8
Proposed Conditions	0.3	0.6	0.8
Percent Change	0.0%	0.0%	0.0%
<b>DMA E</b>			
Existing Conditions	0.4	1.0	1.3
Proposed Conditions	0.4	1.0	1.3
Percent Change	0.0%	0.0%	0.0%
<b>DMA F</b>			
Existing Conditions	0.0	0.0	0.0
Proposed Conditions	0.06	0.13	0.20
Percent Change	-	-	-
<b>Site Total Peak Q</b>			
Existing Conditions	20.4	44.9	57.9
Proposed Conditions	20.0	43.6	56.2
Percent Change	-2.0%	-2.9%	-2.9%

Source: FUSCOE 2024 (refer to [Appendix H](#)).

Notes:

Q<sub>2</sub>= peak drainage from 2-year storm

Q<sub>25</sub>= peak drainage from 25-year storm

Q<sub>100</sub>= peak drainage from 100-year storm

cfs = cubic feet per second

The proposed project would result in a decrease in impervious surface (80 percent compared to the existing 90 percent impervious surfaces) which would help reduce runoff flows. Additionally, the runoff flows would be conveyed into seven MWS (or an approved similar system) to detain and treat stormwater on-site prior to discharge to the existing storm drains. Specifically, as shown in [Table 5.9-2](#), the implementation of the proposed project and MWS would help reduce flows in DMA A and DMA B. However, it should be noted that the implementation of the project would increase flows in DMA C by up to 1.7 cubic feet per second and DMA F would result in an increase of flows by up to 0.2 cubic feet per second. DMA D and DMA E would have no changes in flow. Based on the discussion with the City, increased flows of 1.7 cubic feet per second and 0.2



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cubic feet per second would result in nominal increases and would not affect permitted flow capabilities of the City's MS4 Permit. Based on the Hydrology Report, the existing pipe capacities are sufficient to accommodate the project's proposed flows in these lateral connections. Further, while DMA C and DMA F would increase flows, the overall site would experience a reduction of flows into storm drains downstream.

As such, the proposed project would not substantially alter the existing drainage pattern of the site, would ultimately reduce flows downstream, and does not involve the alteration of any natural drainage channels, streams, or rivers. Impacts would be less than significant in this regard.

### *Erosion and Siltation*

The project would involve site improvements that require grading, excavation, and soil exposure during construction, with the potential for erosion or siltation to occur. If not controlled, the transport of these materials to local waterways could temporarily increase suspended sediment concentrations and release pollutants attached to sediment particles. To minimize this impact, the project would be required to comply with all of the requirements in the General Construction Permit, including preparation of a NOI and SWPPP prior to the start of construction activities pursuant to PPP HYD-1 (as detailed in Impact 5.9-1). The SWPPP would describe the BMPs to be implemented during the project's construction activities. Examples of BMPs that may be implemented during the construction phase could include the following:

- Install on-site sediment basins to prevent off-site migration of erodible materials;
  - Implement dust control measures, such as silt fences and regular watering of open areas;
  - Stabilize construction entrances/exits;
  - Install storm drain inlet protection measures; and
  - Install sediment control measures around the site, including silt fences or gravel bag barriers.
- In addition, the County requires preparation of an erosion and sediment control plan for projects that disturb more than one acre of land and implementation of BMPs to control erosion, debris, and construction-related pollutants. This would further reduce the potential for erosion and siltation during project construction.

There are also required post-construction control measures to minimize the potential for erosion and siltation. A final WQMP must be submitted and approved by the City prior to the issuance of a grading permit. The WQMP includes site design measures, source control measures, and treatment measures that minimize the potential for erosion and siltation. The operational phase of the proposed project would include landscaping and the project-related water quality design features discussed under Impact 5.9-1. In addition, the WQMP must include an O&M plan and maintenance agreement for review and approval by the City to ensure the treatment measures installed at the site are maintained for perpetuity (refer to PPP HYD-5). Further, the project would be subject to compliance with SCA HYD-1 through SCA HYD-3, which would ensure construction BMPs are implemented to reduce potential impacts to water quality.



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Collectively, implementation of the BMPs outlined in the SWPPP, the erosion and sediment control plan, and the proposed landscaping and water quality design features would address the anticipated and expected erosion and siltation impacts during project construction (refer to PPP HYD-1 through PPP HYD-5 and SCA HYD-1 through SCA HYD-3). Therefore, the proposed project would not result in substantial erosion or siltation on- or off-site and construction-related impacts would be less than significant.

The project would increase the rate of discharge, particularly at DMA C and DMA F. As such, this increase could result in increased soil erosion in downstream waters during a storm event. As shown in [Table 5.9-2](#), the implementation of the proposed project would increase flows in DMA C by up to 1.7 cubic feet per second and DMA F would result in an increase of flows by up to 0.2 cubic feet per second. However, it should be noted that the implementation of the project would increase flows in DMA C by up to 1.7 cubic feet per second and DMA F would result in an increase of flows by up to 0.2 cubic feet per second. DMA D and DMA E would have no changes in flow. Based on the discussion with the City, increased flows of 1.7 cubic feet per second and 0.2 cubic feet per second would result in nominal increases and would not affect permitted flow capabilities of the City's MS4 Permit. Based on the Hydrology Report, the existing pipe capacities are sufficient to accommodate the project's proposed flows in these lateral connections. Further, while DMA C and DMA F would increase flows, the overall site would experience a reduction of flows into storm drains downstream. As such, these less than significant impacts would not be cumulatively considerable.

**Plans, Programs, Policies:** Refer to PPP HYD-1 through PPP HYD-3 and PPP HYD-5, as well as the following:

PPP HYD-4 As required by Municipal Code Section 13-107, *Irrigation Requirements*, irrigation systems would be designed to reduce overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences. Automatic systems for watering cycles would be scheduled to maximize ground infiltration rates and further minimize runoff.

**Standard Conditions of Approval:** Refer to SCA HYD-1 through SCA HYD-3.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.9-4: The proposed project would not substantially increase the rate or amount of surface runoff and result in flooding on- or off-site. [Threshold HYD-3 (ii)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** As discussed under Impact 5.9-3, the project would decrease impervious surfaces on-site which would reduce overall runoff flows compared to existing conditions. Additionally, the site is already developed and is expected to reduce the rate of overall stormwater discharge into downstream pipes, compared to the existing conditions.

Project development would decrease impervious areas on-site from 560,947 square feet (90 percent of the site) to 498,620 square feet (80 percent of the site), a net decrease of 62,327 square feet. Proposed pervious areas





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would include landscaping and various open courtyards. Landscaping would be emphasized along the site perimeter, along the buildings perimeter, and at the open space.

As indicated under Impact 5.9-3, the proposed project would not substantially alter the existing drainage pattern of the site. However, as shown in [Table 5.9-2](#), the proposed project would result in a change in the peak flows from the DMAs. Specifically, DMA A and DMA B would result in an overall decrease in peak flow rates while DMA C and DMA F would result in an increase in peak flow rates, DMA E would not be disturbed and, as such, peak flow rates in this DMA would not change. DMA D would have no changes in flow. Based on the discussion with the City, increased flows of 1.7 cubic feet per second and 0.2 cubic feet per second would result in nominal increases and would not affect permitted flow capabilities of the City's MS4 Permit. Based on the Hydrology Report, the existing pipe capacities are sufficient to accommodate the project's proposed flows in these lateral connections. Further, while DMA C and DMA F would increase flows, the overall site would experience a reduction of flows into storm drains downstream.

While the proposed project would increase peak flow rates on DMA C and DMA F, the site's overall peak flow rates would experience a slight decrease in flows, compared to existing conditions. As such, the proposed project would not substantially increase the rate or amount of surface runoff leaving the site and is not anticipated to result in flooding on- or off-site during these storm events. Impacts would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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### **Impact 5.9-5: The proposed project would not impede or redirect flood flows. [Threshold HYD-3 (iv)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** According to the FIRM for the project area, the entire project site is located within Zone X and is outside of any 100-year flood hazard area. Therefore, there would be no impact in regard to impeding or redirecting flood flows as a result of project development.

The project site is within the dam inundation zones of both the Prado and Santiago Creek Dams. The Prado Dam is located about 21 miles northeast of the project site, and the Santiago Creek Dam is located 13 miles northeast of the site. As previously stated, the potential threat of a catastrophic failure of the Prado Dam has been reduced with the upstream construction of the Seven Oaks Dam. During a flood, the Seven Oaks Dam would store floodwaters destined for the Prado Dam for as long as the reservoir pool at the Prado Dam is rising. When the flood threat has passed, the Seven Oaks Dam would begin to release its floodwater at a rate that does not exceed the downstream channel capacity. Working in tandem, the Prado and Seven Oaks Dams provide increased flood protection to the County. Improvements to the Prado Dam are currently underway to



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increase the dam's capacity, and the Santa Ana River Mainstream Project is almost complete, which increases the channel capacity of the river, further reducing the potential for flooding.

The latest available dam inundation map for the Prado Dam was produced in 1985 by the U.S. Army Corps of Engineers. It was prepared prior to dam improvements, construction of the Seven Oaks Dam, and increase in the Santa Ana River flow capacity. As a result, this map overestimates the dam inundation area and potential for flooding. According to the dam inundation map, the peak outflow of the hypothetical flood wave would reach the site in about 15 hours, which would allow sufficient time to implement emergency provisions and public safety measures, as specified in the General Plan Safety Element.

The Santiago Creek Dam is approximately 13 miles northeast of the project site, and the dam inundation map was produced by the Irvine Ranch Water District in 1973. According to the map, the arrival time of a flood wave at the site would be approximately 11 hours, which also would be adequate time to implement evacuation procedures for affected residents and occupants at the site in accordance with the City's Emergency Operations Plan.

The probability of dam failure is extremely low, and the City has never been impacted by a major dam failure. The National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The program requires regular inspection of dams to reduce the risks associated with dam facilities. Furthermore, all dam operators are required to submit an evacuation plan for review and approval by the State Office of Emergency Services (OES). The evacuation plans have been prepared in accordance with the Federal Guidelines for Dam Safety. The evacuation plans identify modes of dam failure, map inundation areas, classify hazard potential within inundation areas, determine available time for response under slow, rapid, or instantaneous failure scenarios, and establish notification procedures.

The proposed project would not exacerbate an existing flood hazard related to dam failure. Due to the length of time required for released water to reach the site if the Prado Dam or the Santiago Creek Dam were to catastrophically fail, as well as the implementation of the City's Emergency Operations Plan, the proposed project would not expose people or structures to a significant risk, and the construction of the project would not impede or redirect flood flows. Continued inspection and maintenance of the two dams and the procedures outlined in the Emergency Operations Plan are considered adequate precautions to reduce impacts due to potential dam inundation to less than significant. Therefore, the proposed project would not impede or redirect flood flows, and impacts would be less than significant.

***Plans, Programs, Policies:*** No PPPs are applicable to this threshold of significance.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.



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**Impact 5.9-6: The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. [Threshold HYD-5]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The project site is located in the Santa Ana River Watershed. The Basin Plan was last updated in 2019 and gives direction on the beneficial uses of the State waters in Region 8; describes the water quality that must be maintained to support such uses; and provides programs, projects, and other actions necessary to achieve the standards in the Basin Plan.

As discussed under Impact 5.9-1, development of the proposed project's SWPPP and WQMP and implementation of the requirements of the NPDES General Construction Permit and MS4 Permit would ensure compliance with the objectives and standards of the Basin Plan (refer to PPP HYD-1 and PPP HYD-2). Therefore, the proposed project would not conflict or obstruct implementation of the Basin Plan, and impacts would be less than significant.

The project site is also within the jurisdiction of the OCWD GMP. As discussed under Impact 5.9-2, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. Therefore, the proposed project would not conflict or obstruct the groundwater management plan, and impacts would be less than significant.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.9.4 Cumulative Impacts

For the purposes of hydrology and water quality, cumulative impacts are considered for cumulative projects located within the same watershed as the proposed project (Santa Ana River Watershed). All projects identified in [Table 4-2, Related Projects](#), are located within the Santa Ana River Watershed and, thus, have the potential to interact with the proposed project to the extent that a cumulative effect may occur.

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**Impact 5.9-7 Development of the proposed project and related projects would not result in cumulatively considerable impacts to water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. [Threshold HYD-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* Like the proposed project, the related projects identified in [Table 4-2](#), as well as existing and planned developed within the Santa Ana River Watershed, could result in cumulatively considerable impacts to water quality due to construction activities and increases in post-development runoff. All construction projects



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that disturb one or more acres of land are subject to the NPDES General Construction Permit requirements for implementation of individual SWPPPs, which outline erosion control, sediment control, wind erosion control, tracking control, non-stormwater management and waste management BMPs (PPP HYD-1). Additionally, new development and redevelopment projects are required to prepare and implement WQMPs and implement LID BMPs requiring specified amounts of runoff be infiltrated, evapotranspired, harvested and reused, or treated (PPP HYD-2). Implementation of such BMPs would reduce the amount of runoff entering public storm drain systems. Thus, pollutants generated within the project and cumulative projects within the Basin would be mitigated during construction activities and project operation. Compliance with the Santa Ana RWQCB's requirements for waste discharge requirements and water quality certifications would also prevent long-term water quality impacts.

As discussed under Impact 5.9-1, the proposed project's impact to water quality during construction activities would be less than significant with implementation of the SWPPP and BMPs during all construction activities and compliance with the City's erosion and sediment control requirements (PPP HYD-1). As previously discussed, infiltration would not be feasible on the project site due to cohesive soils. As such, dewatering during construction would be required to be pump into storm drains. In the event groundwater is encountered during the excavation, compliance with Order No. R8-2020-0006, NPDES No. CAG998001 requirements would ensure project construction dewatering would not cause State waste discharge and Federal NPDES permit requirements to be exceeded. Further, the project would be subject to compliance with SCA HYD-1 through SCA HYD-3, which would ensure construction BMPs are implemented to mitigate potential impacts to water quality. To reduce operational impacts to water quality, the project would be subject to compliance with the project recommendations outlined in the Preliminary WQMP and prepare a Final WQMP prior to the issuance of a grading permit (PPP HYD-2 and PPP HYD-3). Following conformance with NPDES and Santa Ana RWQCB requirements, the project would not result in cumulatively considerable impacts to water quality or surface or groundwater quality. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** Refer to SCA HYD-1 through SCA HYD-3.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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<b>Impact 5.9-8</b>	<b>Development of the proposed project and related projects would not result in cumulatively considerable impacts to groundwater supplies or interfere substantially with groundwater recharge such that sustainable groundwater management of the basin is impeded. [Thresholds HYD-2]</b>
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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative development could result in changes to the amounts of impervious surfaces on each respective development site. According to the OCWD GMP, the majority of the OC Basin area is highly urbanized. The related projects identified in [Table 4-2](#) are considered infill development, and it is not anticipated



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that buildout of these projects would substantially impact recharge of the OC Basin. Individual development projects would be required to mitigate drainage conditions through conformance with applicable local, State, and Federal regulatory requirements, as well as project-specific mitigation. Cumulative development located within MWD’s water service area would also lead to an increased demand in water, and, therefore, would lead to an increase in groundwater pumping. Individual projects would be evaluated on a case-by-case basis to ensure adequate groundwater supply is available.

The proposed project, combined with related development, could result in changes to the amounts of impervious surfaces within the project area and/or lead to an increase in groundwater pumping. As discussed under Impact 5.9-2, the project site is not located within a groundwater recharge area, and no groundwater extraction would occur as part of the project. Further, the project would result in a decrease in impervious areas and an increase in pervious areas compared to existing condition. Specifically, the project would result in a pervious area of approximately 20 percent, compared to the current 10 percent. Although unlikely, dewatering of perched groundwater may be required during project construction. The project’s operation would not result in any groundwater extraction or depletion of groundwater supplies and is not anticipated to interfere with the OCWD GMP. Therefore, the project would not result in cumulatively considerable impacts to groundwater supplies and groundwater recharge. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.9-9**     **Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site. [Thresholds HYD-3 (i) and HYD-3(iii)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Project implementation, combined with related cumulative projects, would incrementally change regional drainage patterns and would increase potential for impacts related to erosion or siltation. As discussed, the majority of the watershed area is highly urbanized, and the projects identified in [Table 4-2](#) are considered infill development. As a result, cumulative development is not anticipated to substantially alter the drainage pattern of the site or area in a manner which would result in substantial soil erosion or siltation on- or off-site. Cumulative development projects would be required to mitigate impacts related to erosion or siltation through conformance with applicable local, State, and Federal regulatory requirements, as well as project-specific mitigation, as required.

As discussed under Impact 5.9-3, the implementation of the proposed project would reduce the percentage of impervious surfaces compared to existing conditions. As discussed above, implementation of the proposed



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project would decrease peak flow rates in DMA A and DMA B while increasing peak flow rates in DMA C and DMA F. DMA E would not be disturbed and as such, peak flow rates would be similar to existing conditions. DMA D would result in no changes in flow. However, the proposed project would not substantially increase the peak flow rates for the entire site. Additionally, the proposed project would not substantially alter the existing drainage pattern of the site and does not involve the alteration of any natural drainage channels, streams, or rivers. The project's proposed MWS would also decrease surface runoff compared to existing conditions. Collectively, implementation of the BMPs outlined in the SWPPP, implementation of the erosion and sediment control plan, and the project's proposed landscaping and water quality design features would address the anticipated and expected erosion and siltation impacts during the construction and operational phases of the proposed project (refer to PPP HYD-1 through PPP HYD-5, and SCA HYD-1 through SCA HYD-3). As a result, the proposed project would not result in cumulatively considerable impacts concerning substantial erosion or siltation on- or off-site. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** Refer to PPP HYD-1 through PPP HYD-5.

**Standard Conditions of Approval:** Refer to SCA HYD-1 through SCA HYD-3.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.9-10 Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantially increasing the rate or amount of surface runoff and result in flooding on- or off-site. [Threshold HYD-3 (ii)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Project implementation, combined with related cumulative projects, would incrementally change regional drainage patterns. However, the cumulative developments identified in [Table 4-2](#) are considered infill development, and it is not anticipated their implementation would substantially alter the drainage pattern of the site or area in a manner which would result in flooding on- or off-site. Individual development projects would be required to mitigate impacts related to flooding through conformance with applicable local, State, and Federal regulatory requirements, as well as project-specific mitigation.

The project would generally involve comparable amounts of impervious surfaces as compared to existing conditions. However, as discussed, the proposed project would result in an increase in pervious surfaces from the existing 10 percent to 20 percent. As discussed under Impact 5.9-4, peak flows to the storm drain system would decrease in DMA A and DMA B with the installation of the biotreatment areas throughout the site that are designed to temporarily retain stormwater runoff prior to discharge to the storm drain system. However, DMA C and DMA F would have an increase in peak flow rates. DMA E would not be disturbed and as such, would have flow rates similar to existing conditions. Similarly, DMA D would not have any changes in flow. Nevertheless, the implementation of the proposed project would result in an overall peak flow reduction for downstream pipes, compared to existing conditions. As a result, the project would not result in cumulatively considerable impacts concerning flooding on- or off-site.



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**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.9-11 Development of the proposed project and related projects would not result in cumulatively considerable impacts related to impeding or redirecting flood flows. [Threshold HYD-3 (iv)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Project implementation, combined with related cumulative projects, would incrementally change regional drainage patterns. Based on the FEMA Flood Map Service Center, cumulative projects identified in [Table 4-2](#) are not located within a mapped flood hazard area (FEMA 2024). These projects are considered infill development, and it is not anticipated that their implementation would substantially alter the drainage pattern of the site or area in a manner which would impede or redirect flood flows. Individual development projects would be required to mitigate impacts related to flood flows through conformance with applicable local, State, and Federal regulatory requirements, as well as project-specific mitigation. Further, impacts related to dam failure would be assessed at the project-level and are not anticipated to result in cumulatively considerable impacts in this regard.

As discussed under Impact 5.9-5, the project site is not located within a mapped flood hazard area and would result in a decrease in impervious surfaces compared to existing conditions. The proposed project also would not exacerbate an existing flood hazard related to dam failure. Project implementation would not result in cumulatively considerable impacts concerning flood flows in this regard. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.9-12 Development of the proposed project and related projects would not result in cumulatively considerable impacts related to conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan. [Threshold HYD-5]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Refer to the Impact 5.9-8 cumulative analysis, concerning the project's and cumulative development's potential to conflict with or obstruct implementation of the OCWD GMP. Cumulative development occurring within the jurisdiction of the Santa Ana RWQCB would be subject to all applicable



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### HYDROLOGY AND WATER QUALITY

water quality control plans, policies, and objectives identified in the Basin Plan. As discussed, cumulative development would be subject to NPDES requirements and the MS4 Permit to ensure compliance with the objectives and standards of the Basin Plan (PPP HYD-1 and PPP HYD-2). As a result, related development would not result in cumulatively considerable impacts related to conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan.

As discussed above, development of the proposed project's SWPPP and WQMP and implementation of the requirements of the NPDES General Construction Permit and the MS4 Permit would ensure compliance with the objectives and standards of the Basin Plan (refer to PPP HYD-1 and PPP HYD-2). As a result, project implementation would not result in cumulatively considerable impacts related to conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan. Impacts in this regard would be less than significant.

***Plans, Programs, Policies:*** No PPPs are applicable to this threshold of significance.

***Standard Conditions of Approval:*** Refer to SCA HYD-1 and SCA HYD-2.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

#### 5.9.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to hydrology and water quality have been identified.





## Chapter 5.10 Land Use and Planning



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## 5. Environmental Analysis

### 5.10 LAND USE AND PLANNING

This section of the Draft EIR evaluates the potential land use impacts from implementation of the proposed project. Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans, including habitat or wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services or increased traffic on roadways. Indirect impacts are addressed in other sections of this Draft EIR.

The proposed project is evaluated in this section for its consistency with adopted regulating plans and programs, including the General Plan and Specific Plan. The proposed project's consistency with other applicable regional plans and programs, such as the South Coast Air Quality Management District's (SCAQMD) *2022 Air Quality Management Plan* (2022 AQMP), Southern California Association of Governments' (SCAG) *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy* (2024-2050 RTP/SCS), and the California Air Resources Board's (CARB) *2022 Scoping Plan*, are addressed in [Sections 5.2](#), [Air Quality](#), and [5.7](#), [Greenhouse Gas Emissions](#).

#### 5.10.1 Environmental Setting

##### 5.10.1.1 REGULATORY BACKGROUND

###### Local

###### *General Plan*

The General Plan is the City's guiding document for long-range planning and policymaking. The General Plan was updated from its first adoption in 1957 and most recently amended in 2016. The current General Plan includes the following ten elements.

- *Land Use Element.* The Land Use Element serves as the long-range planning guide for development in the City by indicating the location and extent of development to be allowed. The element guides land use planning in the City, which impacts various issues addressed in other elements of the General Plan. Accompanying the Land Use Element is the Land Use Map that identifies the distribution and location of land use types within the City.
- *Circulation Element.* The Circulation Element establishes policies governing the system of roadways, intersections, bicycle paths, pedestrian ways, and other components of the circulations system, which collectively provide for the movement of persons and goods throughout Costa Mesa. This element includes goals, objectives, and policies that help the City make decisions regarding transportation improvements related to the expansion of bicycle and pedestrian travel capabilities, effective and efficient management of the established roadway system, enhancement of transit facilities, and implementation of "complete street" strategies.



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### LAND USE AND PLANNING

- *Growth Management Element.* The major goal of the Growth Management Element is to ensure that the planning, management, and implementation of traffic improvements and infrastructure meet the current and projected needs of the City. The Circulation and Land Use Elements provide most of the foundation for the Growth Management Element. The Circulation Element establishes the City's goals, objectives, and policies regarding the transportation network, while the Land Use Element establishes the City's goals, objectives, and policies regarding the use of property, foremost by ensuring that compatible relationships exist between properties that have physical, visual, or proximity relationships.
- *Housing Element.* The Housing Element is a program extending from 2021 to 2029, unlike other General Plan elements that typically cover a minimum ten-year planning period. This Housing Element identifies strategies and programs that focus on: 1) preserving and enhancing existing housing; 2) providing adequate housing sites; 3) facilitating the development of affordable housing; and 4) promoting equal housing opportunities.

State law requires jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the Statewide housing need. In cooperation with HCD, local governments and Councils of Governments (e.g., SCAG) are charged with determining the existing and projected housing needs as a share of the Statewide housing need of their city or region.

The Regional Housing Needs Assessment (RHNA) is an assessment process performed periodically as part of housing element and general plan updates at the local level. The RHNA quantifies the housing need by income group within each jurisdiction during specific planning periods. The *6th Cycle Final RHNA Allocation Plan* was adopted by SCAG on March 4, 2021, and covers the planning period from October 2021 through October 2029. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.

- *Conservation Element.* The purpose of the Conservation Element is to preserve, protect, and replenish the limited natural resources in the City, including water, open space, and sensitive habitats. In addition, this element addresses the management of energy resources and opportunities to integrate sustainability considerations into City policies. The element establishes a policy framework that identifies areas in Costa Mesa with substantial natural resources that the City is committed to manage and prevent from waste, destruction, and neglect, and provides for programs aimed at resource conservation for the benefit of future generations.
- *Noise Element.* The Noise Element identifies noise sources in Costa Mesa and defines strategies for reducing the negative impact of noise on the community. The element also 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.



## 5. Environmental Analysis LAND USE AND PLANNING

- *Safety Element.* The Safety Element identifies and evaluates public health and safety hazards and provides measures that can reduce unreasonable risks and minimize potential losses in the event of natural or human-caused disasters. The element also addresses emergency preparedness and coordinated response, police and fire protection, and emergency services.
- *Community Design Element.* The Community Design Element promotes quality design for every aspect of a community, such as buildings, structures, paths, corridors, districts, nodes, landmarks, natural features, and significant landscaping. It ensures each development in the private or public realm enhances the sense of place for the City, district, and the site itself. The goals, objectives, and policies in this element aim to express the City's parameters for quality design and development.
- *Open Space and Recreation Element.* The purpose of the Open Space and Recreation Element is to sustain the City's network of open space and recreation resources. The goals, policies, and objectives contained in this element aim to protect, maintain, and enhance open spaces for all purposes and to meet recreation needs. This element also describes how Costa Mesa can promote the City's identity as a "City of the Arts."
- *Historical and Cultural Resources Element.* Costa Mesa's historical and cultural resources provide an important connection to the past, while shaping the community's identity and direction for the future. To foster this connection, the Historical and Cultural Resources Element provides the regulatory framework for identifying, maintaining, and restoring the City's historical and cultural resources.

### *North Costa Mesa Specific Plan*

The North Costa Mesa Specific Plan (Specific Plan) area encompasses 423 acres in northern Costa Mesa and is an established area of the City with many identifiable and diversified components, including the urban mixed use development of South Coast Plaza Town Center. There is still, however, a considerable amount of undeveloped land within the plan area that prompts the need for the Specific Plan.

It is the intent of the Specific Plan to implement the policies of the General Plan through the adoption of development standards. These standards recognize the development potential of the plan area and the need to sensitively integrate new development with the surrounding areas, and, therefore, promote both resident and business community confidence in the long-term vision for the plan area.

### *Municipal Code*

Title 13 of the Municipal Code is the *Costa Mesa Zoning Ordinance* (Zoning Ordinance). The Zoning Ordinance and associated Zoning Map act as implementation tools for the General Plan Land Use Element. Both the Zoning Ordinance and Zoning Map work together by designating specific zoning districts within the City and establishing each district's allowed intensities and development standards.



## 5. Environmental Analysis

### LAND USE AND PLANNING

#### 5.10.1.2 EXISTING CONDITIONS

##### On-Site Land Uses

The project site is currently developed with the Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot with access provided by two driveways on Susan Street and one driveway on Sunflower Avenue. The surface parking lot is shared between the office campus and the practice field.

The site is specifically bound by Sunflower Avenue to the north, Susan Street to the east, South Coast Drive to the south, and a public trail (the “Rail Trail”), a pump station (operated by Mesa Water District), and Anduril Industries to the west. Regional access to the project site from the east and west is available via Interstate 405 (I-405), from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, South Coast Drive, and Sunflower Avenue are the major roadways that provide local access to the project site.

The project site is located within and subject to the North Costa Mesa Specific Plan (Specific Plan) and currently has a General Plan land use designation of Industrial Park (IP) within the Specific Plan and a zoning designation of “PDI (Planned Development Industrial)” within a Special Area (North Costa Mesa Specific Plan). The Specific Plan identifies the project site as Subarea 1 (Home Ranch) C (Industrial Park).

##### Surrounding Land Uses

The project site is surrounded by commercial, residential, and public/institutional uses. Surrounding land uses in proximity to the project site include the following:

- *North:* Commercial/office uses (e.g., PHP Agency, TechMD, Lake Center, and United States Post Office) are located to the north and northeast;
- *East:* Single- and multi-family residential (single-family dwellings and townhomes) uses (i.e., The Laurels at Providence Park) and commercial/office uses (i.e., The Interinsurance Exchange of the Automobile Club [AAA]) are located to the east;
- *South:* Vacant land and commercial/retail uses (i.e., Ikea) are located to the south; and
- *West:* Public/institutional (i.e., Rail Trail and Mesa Water District pump station) as well as a corporate headquarters (i.e., Anduril Industries) are located to the west.

#### 5.10.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- LU-1      Physically divide an established community.



## 5. Environmental Analysis LAND USE AND PLANNING

LU-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

No impacts relating to Threshold LU-1 were identified, as substantiated in Section 8.0, *Effects Found Not to Be Significant*. This threshold will not be addressed in the following analysis.

### 5.10.3 Environmental Impacts

#### 5.10.1.1 METHODOLOGY

This analysis evaluates the proposed project's consistency with regional and local plans, policies, and regulations for the purposes of avoiding or mitigating an environmental effect. Specifically, the proposed project is analyzed with respect to applicable planning guidelines and strategies of the General Plan, Specific Plan, and Zoning Ordinance.

#### 5.10.1.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.10-1: Project implementation would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* Project implementation would require the following discretionary approvals: General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement, and Density Bonus Agreement. An evaluation of the proposed project's consistency with applicable regional and local plans and programs that have been adopted for the purpose of avoiding or mitigating an environmental effect is provided below.

#### *General Plan*

According to the General Plan Land Use Map, the project site is designated Industrial Park, which allows for large areas dedicated to industrial, office, and commercial use. Implementation of the proposed project would require a General Plan Amendment to change the site's existing Industrial Park land use designation to Urban Center Commercial on the southern parcel and High Density Residential on the two northern parcels. This amendment would allow for a sitewide density up to 62.3 dwelling units per acre.

Project consistency with applicable General Plan goals and policies is detailed in Table 5.10-1, *Project Consistency with General Plan*. Although the General Plan contains numerous goals and policies beyond those discussed in Table 5.10-1, those goals and policies are not closely related to the "purpose of avoiding or mitigating an environmental effect" and are therefore not analyzed. Overall, the project would be generally consistent with the General Plan.



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.10-1 Project Consistency with General Plan**

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Land Use Element</b>	
<b>Land Use Goal LU-1: A Balanced Community with a Mix of Land Uses to Meet Resident and Business Needs</b>	
<p><b>Policy LU-1.1:</b> Provide for the development of a mix and balance of housing opportunities, commercial goods and services, and employment opportunities in consideration of the needs of the business and residential segments of the community.</p>	<p><b>Consistent:</b> The proposed project is a new multi-phased master-planned residential community. The vision of the project is to create a mixed-use community with housing near major employment. The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space. (i.e., publicly accessible open space area, private common open space, and private balconies). Thus, the project would develop a mix and balance of housing, commercial, and employment opportunities in Costa Mesa.</p>
<p><b>Policy LU-1.3:</b> Strongly encourage the development of residential uses and owner-occupied housing (single-family detached residences, condominiums, townhouses) where feasible to improve the balance between rental and ownership housing opportunities.</p>	<p><b>Consistent:</b> The proposed multi-family residential component of the project would consist of up to 1,050 multi-family rental units (with 45 units reserved as very low income units) within three buildings. The unit breakdown would consist of 141 studio units (13 percent), 562 one-bedroom units (54 percent), and 347 two-bedroom units (33 percent), ranging from 778 square feet to 1,078 square feet. The proposed project would be developed adjacent to an existing residential community (The Laurels at Providence Park), which is comprised of single-family dwellings and townhomes.</p>
<b>Land Use Goal LU-2: Preserve and Protect Residential Neighborhoods</b>	
<p><b>Policy LU-2.7:</b> Permit the construction of buildings over two stories or 30 feet only when it can be shown that the construction of such structures will not adversely impact surrounding developments and deprive existing land uses of adequate light, air, privacy, and solar access.</p>	<p><b>Consistent:</b> The project would demolish three two-story office buildings and a football practice field and develop a mixed-use community. Proposed development would have a maximum height of five stories (77 feet, 6 inches). The project site is surrounded by commercial, residential, and public/institutional uses. A residential community to the east of the project site represents the closest sensitive use. There is an existing masonry wall and trees that border the perimeter of the residential community and block the line-of-sight to the project site. Additionally, the proposed project would construct a six-foot high metal louver fence and plant accent trees along the eastern frontage, and the proposed roof deck amenity area in Building A would include not be visible from adjacent uses; refer to <a href="#">Exhibit 3-8a, Building A Elevations</a>. As such, the project would not deprive these adjacent uses of privacy.</p> <p>The project's shade and shadow impacts were evaluated in <a href="#">Section 5.1, Aesthetics</a>. As concluded, the project would not result in prolonged shading to off-site uses, including the residences to the south. Therefore the project would not adversely impact surrounding land uses regarding light and solar access.</p> <p>Additionally, the proposed project would remove the existing wall that surrounds the existing football practice field along Susan Street to the east and South Coast Drive to the south. The removal of the wall would allow for a more open public view along these frontages. This would ensure adequate open air is afforded to surrounding uses.</p>
<p><b>Policy LU-2.9:</b> Require appropriate building setbacks, structure orientation, and placement windows to consider the privacy of adjacent residential structures within the same project and on adjacent properties.</p>	<p><b>Consistent:</b> The proposed Master Plan would include development standards for structural setbacks and distances between project buildings and between adjacent properties; all setbacks would extend to the public right-of-way (i.e., the sidewalk easement). Specifically, the proposed project would have a 21.5-foot building setback along South Coast Drive, a minimum of a 17.5-foot setback along Susan Street, and a 16.5-foot setback along Sunflower Avenue (refer to PPP AES-2).</p>





## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy LU-2.11:</b> Ensure adequate noise attenuation in urban design, such as walls for sound attenuation, development of landscaped greenbelts, provision of landscape berms, etc.</p>	<p><b>Consistent:</b> The project would install accent trees along the site perimeter, six-foot high walls surrounding outdoor courtyards and decorative walls along the eastern perimeter of the project site that would provide aesthetic features as well as aid in noise attenuation. Additionally, the project would install a fence along the western perimeter. Utility cabinets and mechanical equipment from the proposed development would also be screened to reduce noise and aesthetic impacts.</p>
<p><b>Land Use Goal LU-3:</b> Development that Maintains Neighborhood Integrity and Character</p>	
<p><b>Policy LU-3.4:</b> Ensure that residential densities can be supported by the infrastructure and are compatible with existing residential neighborhoods in the surrounding area.</p>	<p><b>Consistent:</b> The goal of the proposed project is to increase the City's housing stock, including affordable housing opportunities, by providing multi-family residential housing in areas with adequate public utilities and public services (i.e., fire protection and emergency services, police protection services, school services, and library services) and in close proximity to major employment centers. Additionally, the proposed development would be compatible with the adjacent residential community to the east, which consists of single-family dwellings and townhouses.</p>
<p><b>Policy LU-3.5:</b> Provide opportunities for the development of well-planned and designed projects which, through vertical or horizontal integration, provide for the development of compatible residential, commercial, industrial, institutional, or public uses/ within a single project or neighborhood.</p>	<p><b>Consistent:</b> The proposed mixed-use development would include residential, commercial, and open space components within a single project.</p>
<p><b>Policy LU-3.8:</b> Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development and surrounding residential neighborhoods.</p> <p><b>Policy LU-3.9:</b> Locate high-intensity developments or high-traffic-generating uses away from low-density residential in order to buffer the more sensitive land uses from the potentially adverse impacts of the more intense development or uses.</p> <p><b>Policy LU-3.12:</b> Ensure that new development reflects existing design standards, qualities, and features that are in context with nearby development.</p>	<p><b>Consistent:</b> As detailed in <a href="#">Section 5.1</a>, the project is intended to create an attractive, well-designed mixed-use project with a high level of design articulation, landscaping, and streetscape. Provisions of the proposed project would ensure design details of the proposed project are context-sensitive and of high quality in terms of materials and craftsmanship. The City would verify future development associated with the project is architecturally compatible with regard to building materials, style, colors, etc., with the existing surrounding development and consistent with the North Costa Mesa Specific Plan (Specific Plan) during the plan check process (refer to SCA AE-1). Additionally, the proposed Specific Plan Amendment would establish densities and intensities for the site to ensure compatibility with the adjacent residential community to the east, which consists of single-family dwellings and townhomes.</p>
<p><b>Policy LU-3.13:</b> Prohibit construction of buildings which would present a hazard to air navigation, as determined by the Federal Aviation Administration (FAA).</p>	<p><b>Consistent:</b> As depicted in General Plan Safety Element Figure S-8, <i>John Wayne Airport Safety Zones</i>, the project site is not located within the airport's Safety Compatibility Zones. Following approval of the proposed Specific Plan Amendment, which would update the site's building height limitations, the project would be consistent with the FAA's regulations.</p>
<p><b>Land Use Goal LU-4:</b> New development that is sensitive to Costa Mesa's Environmental Resources.</p>	
<p><b>Policy LU-4.1:</b> Ensure that appropriate watershed protection activities are applied to all new development and significant redevelopment projects that are subject to the National Pollutant Discharge Elimination System Stormwater Permit during the planning, project review, and permitting processes.</p>	<p><b>Consistent:</b> In compliance with the National Pollutant Discharge Elimination System (NPDES) and PPP HYD-1 and PPP HYD-2, the project is required to comply with the City's municipal storm sewer system (MS4) permit and is required to develop a Stormwater Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP). The project is also required to implement best management practices (BMPs) for soil erosion and sediment control (PPP HYD-1 through PPP HYD-3). Refer to <a href="#">Section 5.9, Hydrology and Water Quality</a>, for additional analysis on project impacts to hydrology and water quality.</p>



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy LU-4.5:</b> Promote integration of stormwater quality protection into construction and post-construction activities, as required by the NPDES Stormwater Permit and the City's Local Implementation Plan.</p>	<p><b>Consistent:</b> As discussed in <a href="#">Section 5.9</a>, the project is required to comply with the NPDES Stormwater Permit and the City's Local Implementation Plan, which includes low impact development (LID) measures, site design, and structural and non-structural source control BMPs to ensure that post-project water quality impacts would be less than significant.</p>
<p><b>Policy LU-4.6:</b> Incorporate the principles of sustainability into land use planning, infrastructure, and development processes to reduce greenhouse gas emissions consistent with State goals.</p>	<p><b>Consistent:</b> As discussed in <a href="#">Section 5.7</a>, <a href="#">Greenhouse Gas Emissions</a>, PPP EN-1 would require the project to comply with the most recent available California Building Energy and Efficiency standards and the CALGreen requirements. The proposed project would install high efficiency lighting, solar ready roofs, and energy efficient appliances. Furthermore, the project would install low-flow fixtures, water-efficiency irrigation, and drought tolerant landscape. The project would also be required to comply with PPP EN-2 and PPP EN-3 to reduce water demand and associated energy use associated with landscape water use and indoor water use. Overall, the proposed project would support sustainable development that reduces energy consumption and GHG emissions. Following inclusion of these sustainable features and strategies, project impacts related to GHG would be less than significant.</p>
<p><b>Land Use Goal LU-5:</b> Adequate Community Services, Transportation System, and Infrastructure to Meet Growth</p>	
<p><b>Policy LU-5.5:</b> Ensure that new development pays its fair share of impact fees such as park fees and traffic impact fees. This can also include impact fees related to community services (police protection services and fire emergency response services) or library facilities, once adopted and applicable.</p>	<p><b>Consistent:</b> As part of the plan check process, the City would ensure the project applicant pays its fair share of development impact fees applicable to the proposed project, including park, traffic, polices, fire, and library fees.</p>
<p><b>Policy LU-5.7:</b> Encourage new development that is organized around compact, walkable, mixed-use neighborhoods and districts to conserve open space resources, minimize infrastructure costs, and reduce reliance on the automobile.</p>	<p><b>Consistent:</b> The project site is located in North Costa Mesa, which is the economic hub of the City. The project proposes a mixed-use development that would incorporate walkable spaces between the residential and retail uses. Additionally, the proposed project would be located near bus stops, provide bicycle parking, electric vehicle charging stations, and vanpool/carpool parking, which would promote near-zero and zero-emissions vehicle trips.</p>
<p><b>Policy LU-5.8:</b> Include an evaluation of impacts on utility systems and infrastructure in EIRs for all major general plan amendment, rezone, and development applications.</p>	<p><b>Consistent:</b> <a href="#">Section 5.17</a>, <a href="#">Utilities and Service Systems</a>, includes an evaluation of project impacts on utility services and infrastructure, including water, wastewater, and solid waste.</p>
<p><b>Policy LU-5.11:</b> Development plans shall be required for all phased development and approvals and shall be approved by the Planning and Transportation Services Divisions prior to the issuance of building permits.</p>	<p><b>Consistent:</b> As detailed in <a href="#">Section 3.6</a>, <a href="#">Permits and Approvals</a>, the anticipated discretionary approvals therein (in addition to ministerial actions such as demolition permit, grading permit, building permits, encroachment permits, certificates of occupancy, etc.) have been requested by the applicant for this project and would require City discretionary approval prior to issuance of building permits.</p>
<p><b>Policy LU-5.12:</b> Development plans shall include an overall buildout plan, which can demonstrate the ability of the circulation system to support the proposed level of development.</p>	<p><b>Consistent:</b> An analysis of the proposed project's impacts on transportation and circulation in the project vicinity is included in <a href="#">Section 5.15</a>. The proposed project's internal circulation and improvements to the City's circulation system are not anticipated to cause significant traffic impacts, such as internal queuing/stacking at the project driveways, or create significant vehicle-pedestrian conflict points.<sup>1</sup> Impacts to the circulation system were determined to be less than significant.</p>

<sup>1</sup> Linscott, Law & Greenspan Engineers, *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California*, January 9, 2025.



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Land Use Goal LU-6:</b> Economically Viable and Productive Land Uses that Increase the City's Tax Base	
<b>Policy LU-6.1:</b> Encourage a mixed of land uses that maintain and improve the City's long-term fiscal health.	<b>Consistent:</b> It is the objective of the project to redevelop the project site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting and in a manner that is fiscally neutral or fiscally positive for the City.
<b>Policy LU-6.10:</b> Encourage a broad range of business uses that provide employment at all income levels and that make a positive contribution to the City's tax base.	<b>Consistent:</b> Redevelopment of the project site would demolish three existing office buildings and would therefore result in the loss of existing office jobs. However, as a mixed-use development, the project would provide employment opportunities associated with future tenants of the retail spaces. The new retail uses would also be coupled with housing provided in close proximity to employment centers in a job- rich area of the Costa Mesa and provide employment at all income levels.
<b>Policy LU-6.19:</b> Provide flexibility and support for development of residential, office, small retail centers, and similar uses that would serve local residents and would also benefit from the high visibility along major corridors outside of significant commercial or industrial nodes.	<b>Consistent:</b> The project would include a mix of residential and retail uses within a site that is located adjacent to major corridors (e.g., I-405 and Sunflower Avenue). The project would also serve local existing and future residents with housing, retail, and employment opportunities.
<b>Circulation Element</b>	
<b>Circulation Goal C-1:</b> Implement "Complete Streets" Policies on Roadways in Costa Mesa. Plan, develop, and implement a comprehensive transportation system that serves all users and modes of travel.	
<b>Policy C-1.10:</b> Encourage non-motorized transportation in residential areas by providing sidewalks and implementing bicycle friendly design of local streets.	<b>Consistent:</b> The project would maintain the existing sidewalk along the project frontage on Susan Street. The proposed project would include a paseo adjacent to the Rail Trail, a landscaped site perimeter, public plaza, and general amenity space. Internal pedestrian pathways would connect to the proposed public plaza, paseo, and Rail Trail. Additionally, the project proposes to provide bicycle storage space in all three buildings, including adjacent to the Rail Trail.
<b>Circulation Goal C-3:</b> Enhance Regional Mobility and Coordination. Encourage development of a regional transportation network that addresses regional mobility needs for all modes of travel.	
<b>Policy C-3.3:</b> Support the goals and objectives of the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), including expansion of transportation system choices, improvement of transportation system performance, and sustainability of transportation infrastructure.	<b>Consistent:</b> <u>Table 5.7-4 Project Consistency with Connect SoCal 2024</u> , provides an assessment of the proposed project's consistency with pertinent 2024-2050 RTP/SCS goals. As demonstrated, the proposed project is consistent with the goals identified in the 2024-2050 RTP/SCS.
<b>Circulation Goal C-4:</b> Promote Transportation Demand Management, Transit, and Efficiency. Utilize Transportation Demand Management strategies to manage demand and maximize available capacity.	
<b>Policy C-4.1:</b> Support South Coast Air Quality Management District (SCAQMD) trip reduction programs, including park and ride lots, transit subsidies, carpool and vanpool programs, flexible working hours, bicycle facilities, and other traffic reduction strategies.	<b>Consistent:</b> The proposed project would be located near bus stops and provide on-site bicycle parking, electric vehicle charging stations, and vanpool/carpool parking.
<b>Policy C-4.8:</b> Require discussion of transportation system management (TSM) and TDM measures in all EIRs prepared for major projects.	<b>Consistent:</b> Refer to response to Policy C-4.1 regarding proposed mobility. The proposed project would construct a new multi-phased master planned residential community near several existing commercial land uses. The project would increase the City's housing stock by providing multi-family residential housing in areas with adequate public utilities and services and close to major employment centers. Integrating these proposed uses would improve the accessibility and walkability of the project area, thereby reducing the need for vehicle use.



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.10-1, continued**

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Policy C-4.9:</b> Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.	<b>Consistent:</b> Refer to response to Policy C-4.8.
<b>Policy C-4.14:</b> Encourage new development along major transit corridors to provide efficient and safe access to transit stops and public sidewalks.	<b>Consistent:</b> The proposed project is located within a High Quality Transit Area (HQTA), which is within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. In addition, the proposed project would propose public right-of-way improvements including sidewalks and drive approaches along adjacent roadways, which would be constructed to the City's standards; these improvements would encourage pedestrian mobility.
<b>Policy C-4.21:</b> Require discussion of transit service needs and site design amenities for transit ridership in EIR for major projects.	<b>Consistent:</b> Transit ridership and facilities associated with the proposed project are analyzed in <a href="#">Sections 5.7</a> and <a href="#">5.15</a> of this Draft EIR.
<b>Circulation Goal C-5:</b> Ensure coordination between the development of land use and circulation system.	Land Use and Circulation Systems. Facilitate close coordination between
<b>Policy C-5.2:</b> Require that large developments and redevelopments provide short-term and long-term vehicular traffic impact studies.	<b>Consistent:</b> An analysis of the proposed project's impacts on transportation and circulation in the project vicinity is included in <a href="#">Section 5.15</a> ; as analyzed, impacts related to transportation were determined to be less than significant.
<b>Policy C-5.3:</b> Encourage permitted General Plan land uses which generate high traffic volumes to be located near major transit and transportation corridors to minimize vehicle use, congestion, and delay.	<b>Consistent:</b> The project site is located near two bus stops served by the Orange County Transportation Authority (OCTA). There is one bus stop along Harbor Boulevard, approximately 0.25-mile west, and another bus stop along Fairview Road, approximately 0.35-mile east. The proposed project is also located within a HQTA, which is within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. In addition, the proposed project would propose public right-of-way improvements including sidewalks and drive approaches <sup>1</sup> along adjacent roadways, which would be constructed to the City's standards. Compliance with PPP EN-5 would ensure EV charging stations and preferential parking for low emitting, fuel efficient vehicles are provided on-site. As such, the proposed project would encourage alternative modes of transportation.
<b>Policy C-5.5:</b> Promote development of mixed-use projects to reduce number of vehicle trips.	<b>Consistent:</b> The proposed project is a mixed-use development consisting of residential, retail, and open space uses. In addition, the project site is located near two bus stops served by the Orange County Transportation Authority (OCTA). There is one bus stop along Harbor Boulevard, approximately 0.25-mile west, and another bus stop along Fairview Road, approximately 0.35-mile east. The proposed project is also located within a HQTA, which is within one half-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours. As detailed in <a href="#">Section 5.15</a> , project impacts regarding VMT would be less than significant.
<b>Policy C-5.6:</b> Coordinate the design and improvement of pedestrian and bicycle ways in major residential, shopping and employment centers, parks, schools, other public facilities, public transportation facilities, and bicycle networks with adjacent cities.	<b>Consistent:</b> A Class II Bicycle Lane currently exists along Susan Street (on both sides of the street), between South Coast Drive and Sunflower Avenue, as well as along Sunflower Avenue, South Coast Drive, Hyland Avenue, and Fairview Road within the vicinity of the project. A Class I Shared-Use Path currently exists on the project's western boundary (i.e., the Rail Trail). Upon project completion, bicycle circulation would continue to be provided via the Rail Trail and adjacent roadways and sidewalks. The project would maintain the existing sidewalk along the project frontage on Susan Street. The proposed project would include a paseo adjacent to the Rail Trail, a landscaped site perimeter, public plaza, and general amenity space. Internal pedestrian pathways would connect to the proposed public plaza, paseo, and Rail Trail. Additionally, the project proposes to provide bicycle storage space in all three buildings, including adjacent to the Rail Trail.



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy C-5.12:</b> Support consistency with the Orange County <i>Sustainable Communities Strategy</i> (OC SCS) and SCAG RTP/SCS by providing an integrated land use and transportation plan to meet mandated emissions reduction targets consistent with SB 375.</p>	<p><b>Consistent:</b> <a href="#">Table 5.7-4</a> provides an assessment of the proposed project's consistency with applicable 2024-2050 RTP/SCS goals. As demonstrated, the proposed project is consistent with the goals identified in the 2024-2050 RTP/SCS.</p>
<p><b>Policy C-5.13:</b> Require that new development projects improve access to and accommodations for multimodal transportation, provide pedestrian access that serves the intensity of use and compliments the existing pedestrian network, and whenever feasible incorporate pedestrian improvements into the public right-of-way as a part of conditions of approval.</p>	<p><b>Consistent:</b> Refer to response to Policy C-5.6.</p>
<p><b>Policy C-5.15:</b> Consider the needs of the transportation and infrastructure system early for large developments and coordinate with developers to design projects that minimize traffic impacts and infrastructure demands, and implement complete streets wherever feasible. Alternatively, address transportation and infrastructure system impacts through the implementation of development agreements.</p>	<p><b>Consistent:</b> The project's transportation impacts are analyzed in <a href="#">Section 5.15</a>. PPP T-1 through PPP T-3 would be implemented as part of the project's Development Agreement.</p>
<p><b>Circulation Goal C-7:</b> Promote a Friendly Active Transportation System in Costa Mesa. Create a bicycle and pedestrian friendly environment throughout Costa Mesa for all types of users and all trip purposes in accordance with the five "Es:" Education, Encouragement, Enforcement, Engineering, and Evaluation.</p>	
<p><b>Policy C-7.1:</b> Develop an extensive bicycle and pedestrian backbone network through the use of standard and appropriate innovative treatments.</p>	<p><b>Consistent:</b> Refer to response to Policy C-5.6.</p>
<p><b>Policy C-7.4:</b> Where feasible, Class I shared-use paths should be a priority for future developments.</p>	<p><b>Consistent:</b> Refer to response to Policy C-5.6.</p>
<p><b>Policy C-7.26:</b> Prioritize the installation of bicycle-scale and/or pedestrian-scale lighting.</p>	<p><b>Consistent:</b> Project lighting would be installed to illuminate driveways, public walkways, public and private amenity areas, public retail areas, pathways, stairways, entrances and exits, and other locations required by the City to meet minimum pedestrian safety requirements and thus, would be bicycle- and pedestrian-scale in nature.</p>
<p><b>Circulation Goal C-8:</b> Provide a safe, convenient, and attractive bicycling and pedestrian environment. Apply design standards, enforcement of traffic laws, maintenance practices, and safety awareness campaigns to encourage and increase the use of bicycle and pedestrian facilities.</p>	
<p><b>Policy C-8.4:</b> Develop a list of acceptable plant materials for shared use paths that will not damage, create security problems or hazards for bicyclists. Incorporate canopy trees and native, drought-tolerant landscaping as a standard Class I facility (shared use path) feature. Encourage the use of sustainable drainage designs, such as bio-swales.</p>	<p><b>Consistent:</b> Native and/or drought tolerant landscaping would be incorporated into the project, including along the Rail Trail (Class I); refer to <a href="#">Exhibit 3-6, Conceptual Landscape Plan</a>. Runoff is currently conveyed through existing curbs and gutters which would be captured by on-site storm drain inlets and bioswales. The project would implement additional infiltration features and/or detention/retention basins, as appropriate, in conformance with PPP HYD-2 and PPP HYD-3 and as detailed in the Preliminary WQMP (refer to <a href="#">Appendix H</a>).</p>
<p><b>Circulation Goal C-9:</b> Provide bikeway and walkway facilities that are integrated with other transportation systems and land use planning decisions.</p>	
<p><b>Policy C-9.2:</b> Ensure that all current and proposed land use planning is consistent with the Costa Mesa Bicycle and Pedestrian Master Plan.</p>	<p><b>Consistent:</b> A Class II Bicycle Lane currently exists along Susan Street (on both sides of the street), between South Coast Drive and Sunflower Avenue, as well as along Sunflower Avenue, South Coast Drive, Hyland Avenue, and Fairview Road within the vicinity of the project. A Class I Shared-Use Path currently exists on the project's western boundary (i.e., the Rail Trail). As depicted in <a href="#">Figure C-3, Conceptual Bicycle Master Plan</a>, of the Circulation Element, the following bicycle facilities are planned in the project area:</p> <ul style="list-style-type: none"> <li>▪ A Class I Shared-Use Path on South Coast Drive, west of Harbor Boulevard;</li> </ul>



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.10-1, continued**

Applicable General Plan Goal and Policies	Consistency Analysis
	<ul style="list-style-type: none"> <li>▪ A Class II Bike Lane on Harbor Boulevard, south of South Coast Drive; and</li> <li>▪ A Class II Bike Lane on Sunflower Avenue, between Fairview Road and Bristol Street.</li> </ul> <p>Upon completion of the future bicycle facilities, the proposed project would be adequately served by a bikeway system, consistent with the Circulation Element Active Transportation Plan (ATP). Additionally, the project proposes to provide bicycle storage space in all three buildings, including adjacent to the Rail Trail. As such, the proposed project would support and enhance existing and planned bicycle facilities and would be consistent with the City's goals, policies, and recommendations in place to promote development of active transportation systems. A less than significant impact would occur in this regard.</p>
<b>Policy C-9.3:</b> Require new developments provide adequate bicycle parking and pedestrian access.	<b>Consistent:</b> Refer to response to Policy C-5.6.
<b>Policy C-9.5:</b> Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.	<b>Consistent:</b> Refer to response to Policy C-4.9.
<b>Policy C-9.8:</b> Make commercial and recreational areas more enjoyable for pedestrians by implementing measures such as providing shade, planting trees, eliminating visible parking lots and vacant land, and minimizing long stretches of building façade.	<b>Consistent:</b> Refer to response to Policy CD-9.2.
<b>Growth Management Element</b>	
<b>Growth Management Goal GM-1:</b> Inter-jurisdictional Coordination	
<b>Policy GM-1.5:</b> Continue to require that any new large developments prepare a master plan and environmental impact analysis. This allows the City to anticipate the impacts of large projects prior to development of any portion and permits more time to plan for public services and facilities needed to support the project.	<b>Consistent:</b> The proposed project would require discretionary approval of a Master Plan, which is evaluated as part of this Draft EIR.
<b>Policy GM-2.4:</b> Support uses and development which create synergistic relationships with neighboring uses and development, especially those whose addition does not create mutually exclusive additional vehicular trips but adds to the value of the destination by any potential visitor.	<b>Consistent:</b> Refer to response to Policies LU-5.7, LU-6.10, and LU-6.19.
<b>Policy GM-2.5:</b> Support creative and flexible solutions that provide for additional economic or physical growth within the City but does not place greater impact on the circulation system. These would include shared parking agreements, offset hours of operation, and clustering of harmonious and supportive uses.	<b>Consistent:</b> The project involves developing residential, retail, and open space on-site. The project site is located in North Costa Mesa, which is the economic hub of the City. The proposed project would be located near bus stops, provide bicycle parking, electric vehicle charging stations, and vanpool/carpool parking. The proposed project's internal circulation and improvements to the City's circulation system are not anticipated to cause significant traffic impacts, such as internal queuing/stacking at the project driveways, or create significant vehicle-pedestrian conflict points. <sup>2</sup>

<sup>2</sup> Linscott, Law & Greenspan Engineers, *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California*, January 9, 2025.



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Housing Element</b>	
<b>Housing Goal HOU-1:</b> Preserve and enhance the City's existing housing supply.	
<b>HOU-1.1:</b> Assist low and moderate-income homeowners and renters through housing assistance programs as long as funds are available.	<b>Consistent:</b> The goal of the proposed project is to increase the City's housing stock, including affordable housing opportunities, by providing multi-family residential housing in areas with adequate public utilities and public services (i.e., fire protection and emergency services, police protection services, school services, and library services) and in close proximity to major employment centers. Of the proposed 1,050 residential units, 45 would be reserved as affordable units.
<b>HOU-1.2:</b> Minimize the displacement risk for existing residents when considering approval of future redevelopment and public projects.	<b>Consistent:</b> As described in Section 8.0, <i>Effects Found Not to Be Significant</i> , the project site is currently developed with the Hive Creative Office Campus, which consists of three existing two-story office buildings and surface parking, as well as the Los Angeles Chargers practice field. There are no residences on-site. As such, development of the proposed project would not displace existing people or housing.
<b>Housing Goal HOU-2:</b> Facilitate the creation and availability of housing for residents at all income levels and for those with special housing needs.	
<b>HOU-2.1:</b> Facilitate the development of housing that meets the needs of all segments of the population including affordable housing and households with specialized needs.	<b>Consistent:</b> Refer to response to Policy HOU-1.1.
<b>HOU-2.2:</b> Promote the use of State density bonus provisions to encourage the development of affordable housing for lower and moderate-income households, as well as senior housing through the dissemination of informational materials and discussions with project applicants.	<b>Consistent:</b> The proposed project would include a base density of 844 units. With the inclusion of 45 affordable units (i.e., very low income units), the proposed project qualifies for a 20 percent density bonus (pursuant to California Government Code Section 65915[ff][2]) resulting in a maximum of 1,060 total residential units on-site. Thus, the proposed 1,050 residential units would be within the allowed total residential units on-site per State density bonus provisions.
<b>HOU-2.4:</b> Encourage housing programs and future actions that address the need for affordable housing options as well as the housing needs of Costa Mesa's senior resident population and the large households population.	<b>Consistent:</b> Refer to response to Policy HOU-1.1.
<b>Housing Goal HOU-3:</b> Identify adequate, suitable sites for residential use and development to meet the City's Regional Housing Needs Assessment (RHNA) at all income levels and promote a range of housing types to meet the needs of all segments of the Costa Mesa community.	
<b>HOU-3.1:</b> Encourage the conversion of existing marginal or vacant motels, commercial, and/or industrial land to residential, where feasible and consistent with environmental conditions that are suitable for new residential development.	<b>Consistent:</b> The project site is currently developed with the Hive Creative Office Campus, which consists of three existing two-story office buildings and surface parking, as well as the Los Angeles Chargers practice field. The project would redevelop the site into a residential community that includes up to 1,050 multi-family rental units, including affordable housing and 3,692 square feet of retail uses.
<b>HOU-3.2:</b> Provide opportunities for the development of well-planned and designed projects which, through vertical or horizontal integration, provide for the development of compatible residential, commercial, industrial, institutional, or public uses within a single project or neighborhood.	<b>Consistent:</b> The proposed mixed-use development would be a master planned community and include residential, retail, and open space components within a single project site.
<b>HOU-3.5:</b> Encourage residential and mixed-use development along transportation routes and major commercial/mixed use corridors.	<b>Consistent:</b> Refer to response to Policy C-5.3.



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Conservation Element</b>	
<b>Conservation Goal CON-1:</b> Preserve and Restored Natural Coastal Habitat and Landforms	
<p><b>Policy CON-1.A.6:</b> Minimize soil depletion and erosion in development projects. Prevent erosion caused by construction activities, and encourage preservation of natural vegetation and topography.</p>	<p><b>Consistent:</b> Refer to response to Policy LU-4.1.</p>
<p><b>Conservation Goal CON-2:</b> Conserved Natural Resources Through Environmental Sustainability. Reduce the City's carbon footprints and manage resources wisely to meet the needs of a growing population and economy. Base community planning decisions on sustainable practices that reduce environmental pollutants, conserve resources, and minimize waste. Encourage the design of energy-efficient buildings, use renewable energy, and promote alternative methods of transportation.</p>	
<p><b>Policy CON-2.A.1:</b> 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.</p> <p><b>Policy CON-2.A.2:</b> 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.</p> <p><b>Policy CON-2.A.3:</b> 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.</p> <p><b>Policy CON-2.A.4:</b> 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.</p> <p><b>Policy CON-2.A.5:</b> Promote environmentally sustainable development principles for buildings, master planned communities, neighborhoods, and infrastructure.</p> <p><b>Policy CON-2.A.6:</b> Encourage construction and building development practices that reduce resource expenditures throughout the lifecycle of a structure.</p> <p><b>Policy CON-2.A.7:</b> Encourage installation of renewable energy devices for businesses and facilities and strive to reduce communitywide energy consumption.</p> <p><b>Policy CON-2.A.8:</b> Continue City green initiatives in purchases of equipment, and agreements that favor sustainable products and practices.</p>	<p><b>Consistent:</b> As discussed in <a href="#">Section 5.5, Energy</a>, per applicable regulatory requirements, such as the current 2022 CALGreen Code, the project would comply with construction waste management practices to divert a minimum of 65 percent of construction debris (PPP EN-4 and PPP EN-6). Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects.</p> <p>Additionally, the project would be required to comply with the most current and applicable version of the Title 24 Building Energy Efficiency Standards (commonly known as Title 24), which provide minimum efficiency standards related to various building features, including appliances, water and space heating, and cooling equipment, building insulation and roofing, and lighting (PPP EN-1 through EN-3). The project would also comply with the CALGreen Code pertaining to the installation of EV charging stations. Compliance with the most current and applicable Title 24 standards significantly reduces energy usage.</p> <p>The project would also include features such as bicycle parking, electric vehicle charging station, and vanpool/carpool parking, which would promote near-zero and zero-emissions technologies and encourage alternative modes of transportation (PPP EN-1, PPP EN-3, and PPP EN-5).</p>
<p><b>Policy CON-2.A.9:</b> 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.</p> <p><b>Policy CON-2.A.10:</b> 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.</p>	<p><b>Consistent:</b> Project construction and operations would be required to comply with regulations governing solid waste disposal. Operation of the project would include recycling of green waste in accordance with AB 1826 and PPP USS-9. Furthermore, at least 50 percent of construction and demolition debris would be recycled and/or salvaged for reuse in compliance with CALGreen Section 5.408 and PPP USS-10. Pursuant to PPP USS-8, the proposed project's solid waste infrastructure would be designed, constructed, and operated in accordance with the regulations of the Costa Mesa Sanitation District (CMSD) Operations Code. Overall, implementation of PPP USS-8 through PPP USS-10 would ensure the proposed project complies with existing solid waste regulations.</p>





## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy CON-2.A.11:</b> Continue construction and demolition programs that require recycling and minimize waste in haul trips.</p>	
<p><b>Conservation Goal CON-3:</b> Improved Water Supply and Quality. Pursue a multijurisdictional approach to protecting, maintaining, and improving water quality and the overall health of the watershed. A comprehensive, integrated approach will ensure compliance with federal and State standards, and will address a range of interconnected priorities, including water quality and runoff; stormwater capture, storage, and flood management techniques that focus on natural drainage; natural filtration and groundwater recharge through green infrastructure and habitat restoration; and water recycling and conservation.</p>	
<p><b>Policy CON-3.A.1:</b> Continue to consult with local water districts and the Orange County Water District to ensure reliable, adequate, and high-quality sources of water supply at a reasonable cost.</p>	<p><b>Consistent:</b> Mesa Water District (MWD), supplies the project site with potable water and relies on Orange County Water District (OCWD) water supplies. As detailed in <a href="#">Section 5.17</a>, water demands associated with the proposed project and existing and future MWD customers through year 2045 would be adequately met with MWD's existing and future groundwater and recycled water supply.</p>
<p><b>Policy CON-3.A.2:</b> Encourage residents, public facilities, businesses, and industry to minimize water consumption, especially during drought years.</p>	<p><b>Consistent:</b> Sustainable water design features and operational programs would be incorporated into the proposed project, including those required by CALGreen (PPP EN-1). Landscaping would be required to comply with the City's Landscape Water Conservation Ordinance. Water conservation techniques implemented by the proposed project would include the installation of plumbing fixtures that meet the United States Environmental Protection Agency (EPA) Certified WaterSense, most current and applicable version CALGreen standards or equivalent, faucets, toilets, and other plumbing fixtures (PPP EN-3), and a landscaping palette emphasizing drought-tolerant plants and water-efficient irrigation techniques consistent with provisions of the City's Model Water Efficient Landscape Ordinance (MWELO; Ordinance No. 16-03) requirements (PPP EN-2).</p>
<p><b>Policy CON-3.A.3:</b> Restrict use of turf in new construction and landscape reinstallation that requires high irrigation demands, except for area parks and schools, and encourage the use of drought-tolerant landscaping.</p>	<p><b>Consistent:</b> Project landscaping would be required to comply with the City's Landscape Water Conservation Ordinance. The project would also limit landscape irrigation when possible and incorporate drought-tolerant plant species, non-potable water sources, and weather-based smart irrigation controllers (PPP EN-2).</p>
<p><b>Policy CON-3.A.5:</b> Work with public and private property owners to reduce stormwater runoff in urban areas to protect water quality in storm drainage channels, the Santa Ana River, and other local water courses that lead to the Pacific Ocean.</p> <p><b>Policy CON-3.A.6:</b> Continue to develop strategies to promote stormwater management techniques and storm drain diversion programs that collectively and naturally filter urban runoff.</p> <p><b>Policy CON-3.A.7:</b> Continue to comply with the National Pollutant Discharge Elimination System Program (NPDES) by participating in the Countywide Drainage Area Management Plan (DAMP), which stipulates water quality requirements for minimizing urban runoff and discharge from new development and requires the provisions of applicable Best Management Practices (BMP).</p> <p><b>Policy CON-3.A.8:</b> Require that all applicable development projects be reviewed with regards to requirements of both the on-site Water Quality Management Plan and State requirements for runoff and obtaining a Storm Water Pollution Prevention Plan (SWPPP) permit.</p>	<p><b>Consistent:</b> Refer to response to Policy LU-4.1.</p>



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy CON-3.A.9:</b> Continue to consult with the Costa Mesa Sanitation District and the Orange County Sanitation District to modernize wastewater treatment facilities to avoid overflows of untreated sewage.</p>	<p><b>Consistent:</b> As part of the project, an on-site sewer system comprised of public and private sewer components would be constructed. As detailed in <a href="#">Section 5.17</a>, pursuant to PPP USS-1 and PPP USS-2, the project's sewer infrastructure improvements would be designed, constructed, and operated in accordance with the CMSD Operations Code and OCSD Ordinance Nos. 40 and 48. The project would also be required to comply with PPP USS-3, which details construction requirements related to new wastewater infrastructure development in the City pursuant to Municipal Code Sections 15-6, 15-67, 13-180, and 13-71.</p>
<p><b>Conservation Goal CON-4:</b> Improved Air Quality. Take steps to improve and maintain air quality for the benefit of the health and vitality of residents and the local economy. In alignment with State emissions reduction goals and in cooperation with the South Coast Air Quality Management District, pursue regional collaboration to reduce emissions from all sources.</p>	
<p><b>Policy CON-4.A.1:</b> Support regional policies and efforts that improve air quality to protect human and environmental health, and minimize disproportionate impacts on sensitive population groups.</p> <p><b>Policy CON-4.A.2:</b> Encourage businesses, industries and residents to reduce the impact of direct, indirect, and cumulative impacts of stationary and non-stationary pollution sources.</p> <p><b>Policy CON-4.A.3:</b> Require that sensitive uses such as schools, childcare centers, parks and playgrounds, housing, and community gathering places are protected from adverse impacts of emissions.</p> <p><b>Policy CON-4.A.4:</b> Continue to participate in regional planning efforts with the Southern California Association of Governments, nearby jurisdictions, and South Coast Air Quality Management District to meet or exceed air quality standards.</p>	<p><b>Consistent:</b> Project-related air quality impacts are addressed in <a href="#">Section 5.2, Air Quality</a>. As detailed, air quality impacts would be less than significant; the project would not result in adverse impacts to nearby sensitive uses, and project operations would not result in adverse impacts from stationary and mobile pollution sources. The proposed project would not exceed SCAQMD thresholds and would be consistent with SCAG's RTP/SCS.</p>
<p><b>Policy CON-4.A.5:</b> Encourage compact development, infill development, and a mix of uses that are in proximity to transit, pedestrian, and bicycling infrastructures.</p> <p><b>Policy CON-4.A.6:</b> Enhance bicycling and walking infrastructure, and support public bus service, pursuant to the Circulation Element's goals, objectives, and policies.</p>	<p><b>Consistent:</b> The project site is currently developed with the Hive Creative Office Campus, which consists of three existing two-story office buildings and surface parking, as well as the Los Angeles Chargers practice field. The proposed project would redevelop the project site into a residential community within an employment center area. The proposed mix of land uses, including residential, retail, and open space, which would reduce the number of commuter trips between residences, employment centers, and services. Refer to responses to Policies C-5.3, C-5.6, C-8.4, and C-9.2 with regards to multimodal transportation connections and improvements.</p>
<p><b>Policy CON-4.A.7:</b> Encourage installation of renewable energy devices for businesses and facilities and strive to reduce communitywide energy consumption.</p>	<p><b>Consistent:</b> The project would meet the most current and latest Title 24 standards for energy efficiency and incorporate all applicable energy efficiency measures (solar ready roofs, high efficiency lighting, energy efficient appliances, etc.) as well as standards pertaining to EV capable spaces and parking stalls with EV chargers.</p>
<p><b>Noise Element</b></p>	
<p><b>Noise Goal N-1:</b> 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.</p>	
<p><b>Policy N-1.1:</b> Enforce the maximum acceptable exterior noise levels for residential areas at 65 CNEL.</p>	<p><b>Consistent:</b> As detailed in <a href="#">Section 5.10, Noise</a>, long-term operational noise generated by the proposed project would not exceed applicable standards, and impacts would be less than significant in this regard.</p>



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Policy N-1.4:</b> Ensure that appropriate site design measures are incorporated into residential developments, when required by an acoustical study, to obtain appropriate exterior and interior noise levels. When necessary, require field testing at the time of project completion to demonstrate compliance.	<b>Consistent:</b> Refer to response to Policy N-1.1.
<b>Policy N-1.5:</b> Apply the standards contained in Title 24 of the California Code of Regulations as applicable to the construction of all new dwelling units.	<b>Consistent:</b> The project would be required to comply with all Title 24 Standards, including Section 1207.11.2, <i>Allowable Interior Noise Levels</i> , which requires that interior noise levels attributable to exterior sources not exceed 45 dBA in any habitable room.
<b>Policy N-1.6:</b> Discourage sensitive land uses from locating within the 65 CNEL noise contour of John Wayne Airport. Should it be deemed by the City as appropriate and/or necessary for a sensitive land use to locate in the 65 CNEL noise contour, ensure that appropriate interior noise levels are met and that minimal outdoor activities are allowed.	<b>Consistent:</b> As depicted in General Plan Safety Element Figure S-8, <i>John Wayne Airport Safety Zones</i> , the project site is not located within the airport's Safety Compatibility Zones. Additionally, the project site is located outside the 60 A-weighted decibel scale (dBA) Community Noise Equivalent Level (CNEL) noise contour for John Wayne Airport. <sup>3</sup>
<b>Noise Goal N-2:</b> Noise and Land Use Compatibility. Integrate the known impacts of excessive noise on aspects of land use planning and siting of residential and non-residential projects.	
<b>Policy N-2.1:</b> Require the use of sound walls, berms, interior noise insulation, double-paned windows, and other noise mitigation measures, as appropriate, in the design of new residential or other new noise sensitive land uses that are adjacent to arterials, freeways, or adjacent to industrial or commercial uses.	<b>Consistent:</b> As analyzed in <a href="#">Section 5.10</a> , project design is required to meet the noise standards included in the Specific Plan (i.e., a standard of 65 CNEL for exterior areas and 45 CNEL for interior areas), Municipal Code Section 13-280, <i>Exterior Noise Standard</i> (PPP N-1), and the Title 24 Standards.
<b>Policy N-2.2:</b> Require, as a part of the environmental review process, that full consideration be given to the existing and projected noise environment.	<b>Consistent:</b> The project's short-term construction and long-term operational noise impacts are fully analyzed in <a href="#">Section 5.11</a> , <i>Noise</i> , and <a href="#">Appendix K</a> , <i>Noise and Vibration Impact Analysis</i> . Overall, with implementation of PPP N-1, project impacts related to noise would be less than significant, and no mitigation is required.
<b>Policy N-2.4:</b> Require that all proposed projects are compatible with adopted noise/land use compatibility criteria.	<b>Consistent:</b> Refer to response to Policy N-2.2.
<b>Policy N-2.5:</b> Enforce applicable interior and exterior noise standards.	<b>Consistent:</b> Refer to response to Policy N-2.2.
<b>Policy N-2.8:</b> Require new mixed-use developments to site loading areas, parking lots, driveways, trash enclosures, mechanical equipment, and other noise sources away from the residential portion of the development and adjacent established residential development.	<b>Consistent:</b> The proposed residential units are designed within Buildings A, B, and C away from loading areas, parking lots/garages, driveways, trash enclosures, and mechanical equipment; refer to <a href="#">Exhibit 3-5</a> , <i>Conceptual Site Plan</i> . As analyzed in <a href="#">Section 5.11</a> , stationary and mobile sources associated with project operations would not exceed City-established interior or exterior noise standards.
<b>Safety Element</b>	
<b>Safety Goal S-1:</b> Risk Management of Natural and Human-Caused Disasters. Minimize the risk of injury, loss of life, property damage, and environmental degradation from seismic activity, geologic hazards, flooding, fire, and hazardous materials. Promote a sustainable approach to reduce impacts of natural disasters, such as flooding and fire.	
<b>Policy S-1.1:</b> Continue to incorporate geotechnical hazard data into future land use decision-making, site design, and construction standards.	<b>Consistent:</b> A Geotechnical Investigation was prepared for the proposed project, which includes recommendations to reduce the potential for geotechnical hazards; refer to <a href="#">Appendix G</a> , <i>Geotechnical Investigation</i> . Adherence to these recommendations during site design and construction would reduce impacts related to geotechnical hazards.

<sup>3</sup> Orange County Airport Land Use Commission, *Airport Environs Land Use Plan for John Wayne Airport*, April 17, 2008.



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p><b>Policy S-1.5:</b> Enforce applicable building codes relating to the seismic design of structures to reduce the potential for loss of life and property damage.</p> <p><b>Policy S-1.7:</b> Continue to implement the Seismic Hazard Mapping Act, which requires sites within liquefaction hazard areas to be investigated for liquefaction susceptibility prior to building construction or human occupancy.</p> <p><b>Policy S-1.8:</b> Consider site soils conditions when reviewing projects in areas subject to liquefaction or slope instability.</p>	<p><b>Consistent:</b> As detailed in <u>Section 5.6, <i>Geology and Soils</i></u>, future development associated with the project would be required to comply with the seismic design requirements detailed under the California Building Code (CBC) (PPP GEO-1). Furthermore, the project's Geotechnical Investigation includes specific design recommendations that would reduce potential liquefaction settlement impacts during an earthquake event (PPP GEO-2). Adherence to the seismic design parameters included in the Geotechnical Investigation and required by the CBC would be confirmed during plan check and building design review.</p>
<p><b>Policy S-1.11:</b> Improve and maintain local storm drainage infrastructure in a manner that reduces flood hazards.</p>	<p><b>Consistent:</b> As detailed in <u>Section 5.9</u>, while the proposed project would increase peak flow rates in some drainage management areas, the overall site peak flow rates would be reduced compared to existing conditions. As such, the proposed project would not substantially increase the rate or amount of surface runoff leaving the site and is not anticipated to result in flooding on- or off-site.</p>
<p><b>Policy S-1.14:</b> Minimize flood hazard risks to people, property, and the environment by addressing potential damage tsunamis and sea level rise.</p>	<p><b>Consistent:</b> The project site is located approximately 4.5 miles inland from the Pacific Ocean. Given this distance, it is not anticipated that sea level rise would impact the project site. Further, according to the California Department of Conservation, the project site is not within a tsunami hazard zone.<sup>4</sup></p>
<p><b>Policy S-1.16:</b> Develop emergency response, early warning notification, and evacuation plans for areas that are within dam inundation areas, where feasible.</p>	<p><b>Consistent:</b> The proposed project would not exacerbate an existing flood hazard related to dam failure. Due to the length of time required for released water to reach the site if the closest dams, Prado Dam or the Santiago Creek Dam, were to catastrophically fail, as well as the implementation of the City's Emergency Operations Plan, the proposed project would not expose people or structures to a significant risk, and the construction of the project would not impede or redirect flood flows. Continued inspection and maintenance of the two dams and the procedures outlined in the Emergency Operations Plan are considered adequate precautions to reduce impacts due to potential dam inundation to less than significant.</p>
<p><b>Safety Goal S-2:</b> Provide a high level of security in the community to prevent and reduce crime, and to minimize risks of fire to people, property, and the environment.</p>	
<p><b>Policy S-2.1:</b> Promote crime prevention strategies and provide a high level of response to incidents.</p>	<p><b>Consistent:</b> The proposed development would result in a shift in patrol strategies due to the new land uses, which would affect patrol response times. In order to assist in deterring crime in the project area, the applicant would install an Automated License Plate Reader (refer to MM PS-1). The Costa Mesa Police Department (CMPD) currently utilize the Automated License Plate Reader program to help in investigation of crimes and utilize a total of 46 public and 10 private cameras Citywide to help deter crime. The applicant would be required to install the Automated License Plate Reader at all entrances of the property and would be responsible for the initial and future funding of the Automated License Plate Reader program on the property. Additionally, project lighting would be installed to illuminate driveways, public walkways, public and private amenity areas, public retail areas, pathways, stairways, entrances and exits, and other locations required by the City to meet minimum safety requirements.</p>
<p><b>Policy S-2.2:</b> Emphasize and prioritize crime prevention strategies, such as pedestrian-scale lighting in targeted areas.</p>	
<p><b>Policy S-2.4:</b> Provide a high level of police and fire service in the community. Secure adequate facilities, equipment, and personnel for police and fire.</p>	<p><b>Consistent:</b> As detailed in <u>Section 5.13, <i>Public Services</i></u>, the proposed project would result in adequate facilities, equipment, and personnel for police and fire to serve the project with compliance with recommended mitigation.</p>
<p><b>Policy S-2.6:</b> Require that water supply systems for development are adequate to combat structural fires in terms of location and minimum required fire-flow pressures.</p>	<p><b>Consistent:</b> Domestic water and fire flow on-site would be provided through an 8-inch water extension to an existing water line in Susan Street. As detailed in <u>Section 5.17</u>, water demands associated with the proposed project</p>

<sup>4</sup> Department of Conservation, *California Tsunami Maps*, <https://www.conservation.ca.gov/cgs/tsunami/maps>, accessed August 20, 2024.



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
	and existing and future MWD customers through year 2045 would be adequately met with MWD's existing and future groundwater and recycled water supply.
<b>Policy S-2.7:</b> Require development to contribute its fair share toward funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.	<b>Consistent:</b> As detailed in <u>Section 5.13, <i>Public Services</i></u> , the project would be required to contribute its fair share toward funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.
<b>Policy S-2.12:</b> Continue to maintain adequate police and fire staffing, facilities, equipment, and maintenance sufficient to protect the community.	<b>Consistent:</b> As detailed in <u>Section 5.13, <i>Public Services</i></u> , adequate police and fire staffing, facilities, equipment, and maintenance would be provided, sufficient to protect the community.
<b>Policy S-2.16:</b> Require the safe production, transportation, handling, use, and disposal of hazardous materials that may cause air, water, or soil contamination.	<b>Consistent:</b> As detailed in <u>Section 8.0, <i>Effects Found Not to Be Significant</i></u> , minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the project site are generally the extent of hazardous materials that would be routinely utilized on-site. As the presence and on-site storage of these materials are common for residential uses and would not be stored in substantial quantities (quantities required to be reported to a regulatory agency), impacts in this regard are less than significant. Further, the routine transportation, use, and disposal of these materials would be required to adhere to State and local standards and regulations for handling, storage, and disposal of hazardous substances. With compliance with the existing State and local procedures that are intended to minimize potential health risks associated with their use, impacts associated with the handling, storage, and transport of these hazardous materials during construction would be less than significant.
<b>Policy S-2.17:</b> Encourage best practices in hazardous waste management, and ensure consistency with City, County, and Federal guidelines, standards, and requirements.	<b>Consistent:</b> The project would be required to comply with the CBC, California Fire Code, as well as other Federal, State, and local regulations related to the protection of the public's health and safety. Additionally, the project would implement Mitigation Measure HAZ-1, as well as PPP HAZ-1 and PPP HAZ-2, which would reduce impacts related to hazardous waste to less than significant levels. Specifically, PPP HAZ-1 and PPP HAZ-2 address the exposure, handling, and disposal of lead-based paint and/or asbestos-containing materials, and polychlorinated biphenyls, respectively, and Mitigation Measure HAZ-1 would require the project contractor to notify the Costa Mesa Police Department, Costa Mesa Fire Department, and the City of Costa Mesa Public Services Director of construction activities that would impede movement (such as road or lane closures) along Sunflower Avenue, Susan Street, and South Coast Drive.
<b>Community Design Element</b>	
<b>Community Design Goal CD-1:</b> Vehicular and Pedestrian Corridors. Strengthen the image of the City as experienced from sidewalks and roadways.	
<b>Policy CD-1.3:</b> Promote treatments for walls and fences and utility cabinets along public rights-of-way that contribute to an attractive street and sidewalk environment. Require that new walls and fences complement the style and character of the local district and adjacent buildings. Newly constructed or reconstructed walls and fences adjacent to sidewalks and roadways should incorporate architectural treatments such as pilasters, masonry, or wrought iron, and should integrate tiered plantings to soften their appearance.	<b>Consistent:</b> The proposed project would remove the existing eight-foot tall wall that currently surrounds the perimeter of the Los Angeles Charger practice field and thus, would open the site to the street. As such, the proposed project would remove existing walls and would allow for a more fluid transition from the proposed development to the bordering sidewalk. The proposed project would also install a variety of walls throughout the project site. Specifically, the project would install six-foot tall walls surrounding outdoor courtyards, two-foot tall seat walls, and decorative walls along the eastern perimeter of the project site. Additionally, the project would install a fence along the western perimeter to match the existing fence. Utility cabinets and mechanical equipment from the proposed development would be screened from view, and SCA AE-3 would ensure the project's exterior features do not detract from the architecture by prohibiting roof access ladders, roof drain scuppers, and roof drain downspouts. The proposed



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
	project includes a contemporary design that would complement the surrounding buildings while serving as a gateway to the City.
<p><b>Policy CD-1.4:</b> Promote a consistent landscape character along City streets to reinforce the unique qualities of each corridor and district, including the development of landscaped medians. Support implementation of the recommended street tree palette for each City street, as identified in the City of Costa Mesa Streetscape and Median Development Guidelines.</p>	<p><b>Consistent:</b> The proposed project would remove the existing wall that surrounds the existing football practice field along Sunset Street and South Coast Drive. The removal of the wall would allow for a more open public view along this frontage. Additionally, the project proposes several improvements along Susan Street that would enhance the visual quality along the project frontage. Specifically, landscaping would be incorporated along the perimeter of the proposed buildings and open space courtyards and a public plaza would be placed along Susan Street. The Specific Plan includes landscape development standards which would be consistent with the City’s Streetscape and Median Development Guidelines (refer to PPP AES-1).</p>
<p><b>Policy CD-1.5:</b> Encourage electric and communication lines to be placed underground and electrical substations and telephone facilities to be screened to minimize visual impacts from sidewalks, streets, and adjacent properties. Support utility undergrounding through conditions of project approval, preparation of undergrounding plans, and the formation of assessment districts.</p>	<p><b>Consistent:</b> The project proposes to connect to existing underground Southern California Edison and communications utility lines along the project frontage. All on-site utility lines would be underground.</p>
<p><b>Community Design Goal CD-2:</b> Cohesive and Identifiable Districts. Enhance the existing character and strengthen the identity of Costa Mesa’s districts.</p>	
<p><b>Policy CD-2.2:</b> Support and seek land uses and development that correspond or enrich our existing districts.</p>	<p><b>Consistent:</b> The North Costa Mesa district is defined as the economic heart of the City. The proposed project provides a multi-family residential community development with a contemporary design through the construction of three multi-story buildings. Extensive landscaping would be incorporated throughout the site. The design of the proposed project would complement the North Costa Mesa District and contribute to the image, identity, and character of the District and City. Additionally, the proposed project would enhance the existing character of the district by replacing existing office buildings and a former practice field with a contemporary designed residential community.</p>
<p><b>Community Design Goal CD-4:</b> Identifiable and Protected City Landmarks.</p>	
<p><b>Policy CD-4.1</b> Support efforts to introduce new monuments and landmarks, and preserve, maintain, and improve the condition of Costa Mesa landmarks.</p>	<p><b>Consistent:</b> No existing landmarks or monuments are located on-site. Segerstrom Home, which is located east of the project, is identified as a landmark site. The proposed project would support this existing landmark by developing a well-designed residential community with contemporary architecture.</p>
<p><b>Community Design Goal CD-6:</b> Enhance opportunities for new development and redevelopment to contribute to a positive visual image for the City of Costa Mesa that is consistent with the district image.</p>	
<p><b>Policy CD-6.1:</b> Encourage the inclusion of public art and attractive, functional architecture into new development that will have the effect of promoting Costa Mesa as the “City of the Arts”.</p>	<p><b>Consistent:</b> The proposed project would redevelop the site with well-designed contemporary buildings and landscaping and would contribute to a positive visual image of the City. Pursuant to SCA AE-1, the City would verify the proposed project is architecturally compatible (pertaining to building materials, style, colors, etc.) with the existing surrounding development. Additionally, the proposed project would include the installation of public art within the proposed open space area. The Master Plan includes a public open space art plan detailing the location for the potential public art installation. As shown in <a href="#">Exhibit 3-6</a>, public art installation may be located at the public plaza, located near the corner of Susan Street and South Coast Drive.</p>
<p><b>Policy CD-6.2:</b> Encourage the use of creative and well-designed signs that establish a distinctive image for the City.</p>	<p><b>Consistent.</b> The proposed project would include entry, directional, identification, and open space signage to provide for wayfinding and placemaking. Pursuant to SCA AE-4, permits would be required for all signs according to the provisions of the Costa Mesa Sign Ordinance. Freestanding</p>



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
	signs would be subject to review and approval by the Planning Division/Development Services Director to ensure compatibility in terms of size, height, and location with the proposed/existing development and existing freestanding signs in the project vicinity.
<b>Community Design Goal CD-7:</b> Quality Residential. Promote and protect the unique identity of Costa Mesa’s residential neighborhoods.	
<b>Policy CD-7.1:</b> Ensure that new and remodeled structures are designed in architectural styles that reflect the City’s eclectic quality, yet are compatible in scale and character with existing buildings and the natural surroundings within residential neighborhoods. Continue to update and maintain the Costa Mesa Residential Guidelines.	<b>Consistent:</b> The proposed project is located adjacent to a residential neighborhood to the east. However, it should be noted that the proposed project would be located on a site that is currently developed with two-story office buildings. While the project would construct three multi-story residential buildings, the project would incorporate features that would lessen the scale of visual impact through the use of setbacks, landscaping, and building set backs. The proposed project would redevelop the site with well-designed contemporary residential buildings consistent with the prevailing character of existing development in the immediate vicinity.
<b>Policy CD-7.2:</b> Preserve the character and scale of Costa Mesa’s established residential neighborhoods where possible; when new residential development is proposed, encourage that the new structures are consistent with the prevailing character of existing development in the immediate vicinity, and that new development does not have a substantial adverse impact on adjacent areas.	
<b>Policy CD-7.3:</b> Ensure that California native plants are used to support the local ecology and save water. Develop landscaping guidelines that reflect the local community.	<b>Consistent:</b> Refer to responses to Policies CON-3.A.2 and CON-3.A.3.
<b>Community Design Goal CD-9:</b> Promote development of mixed-use projects that seamlessly integrate multiple uses both functionally and aesthetically.	
<b>Policy CD-9.1:</b> Require that mixed-use development projects be designed to mitigate potential conflicts between uses. Consider noise, lighting, and security.	<b>Consistent:</b> The project’s potential impacts related to noise, lighting, and security (police protection), are detailed in Sections 5.11, 5.1, and 5.13, respectively, which conclude impacts would be reduced to less than significant levels with mitigation, plans, programs, and policies, and standard conditions of approval incorporated.
<b>Policy CD-9.2:</b> Provide adequate parking, open space and recreational facilities to serve residents in mixed-use development projects. Design parking and other areas to acknowledge different users (residents versus shoppers) and to be compatible with the architectural character of the building(s).	<b>Consistent:</b> Proposed recreational facilities would include a mix of private and public facilities to support the project. Public and private amenities include indoor and outdoor lounges, dog park, ground-level courtyards fitness room, and a roof deck. The proposed parking design would accommodate shared parking facilities with residents and public plaza use, as well as dedicated residential parking areas. Parking structure entrances, open space, and recreational components of the project would be designed to be visually consistent with the architectural character of the buildings proposed.
<b>Policy CD-9.6:</b> Support efforts to mix compatible uses and activities. Encourage the siting of community-oriented services, businesses, and amenities in and near mixed-use neighborhoods, including schools, libraries, open space, and parks.	<b>Consistent:</b> The project is a mixed-use development and would provide residential, retail, and open space uses on-site. The project site is located in North Costa Mesa, which is the economic hub of the City. The project site is within the Newport-Mesa Unified School District. The closest library to the project site is the Mesa Verde Library approximately 1.1 miles to the south, and the closest park to the project site is Gisler Park, a 4.1-acre park located approximately 0.4-miles to the south of the project site.



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<b>Open Space and Recreation Element</b>	
<b>Open Space and Recreation Goal OSR-1:</b> Provide a high-quality environment through the development of recreation resources and preservation of open space that meets community needs in Costa Mesa.	
<b>Policy OSR-1.5:</b> Maximize public space by requiring plazas and public gathering spaces in private developments that can serve multiple uses, including recreation and social needs.	<b>Consistent:</b> The proposed project would include a total of 335,958square feet of open space, including public and private open spaces. Public open space areas would include a rear paseo adjacent to the existing Rail Trail, landscaped perimeters, a public plaza, general amenity space, bicycle storage spaces, and retail space. In addition to the publicly-accessible open space areas, the proposed project would include private open space (i.e., indoor and outdoor amenities) throughout the project site available exclusively for residents. The indoor and outdoor amenities may include a leasing office, indoor and outdoor lounges, ground-level courtyards and pools, dog park, general amenity space, mail room, bicycle storage space, art exhibit, art work, co-work/flex space available to residents, move-in area, fitness room, and roof deck (including a fitness facility, roof lounge, and outdoor deck and pool).
<b>Policy OSR-1.18:</b> Provide a minimum of 4.26 acres of parkland per 1,000 residents.	<b>Consistent:</b> As detailed in Section 5.13, the project would be required to dedicate land and/or pay in-lieu fees sufficient for acquisition and development of parkland in accordance with the Quimby Act and Ordinance No. 2016-07 (Measure Z), or as otherwise required by the terms and conditions of the Development Agreement.
<b>Policy OSR-1.20:</b> Enhance pedestrian, bicycle, and transit linkages to meet the needs of residents and to provide better access to parks, recreation, and public spaces.	<b>Consistent:</b> The proposed project would include a total of 335,958square feet of open space of private and public open spaces. In addition, the project would enhance bicycle and pedestrian connections; refer to responses to Policies C-5.3, C-5.6, C-8.4, and C-9.2.
<b>Policy OSR-1.21:</b> Provide opportunities for public access to all open space areas, except where sensitive resources may be threatened or damaged, public health and safety may be compromised, or access would interfere with the managed production of resources.	<b>Consistent:</b> Refer to Response to Policy OSR-1.20. The proposed open space amenities would not interfere with sensitive resources.
<b>Historical and Cultural Resources Element</b>	
<b>Historical and Cultural Resources Goal HCR-1:</b> Historical, Archeological, and Paleontological Resource Preservation. The City of Costa Mesa supports focused efforts to provide residents with a sense of community and history through the protection and preservation of historical and cultural resources.	
<b>Policy HCR-1.4:</b> Require, as part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources, and the impact of proposed development on those resources.	<b>Consistent:</b> Refer to response to Policies HCR-1.9 and HCR-1.10 regarding paleontological resources.
<b>Policy HCR-1.7:</b> Require cultural resources studies (i.e., archaeological and historical investigations) for all applicable discretionary projects, in accordance with CEQA regulations. The studies should identify cultural resources (i.e., prehistorical sites, historical sites, and isolated artifacts and features) in the project area, determine their eligibility for inclusion in the California Register of Historical Resources, and provide mitigation measures for any resources in the project area that cannot be avoided. Cultural resources studies shall be completed by a professional archaeologist that meets the Secretary of the Interior's Professional Qualifications Standards in prehistorical or historical archaeology.	A Cultural and Paleo Resources Memo was prepared to evaluate the project's potential impacts on paleontological, archaeological, and historical resources. Refer to Sections 5.4, <i>Cultural Resources</i> , and 5.6, <i>Geology and Soils</i> , for additional analysis. Overall, it was determined that since the sensitivity for buried archaeological resources on-site is considered low at and near the surface but increases to moderate with depth, retention of a qualified archaeologist during all demolition and grading/excavation activities would be required (Mitigation Measure CUL-1) in order to reduce impacts to less than significant levels. Additionally, in the unlikely event that human remains are encountered during excavation or grading activities, State Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98 (PPP CUL-1); following implementation of PPP CUL-1, impacts to human remains would be less than significant.
<b>Policy HCR-1.8:</b> Comply with requirements of the California Environmental Quality Act regarding protection and recovery	





## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-1, continued

Applicable General Plan Goal and Policies	Consistency Analysis
<p>of archaeological resources discovered during development activities.</p> <p><b>Policy HCR-1.9:</b> Require paleontological studies for all applicable discretionary projects. The studies should identify paleontological resources in the project area, and provide mitigation measures for any resources in the project area that cannot be avoided.</p> <p><b>Policy HCR-1.10:</b> Comply with the California Environmental Quality Act regarding the protection and recovery of paleontological resources during development activities.</p>	<p><b>Consistent:</b> Impacts to paleontological resources were analyzed in the Cultural and Paleo Memo prepared for the proposed project; refer to <u>Appendix E, Cultural and Paleontological Resources Identification Memorandum</u>. As discussed in <u>Section 5.6</u>, excavation during development of the project is expected to extend into deposits with high paleontological sensitivity and has the potential to encounter undocumented scientifically significant paleontological resources. As such, adherence to the project-specific mitigation measures in accordance with recommendations provided in the Cultural and Paleo Resources Memo would ensure potential impacts to paleontological resources are avoided. Specifically, Mitigation Measure GEO-1 requires paleontological monitoring to be present if project construction occurs at depths that could encounter highly sensitive sediments for paleontological resources. Mitigation Measure GEO-2 provides procedures for construction workers to follow in the event of any fossil discovery to ensure grading is halted to assess the find for significance and any paleontological finds are properly excavated and preserved. With implementation of these mitigation measures, impacts in this regard would be reduced to less than significant levels.</p>

### North Costa Mesa Specific Plan

The proposed Specific Plan Amendment would modify the existing Specific Plan development standards, regulations, design guidelines, infrastructure systems, and implementation strategies on which project-related development activities would be founded. Specifically, the Specific Plan Amendment would update Specific Plan Table 4A, *Segerstrom Home Ranch Sub-Areas*, and Figure 2, *Existing Land Uses*, through Figure 4, *Zoning*, and Figure 11, *Area 1 – Segerstrom Home Ranch*, to be consistent with the proposed project’s anticipated development potential, zoning, and land uses; refer to Exhibit 3-4, Existing and Proposed Zoning Designation and Specific Plan Area, and Table 3-2, Segerstrom Home Ranch Sub-Area Development Potential. Table 3-2 illustrates the proposed updates to Specific Plan Table 4A, *Segerstrom Home Ranch Sub-Areas*, as they relate to the proposed project (i.e., Subarea 1 [Home Ranch] C [HIVE LIVE]). Following approval of the proposed Specific Plan Amendment, the project would be consistent with buildout of the proposed Segerstrom Home Ranch Subarea 1 (Home Ranch) C (HIVE LIVE).

Additionally, project consistency with applicable Specific Plan development standards is evaluated in Table 5.10-2, Project Consistency with North Costa Mesa Specific Plan. Overall, the project would be generally consistent with the Specific Plan.



## 5. Environmental Analysis

### LAND USE AND PLANNING

**Table 5.10-2 Project Consistency with North Costa Mesa Specific Plan**

Applicable Specific Development Standards	Consistency Analysis
<b>All Properties</b>	
<p><b>1:</b> Should future development plans propose residential land uses, the dwelling units as well as any other sensitive land use (including, but not limited to, day care, open space and recreational facilities) shall be required to comply with the General Plan and zoning ordinance standard of 65 CNEL for the exterior and 45 CNEL for interior areas. An exception is for high-rise residential projects, for which the 65 CNEL standard for exterior areas shall only be applied to 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 the 65 CNEL exterior standard. Mitigation measures may be used in order to achieve these noise levels.</p>	<p><b>Consistent:</b> As detailed in <a href="#">Section 5.11, Noise</a>, long-term operational noise generated by the proposed project would not exceed applicable standards, and impacts would be less than significant in this regard. Additionally, the project would be required to comply with all 2022 Title 24 Standards, including <a href="#">Section 1207.11.2, Allowable Interior Noise Levels</a>, which requires that interior noise levels attributable to exterior sources not exceed 45 dBA in any habitable room.</p>
<p><b>2:</b> New development proposals that are adjacent to any freeway, on- or off-ramp, and /or major street shall include an environmental analysis of the existing and future air quality impacts to on-site land uses from these sources; appropriate mitigation measures for on-site land uses shall also be identified.</p>	<p><b>Consistent:</b> Regional access to the project site from the west and east is available via I-405, from the south via the SR-73, and the east via SR-55. Harbor Boulevard, Fairview Road, South Coast Drive, and Sunflower Avenue are the major roadways that provide local access to the project site. <a href="#">Section 5.2, Air Quality</a>, of this Draft EIR analyzes project impacts regarding existing and future air quality. Due to the proximity of the project site to nearby sensitive receptors (located 150 feet to the east) and the extended period of construction activities (eight years), Mitigation Measure AQ-1 would be required to reduce emissions and associated health impacts. Mitigation Measure AQ-1 would require that all off-road diesel-fueled construction vehicles and equipment greater than 50 horsepower meet Tier 4 emissions standards. With the implementation of Mitigation Measure AQ-1, impacts in this regard would be reduced to less than significant; all other project impacts related to air quality were determined to be less than significant.</p>
<p><b>3:</b> Shade/shadow impacts of buildings in excess of 2 stories to surrounding land uses shall be considered during project review.</p>	<p><b>Consistent:</b> The proposed project prepared a Shade and Shadow Analysis; refer to <a href="#">Section 5.1, Aesthetics</a>; impacts were determined to be less than significant.</p>
<p><b>4:</b> Planned development projects that include a residential component shall analyze the interface and compatibility between residential and nonresidential uses that are included as part of the project or on separate properties.</p>	<p><b>Consistent:</b> Surrounding land uses are comprised of industrial and commercial uses to the north, south, and west, and residential uses to the east. The proposed project would demolish existing office buildings to provide a residential community with residential, retail, and open space uses. The proposed development would be compatible as it would allow for a transition from heavy warehouse and industrial uses to the west, commercial/business park to the north, retail to the south, and a residential community to the east.</p>
<p><b>5:</b> A mix of service-oriented retail uses (i.e. banks, restaurants, business services, health clubs, etc.) that are easily accessible to pedestrians in large scale office developments is encouraged.</p>	<p><b>Consistent:</b> The project proposes a mixed-use development that would incorporate walkable spaces between the residential and retail uses on site, and to nearby employment centers, including offices uses to the north. Additionally, the proposed project would be located near bus stops and provide bicycle parking.</p>
<p><b>7:</b> Future development of the properties designated as Urban Center Commercial, Cultural Arts Center, and Regional Commercial by the Land Use Element of the General Plan and Segerstrom Home Ranch (Area 1) shall be controlled by the trip budget provisions described in Section 2.0 and specified in Section 3.0.</p>	<p><b>Consistent:</b> Following approval of the proposed Specific Plan Amendment, which would update the site's density and floor area ratio (FAR), the project would be consistent with the trip budget for the Urban Center Commercial land use designation.</p>
<p><b>8:</b> Outdoor storage on any nonresidential property in the plan area shall meet with the requirements pertaining to outdoor storage as noted in the Municipal Code under the property's</p>	<p><b>Consistent:</b> The proposed project would install a variety of walls throughout the project site. Specifically, the project would install six-foot tall walls surrounding outdoor courtyards, two-foot tall seat walls, and decorative walls along the eastern perimeter of the project site. Additionally, the project would</p>



## 5. Environmental Analysis LAND USE AND PLANNING

Table 5.10-2, continued

Applicable Specific Development Standards	Consistency Analysis
<p>zoning designation. In addition to the requirements stated, the following criteria shall be met:</p> <p>(a) Storage screening shall be of masonry or other solid, non-wood material or material(s) consistent with building materials used for the main structures on the subject site. Materials used shall incorporate design elements or features of the main structures on the property.</p> <p>(b) Landscaping shall be required to soften screening hardscape when a storage area can be seen from a public street or from a residential property. Landscaping shall meet with the approval of the Planning Division.</p> <p>(c) Screening consisting of chain link fencing with wood or other material-type slats woven between the links shall be prohibited.</p>	<p>install a fence along the western perimeter to match the existing fence. Utility cabinets and mechanical equipment from the proposed development would be screened from view, and SCA AE-3 would ensure the project's exterior features do not detract from the architecture by prohibiting roof access ladders, roof drain scuppers, and roof drain downspouts. Native and/or drought tolerant landscaping would be incorporated into the project; refer to <a href="#">Exhibit 3-6</a>.</p>
<p><b>9:</b> Parking structures that are visible from public streets and/or residential areas shall be landscaped in such a manner as to provide visual relief to the surrounding areas without compromising the security of the parking structure.</p>	<p><b>Consistent:</b> As shown in <a href="#">Exhibit 3-5</a>, the proposed project would have parking structure entrances that are visible along Susan Street. Specifically, Building A would have a parking structure entry that would face Susan Street. However, it should be noted that the entrance of this parking structure would be facing an existing parking lot located further east. Nevertheless, the entrance of the parking structure would be heavily landscaped, and trees planted along Susan Street would help obstruct the view of the parking structure entrance.</p>
<p><b>10:</b> Lighting for parking structures and lots shall be directed away and/or shielded from adjacent residential areas where applicable.</p>	<p><b>Consistent:</b> The proposed project would have lighting throughout the project site including lighting at open space courtyards, public plaza, driveways and access routes, string lighting, and building lighting fixtures (refer to SCA AES-6). Lighting for vehicular driveways and access route to the proposed parking lots would be directed away and shielded from adjacent residential areas (refer to PPP AES-3).</p>
<p><b>11:</b> In conjunction with site development plans, appropriate environmental documentation shall be conducted in respect to the effect on the site from surrounding industrial uses and previous agricultural activities, where applicable.</p>	<p><b>Consistent:</b> The project site is located within a built-out urban area that is largely developed with commercial, residential, and public/institutional uses. As substantiated in <a href="#">Section 8.0, Effects Found Not to Be Significant</a>, the project site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), and would have no impact on agricultural resources. There are no adjacent industrial uses, other than Anduril Industries.</p>
<p><b>12:</b> Building heights shall be limited to the maximum height shown in Table 2 of this Specific Plan.</p>	<p><b>Consistent:</b> Following approval of the proposed Specific Plan Amendment, which would update the site's building height limitations, the project would be consistent with Table 2 of the Specific Plan.</p>
<p><b>13:</b> New development shall minimize direct access to the streets shown on the Master Plan of Highways.</p>	<p><b>Consistent:</b> All streets bounding the project site are included in the Master Plan of Highways. However, the project would utilize the existing driveways on Susan Street for vehicular access and does not propose any additional all-access driveways. The existing driveway on Sunflower Avenue and the new driveway on South Coast Drive would both be limited to emergency access only.</p>
<p><b>14:</b> New development shall provide linkages to the public sidewalk system where appropriate. In the Urban Center Commercial areas, pedestrian walkways should be aligned with the pedestrian walkways in adjacent developments to promote walking.</p>	<p><b>Consistent:</b> The proposed project would include open-space courtyards accessible to the public and recreational facilities (i.e., dog park, fitness rooms, pool, etc.) for residents. The proposed project would include a paseo adjacent to the existing Rail Trail, a landscaped site perimeter, public plaza, and general amenity space. Internal pedestrian pathways would connect to the proposed public plaza, paseo, and existing Rail Trail.</p>



## 5. Environmental Analysis

### LAND USE AND PLANNING

Table 5.10-2, continued

Applicable Specific Development Standards	Consistency Analysis
<p><b>15:</b> Site design for new development shall include bikeway linkages to the Master Plan of Bikeways where appropriate.</p>	<p><b>Consistent:</b> A Class II Bicycle Lane currently exists along Susan Street (on both sides of the street), between South Coast Drive and Sunflower Avenue, as well as along Sunflower Avenue, South Coast Drive, Hyland Avenue, and Fairview Road within the vicinity of the project. A Class I Shared-Use Path currently exists on the project's western boundary (i.e., the Rail Trail). As depicted in Figure C-3, <i>Conceptual Bicycle Master Plan</i>, of the Circulation Element, the following bicycle facilities are planned to be constructed by the City or other developments in the area:</p> <ul style="list-style-type: none"> <li>▪ A Class I Shared-Use Path on South Coast Drive, west of Harbor Boulevard;</li> <li>▪ A Class II Bike Lane on Harbor Boulevard, south of South Coast Drive; and</li> <li>▪ A Class II Bike Lane on Sunflower Avenue, between Fairview Road and Bristol Street.</li> </ul> <p>Upon completion of the future bicycle facilities, the proposed project would be adequately served by a bikeway system, consistent with the Circulation Element Active Transportation Plan (ATP). Additionally, the project proposes to provide bicycle storage space in all three buildings, including adjacent to the Rail Trail.</p>
<p><b>18:</b> A portion of the common open space in new planned residential developments should be located in proximity to public park areas, where feasible.</p>	<p><b>Consistent:</b> Public open space areas would consist of a rear paseo adjacent to the Rail Trail, landscaped perimeter, public plaza, general amenity space, bicycle storage space, and retail space. The closest park to the project site is Gisler Park, a 4.1-acre park located approximately 0.4-miles to the south of the project site.</p>
<p><b>19a:</b> In conjunction with high-rise residential projects, private on-site recreational amenities shall be provided to serve the high-rise residents. These amenities may be located on the ground level, roof top, and/or on a podium.</p>	<p><b>Consistent:</b> The proposed project would include private open space (i.e., indoor and outdoor amenities) throughout the project site available exclusively for residents. The indoor and outdoor amenities may include a leasing office, indoor and outdoor lounges, ground-level courtyards and pools, dog park, general amenity space, mail room, bicycle storage space, art exhibit, art work, co-work/flex space available to residents, move-in area, fitness room, and roof deck (including a fitness facility, roof lounge, and outdoor deck and pool).</p>
<b>Area 1 – Home Ranch</b>	
<p><b>21:</b> All buildings should be set back from the historical preservation area so as to not visually encroach into this area. Buffering could include walls/fencing, landscaping, and/or parking areas.</p>	<p><b>Consistent:</b> The project site is located adjacent to the historical preservation area, separated by South Coast Drive to the south. The proposed project would have a 21.5-foot building setback along South Coast Drive. Additionally, landscaping is proposed along this street frontage.</p>
<p><b>22:</b> Future development plans and environmental analyses for Home Ranch shall include an analysis regarding the future fire station in the North Harbor area; i.e.; location and timing of construction. Joint use with surrounding Central Net cities should also be considered in order to defray the costs of an additional fire station. A study could also reexamine the need/demand for the seventh station.</p>	<p><b>Consistent:</b> As detailed in <u>Section 5.13, <i>Public Services</i></u>, the City is concurrently conducting a Development Impact Fee Study to account for changes of use that result in net increases to call volumes. In the meantime, to mitigate the impacts of the project-generated increase in anticipated calls for service, CMFD has accepted PPP FS-3, which requires the negotiation of fees through the Development Agreement with an understanding that the developer will be required to pay its pro-rata share of additional staffing, apparatus, and facilities. The project would be required to pay development impact fees established based on the Citywide Standards of Coverage Assessment and the Development Impact Fee Study and as required in the Development Agreement in accordance with PPP FS-3 and Municipal Code Section 13-270, <i>Establishment of Development Impact Fee</i>. The revenues raised by the development impact fee, the Development Agreement, and the proportionate revenues generated through the project's ongoing payment of taxes (and other similar project-related revenues) would fund fire protection staffing, facilities, and equipment and would offset the project's incremental impacts to fire services.</p>



## 5. Environmental Analysis LAND USE AND PLANNING

**Table 5.10-2, continued**

Applicable Specific Development Standards	Consistency Analysis
<p><b>23B:</b> In Building Height Area 1 adjacent to Fairview Road, the City of Costa Mesa shall require a shade/shadow analysis for any building proposed to exceed 30 feet in height in order to ensure that building's shade or shadow does not extend beyond the project site or public rights-of-way.</p>	<p><b>Consistent:</b> The proposed project prepared a Shade and Shadow Analysis; refer to <a href="#">Section 5.1</a>. Based on this analysis, the proposed project would not result in prolonged shadows at sensitive uses.</p>
<p><b>23C:</b> In conjunction with the review and approval of any master plan for the areas containing the four-story industrial/office park buildings (and parking structures, as appropriate) north of South Coast Drive and west of Susan Street, the three-story townhomes (south of Sunflower Avenue and east of Susan Street), and the five-story office buildings (and parking structures, as appropriate) south of South Coast Drive and west of Fairview Road, the following provisions shall be applied:</p> <ol style="list-style-type: none"> <li>1. Provision of sufficient setbacks between buildings and Sunflower Avenue, Susan Street, South Coast Drive, Fairview Road, adjacent to the 1-405, and from other buildings to ensure that buildings do not create a "canyon effect.</li> <li>2. Use of low-reflective materials on buildings and parking structures that do not promote glare.</li> <li>3. Provision for architectural design, hardscape features, and landscaping in open space areas, in surface parking areas, or on parking structures that reflect a consistent design theme.</li> </ol>	<p><b>Consistent:</b> The proposed project would include architectural design elements, such as setbacks, differentiated building materials, and landscaping, to visually break up the massing of the proposed project and visually reinforce the scale of the district. Specifically, the proposed project would have a 21.5-foot building setback along South Coast Drive, a minimum 17.5-foot setback along Susan Street, and a 16.5-foot setback along Sunflower Avenue, and would use low-reflective materials on buildings and parking structures that do not promote glare (refer to PPP AES-2).</p>

### Zoning Ordinance

As indicated previously, the project site is zoned “PDI (Planned Development Industrial).” The PDI district is intended for large, concentrated industrial areas where the aim of development is to create a spacious environment in a park-like setting. Implementation of the proposed project requires a Zone Amendment from PDI to “PDC (Planned Development Commercial)” and “PDR-NCM (Planned Development Residential – North Costa Mesa).” According to Municipal Code Section 13-20, *Zoning Districts*, PDC districts are intended for retail shops, offices and service establishments, including but not limited to, hotels, restaurants, theaters, museums, financial institutions, and health clubs. These uses are intended to serve adjacent residential areas, as well as the entire community and region. Complementary residential uses could also be included in the planned development. PDR-NCM districts are intended for single- and multi-family residential developments containing any type or mixture of housing units, either attached or detached, including, but not limited to, clustered development, townhouses, patio houses, detached houses, duplexes, garden apartments, high rise apartments, or common interest developments. Complementary non-residential uses could also be included in the planned development. As such, the proposed zoning district would allow a mix of residential and non-residential uses, and the proposed residential and retail development would be permitted on-site. Additionally, the Municipal Code contains development standards that help govern scenic quality; refer to [Table 5.2-2, \*Municipal Code Consistency Analysis Governing Scenic Quality\*](#), for a consistency analysis of applicable Municipal Code regulations governing scenic quality at the project site. Upon City approval of the proposed Zone Amendment, the project would be consistent with the Zoning Ordinance.



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#### *Plans, Programs, Policies:*

PPP LU-1 The proposed project would be designed and constructed as Planned Development Commercial (PDC) and Planned Development Residential – North Costa Mesa (PDR-NCM) in accordance with the applicable provisions of Municipal Code Section 13-20, *Zoning Districts*. Future development would also be subject to the North Costa Mesa Specific Plan and proposed Master Plan regulations. Where these documents are silent, the Municipal Code would prevail.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.10.4 Cumulative Impacts

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**Impact 5.10-2: Development of the proposed project in combination with related projects would not result in cumulatively considerable conflicts with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect. [Threshold LU-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

#### *Impact Analysis:*

##### *General Plan*

Upon approval of the required discretionary approvals, the project would be consistent with the applicable General Plan policies and would be consistent with the General Plan Land Use Map and Zoning Map. Related development projects within the City would undergo a similar plan review process to determine potential land use planning policy and regulation conflicts. Each cumulative project would be analyzed independent of other projects, within the context of their respective land use and regulatory setting. As part of the review process, each project would be required to demonstrate compliance with the provisions of the applicable land use designation(s). As with the proposed project, each cumulative project would be analyzed to ensure consistency with the goals and policies of the General Plan. As the project would be consistent with the General Plan upon approval, the project would not result in cumulatively considerable impacts in this regard.

##### *North Costa Mesa Specific Plan*

Upon approval of the required discretionary approvals, the project would be consistent with the applicable development standards of the Specific Plan. Related development projects within the Specific Plan area would undergo a similar plan review process to determine potential land use planning policy and regulation conflicts. Each cumulative project would be analyzed independent of other projects, within the context of their respective land use and regulatory setting. As part of the review process, each project would be required to demonstrate compliance with the provisions of the Specific Plan. As with the proposed project, each cumulative project



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would be analyzed to ensure consistency with the development standards of the Specific Plan. As the project would be consistent with the Specific Plan upon approval, the project would not result in cumulatively considerable impacts in this regard.

### *Zoning Ordinance*

Future cumulative projects would undergo a similar plan review process to determine potential inconsistencies with the Zoning Ordinance, within the context of their respective zoning and regulatory setting. Similar to land use consistency, each project would be required to demonstrate compliance with the provisions of the applicable zoning district(s). Thus, as the project would be consistent with the Zoning Ordinance upon approval, the project would not result in cumulatively considerable impacts in this regard.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### **5.10.5 Significant Unavoidable Impacts**

No significant unavoidable impacts related to land use and planning have been identified.



## 5. Environmental Analysis

### LAND USE AND PLANNING

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## Chapter 5.11 Noise



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## 5. Environmental Analysis

### 5.11 NOISE

The purpose of this section is to evaluate potential noise related impacts to surrounding land uses as a result of implementation of the project. This section evaluates short-term construction-related impacts, as well as long-term operational-related impacts. Noise measurement and traffic noise modeling data can be found in [Appendix I, \*Noise and Vibration Analysis\*](#).

#### 5.11.1 Environmental Setting

##### 5.11.1.1 BACKGROUND

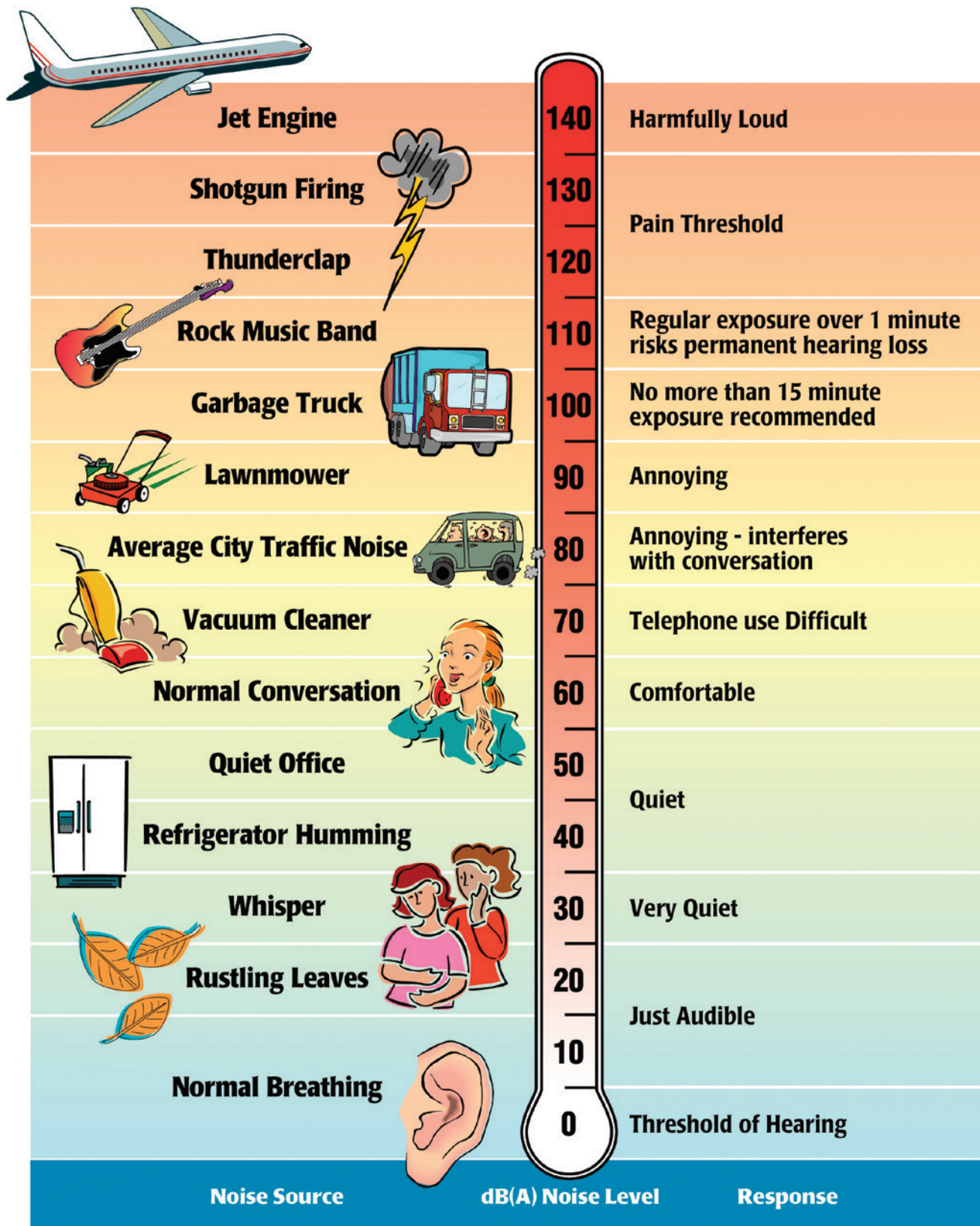
###### Noise Scales And Definitions

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air and is characterized by both its amplitude and frequency (or pitch). The human ear does not hear all frequencies equally. In particular, the ear de-emphasizes low and very high frequencies. To better approximate the sensitivity of human hearing, the A-weighted decibel scale (dBA) has been developed. On this scale, the human range of hearing extends from approximately three dBA to around 140 dBA.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud, and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are illustrated on [Exhibit 5.11-1, \*Common Environmental Noise Levels\*](#).

Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time;
- The influence of periodic individual loud events; and
- The community response to changes in the community noise environment.



**Source:**

Melville C. Branch and R. Dale Beland, *Outdoor Noise in the Metropolitan Environment*, 1970.

Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004)*, March 1974.



## 5. Environmental Analysis NOISE

Numerous methods have been developed to measure sound over a period of time; refer to Table 5.11-1, *Noise Descriptors*.

**Table 5.11-1 Noise Descriptors**

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measured sound to a reference pressure (20 micropascals).
A-Weighted Decibel (dBA)	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Sound Level ( $L_{eq}$ )	The sound level containing the same total energy as a time varying signal over a given time period. The $L_{eq}$ is the value that expresses the time averaged total energy of a fluctuating sound level.
Maximum Sound Level ( $L_{max}$ )	The highest individual sound level (dBA) occurring over a given time period.
Minimum Sound Level ( $L_{min}$ )	The lowest individual sound level (dBA) occurring over a given time period.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments are +5 dBA for the evening, 7:00 PM to 10:00 PM, and +10 dBA for the night, 10:00 PM to 7:00 AM.
Day/Night Average ( $L_{dn}$ )	The $L_{dn}$ is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the $L_{eq}$ . The $L_{dn}$ is calculated by averaging the $L_{eq}$ 's for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 PM to 7:00 AM) by 10 dBA to account for the increased sensitivity of people to noises that occur at night.
Exceedance Level ( $L_n$ )	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% ( $L_{01}$ , $L_{10}$ , $L_{50}$ , $L_{90}$ , respectively) of the time during the measurement period.

Source: Cyril M. Harris, *Handbook of Noise Control*, 1979.

### Health Effects of Noise

Human response to sound is highly individualized. Annoyance is the most common issue regarding community noise. However, many factors influence people's response to noise. The factors can include the character of the noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as the person's opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed".

The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on the community can be organized into six broad categories:

- Noise-Induced Hearing Loss;
- Interference with Communication;
- Effects of Noise on Sleep;
- Effects on Performance and Behavior;
- Extra-Auditory Health Effects; and
- Annoyance.

According to the United States Public Health Service, nearly ten million of the estimated 21 million Americans with hearing impairments owe their losses to noise exposure. Noise can mask important sounds and disrupt



## 5. Environmental Analysis

### NOISE

communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. It can also disrupt effective communication between teachers and pupils in schools and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

Interference with communication has proved to be one of the most important components of noise-related annoyance. Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep. It can produce short-term adverse effects on mood changes and job performance, with the possibility of more serious effects on health if it continues over long periods. Noise can cause adverse effects on task performance and behavior at work, and non-occupational and social settings. These effects are the subject of some controversy, since the presence and degree of effects depends on a variety of intervening variables. Most research in this area has focused mainly on occupational settings, where noise levels must be sufficiently high and the task sufficiently complex for effects on performance to occur.

Annoyance can be viewed as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above. In a study conducted by the United States Department of Transportation, the effects of annoyance to the community were quantified. In areas where noise levels were consistently above 60 dBA CNEL, approximately nine percent of the community is highly annoyed. When levels exceed 65 dBA CNEL, that percentage rises to 15 percent. Although evidence for the various effects of noise have differing levels of certainty, it is clear that noise can affect human health. Most of the effects are, to a varying degree, stress related.

### Ground-Borne Vibration

Sources of ground-borne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration. Typically, ground-borne vibration, generated by man-made activities, attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore usually confined to short distances (i.e., 500 feet or less) from the source. Both construction and operation of development projects can generate ground-borne vibration.



## 5. Environmental Analysis NOISE

Table 5.11-2, *Typical Vibration Level Effects*, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in Table 5.11-2 should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

**Table 5.11-2 Typical Vibration Level Effects**

Vibration Level Peak Particle Velocity	Human Reaction	Effect on Buildings
0.006 – 0.019 inch/sec	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
0.08 inch/sec	Vibrations readily perceptible.	Recommended upper level of vibration to which ruins and ancient monuments should be subjected.
0.10 inch/sec	Level at which continuous vibration begins to annoy people.	Virtually no risk of “architectural” (i.e., not structural) damage to normal buildings.
0.20 inch/sec	Vibrations annoying to people in buildings.	Threshold at which there is a risk to “architectural” damage to normal dwelling – houses with plastered walls and ceilings.
0.4–0.6 inch/sec	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic, but would cause “architectural” damage and possibly minor structural damage.

Source: California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2020; Tables 5 and 12.  
Notes: in/sec = inches per second

### 5.11.1.2 REGULATORY BACKGROUND

#### State

##### *California Building Code*

California Building Code (CBC), Title 24, Section 1207.11.2, *Allowable Interior Noise Levels*, requires that interior noise levels attributable to exterior sources not exceed 45 dBA in any habitable room. The noise metric is evaluated as either  $L_{dn}$  or CNEL, consistent with the noise element of the local general plan.

##### *California Green Building Standards Code*

The California Green Building Standards Code (CALGreen) has requirements for insulation that affect exterior-interior noise transmission for non-residential structures. Pursuant to CALGreen Section 5.507.4.1, *Exterior Noise Transmission*, an architectural acoustics study may be required when a project site is within a 65 dBA CNEL or  $L_{dn}$  noise contour of an airport, freeway or expressway, railroad, industrial source, or fixed-guideway source. Where noise contours are not readily available, if buildings are exposed to a noise level of 65 dBA  $L_{eq}$  during any hour of operation, specific wall and ceiling assembly and sound-rated windows may be necessary to reduce interior noise to acceptable levels. A performance method may also be used per CALGreen Section 5.507.4.2 to show compliance with State interior noise requirements.



## 5. Environmental Analysis

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#### Local

##### *General Plan*

The Chapter 7, *Noise Element* of the 2035 General Plan includes the following goals, objectives, and policies to minimize adverse noise conditions within the City:

- **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.
  - **Policy N-1.4:** Ensure that appropriate site design measures are incorporated into residential developments, when required by an acoustical study, to obtain appropriate exterior and interior noise levels.
  - **Policy N-1.4:** Apply the standards contained in Title 24 of the California Code of Regulations as applicable to the construction of all new dwelling units.
- **Objective N-2A:** Plan for the reduction in noise impacts on sensitive receptors and land uses.
  - **Policy N-2.1:** Require the use of sound walls, berms, interior noise insulation, double-paned windows, and other noise mitigation measures, as appropriate, in the design of new residential or other new noise sensitive land uses that are adjacent to arterials, freeways, or adjacent to industrial or commercial 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.

In addition, the Noise Element sets forth land use compatibility guidelines to protect residential neighborhoods and noise-sensitive receptors from potentially harmful noise sources. The noise and land use compatibility standards are detailed in Table 5.11-3, *Noise and Land-Use Compatibility Standards*.





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**Table 5.11-3 Noise and Land Use Compatibility Standards**

Land Use	Community Noise Exposure (CNEL or L <sub>dn</sub> , dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential: Low Density	50 - 60	60 - 70	70 - 75	75 or greater
Residential: Multiple Family	50 - 65	65 - 70	70 - 75	75 or greater
Mixed Use	50 - 65	65 - 70	70 - 75	75 or greater
Transient Lodging-Motel, Hotels	60 - 65	65 - 70	70 - 80	80 or greater
School, Libraries, Churches, Hospitals, Nursing Homes	50 - 60	60 - 65	65 - 80	80 or greater
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	80 or greater
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	80 or greater
Playgrounds, Neighborhood Parks	50 - 67.5	NA	67.5 - 75	75 or greater
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 or greater
Office Buildings, Business Commercial and Professional	50 - 67.5	67.5 - 77.5	77.5 - 85	85 or greater unless appropriately insulated
Industrial, Manufacturing, Utilities, Agriculture	50 - 70	70 - 80	80 - 85	NA

Source: City of Costa Mesa, 2035 General Plan, Noise Element, accessed on July 28, 2024.

Notes: CNEL = Community Noise Equivalent Level; L<sub>dn</sub> = Day Night Level; dBA = A-weighted decibels; NA = not applicable

### City of Costa Mesa Municipal Code

#### Interior and Exterior Noise Standards

City of Costa Mesa Municipal Code (CMMC) Sections 13-280, *Exterior Noise Standards*, 13-281, *Interior Noise Standards*, and 13-282, *Noise Near Schools, Hospitals, Churches*, establish permissible noise levels at the property line of nearby sensitive receptors. Sections 13-280 and 13-281 establish interior and exterior noise level standards for residential land uses affected by stationary noise sources. Section 13-282 applies the exterior noise standards from Section 13-280 to any school, hospital, or church while it is in use. [Table 5.11-4, City of Costa Mesa Noise Level Standards, dBA](#), summarizes the City's noise level standards based on the land use, measurement location (exterior/interior), and time period.

**Table 5.11-4 City of Costa Mesa Noise Level Standards, dBA**

Land Use	Exterior/ Interior	Time Period	L <sub>50</sub>	L <sub>25</sub>	L <sub>8</sub>	L <sub>2</sub>	L <sub>max</sub>
Residential	Exterior	7:00 a.m. to 11:00 p.m.	55	60	65	70	75
		11:00 p.m. to 7:00 a.m.	50	55	60	65	70
	Interior	7:00 a.m. to 11:00 p.m.	—	—	55	60	65
		11:00 p.m. to 7:00 a.m.	—	—	45	50	55
School, Hospital or Church <sup>1</sup>	Exterior	7:00 a.m. to 11:00 p.m.	55	60	65	70	75
		11:00 p.m. to 7:00 a.m.	50	55	60	65	70

Source: City of Costa Mesa, Municipal Code Sections 13-280

Notes: dBA = A-weighted decibels, L<sub>50</sub>=noise level exceeded 50 percent of the time, L<sub>25</sub>= noise level exceeded 25 percent of the time. L<sub>8</sub>= noise level exceeded 8 percent of the time, L<sub>2</sub>= noise level exceeded 2 percent of the time, L<sub>max</sub> = maximum sound level

<sup>1</sup> The exterior noise standards are applicable to schools, hospitals, and churches while they are in use.

In the event ambient noise levels exceed any of the noise limit categories above, the cumulative period applicable to the category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the last noise limit category, the maximum allowable noise level under the category shall be increased to reflect the maximum ambient noise level.



## 5. Environmental Analysis

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#### *Construction Noise Standards*

CMMC Section 13-279, *Exceptions for Construction*, establishes allowed times for construction activities and includes special provisions for sensitive land uses. The Municipal Code allows construction to occur between the hours of 7:00 a.m. and 7:00 p.m., Mondays through Fridays, and between 9:00 a.m. and 6:00 p.m. on Saturdays. Construction is not permitted outside of these hours or on Sundays or New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, unless a temporary waiver is granted by the City of Costa Mesa Development Services Director or his/her authorized representative or in emergencies, including maintenance work in the City rights-of-way. The limitations on construction activity also apply to vehicles and equipment involved with deliveries, loading or transferring materials, equipment service, or maintenance of any equipment.

#### 5.11.1.3 EXISTING CONDITIONS

##### Existing Noise Levels

To quantify existing ambient noise levels in the project area, Michael Baker International conducted three short-term noise measurements in the vicinity of the project area on May 2, 2024. The noise measurement locations are shown in [Exhibit 5.11-2, \*Noise Measurement Locations\*](#), and are representative of typical existing noise exposure at the nearest sensitive receptors. The 10-minute measurements were taken between 10:00 a.m. and 11:00 a.m. Short-term ( $L_{eq}$ ) measurements are considered representative of the noise levels throughout the day.

The noise measurements were taken during “off-peak” (9:00 a.m. through 3:00 p.m.) traffic noise hours as this provides a more conservative baseline. During rush hour traffic, vehicle speeds and heavy truck volumes are often low. Free-flowing traffic conditions just before or after rush hour often yield higher noise levels.<sup>1</sup> The noise levels measured near the proposed project and the nearest sensitive receptors are identified in [Table 5.11-5, \*Ambient Noise Measurements\*](#).

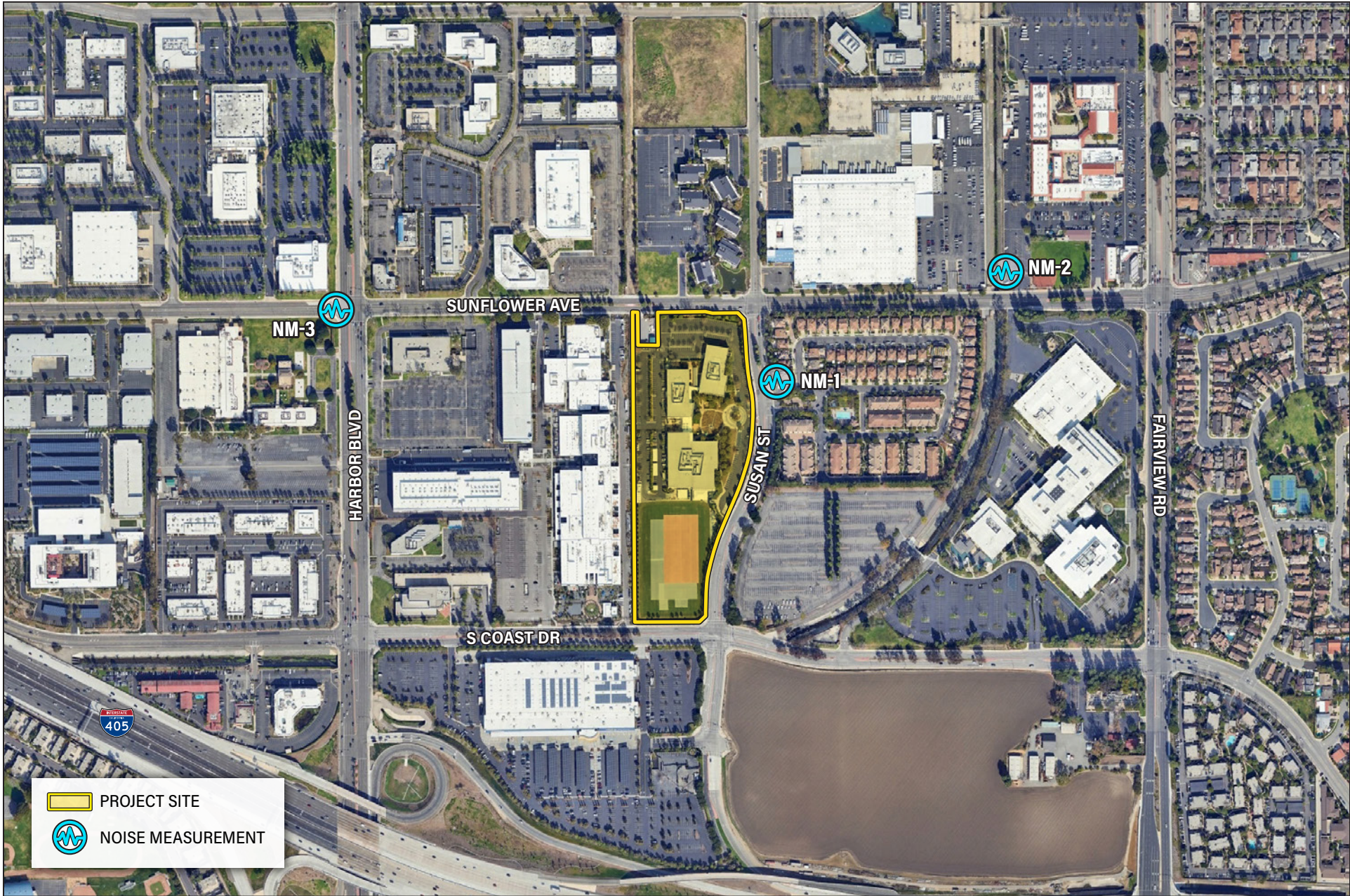
**Table 5.11-5 Ambient Noise Measurements**

Location	Description	$L_{eq}$ (dBA)	$L_{max}$ (dBA)	$L_{min}$ (dBA)
NM-1	Northeast corner of the Via Luca and Susan Street intersection	63.7	80.9	44.7
NM-2	Approximately 350 feet west of the West Sunflower Avenue and Fairview Road intersection	68.7	83.3	46.6
NM-3	Southwest corner of the Harbor Boulevard and Sunflower Avenue intersection	72.7	97.0	54.2

Source: Michael Baker International; refer to [Appendix I](#).

Notes: dBA = A-weighted decibels;  $L_{eq}$  = Equivalent Sound Level;  $L_{min}$  = Minimum Sound Level;  $L_{max}$  = Maximum Sound Level

<sup>1</sup> California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013.



Source: Google Earth Pro, August 2024



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Meteorological conditions were clear sky, cold temperatures, with light wind speeds (less than 4 miles per hour), and low humidity. Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a Type 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute (ANSI) for sound level meters. The results of the field measurements are included in [Appendix I](#).

#### Sensitive Receptors

Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. Sensitive populations are more susceptible to the effects of noise than are the general population. Land uses considered sensitive by the State of California include schools, playgrounds, athletic facilities, hospitals, rest homes, rehabilitation centers, long-term care and mental care facilities. Generally, a sensitive receptor is identified as a location where human populations (especially children, senior citizens, and sick persons) are present. Land uses less sensitive to noise are business, commercial, and professional developments. Noise receptors categorized as being least sensitive to noise include industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, and transit terminals. These types of land use often generate high noise levels. Moderately sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, and outpatient clinics. The nearest sensitive receptors are the existing single- and multi-family residential uses located approximately 105 feet east of the project site.

#### Aircraft Noise

Airport-related noise levels are primarily associated with aircraft engine noise made during takeoff, landing, or idling on the tarmac. The closest airport to the project site is the John Wayne Airport (JWA), approximately 2.76 miles to the southeast in the City of Santa Ana.

#### Stationary Sources

Land uses in the project area are mostly residential, commercial, and light industrial uses. The primary sources of stationary noise in the project vicinity are urban-related activities (i.e., mechanical equipment and parking areas). The noise associated with these sources may represent a single-event noise occurrence, short-term, or long-term/continuous noise.

#### Mobile Sources

The guidelines included in the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate traffic-related noise conditions along local roadway segments in the project vicinity. The details of traffic noise modeling are included in [Appendix I](#). According to the *Traffic Impact Analysis: Hive Apartments, Costa Mesa, California (Traffic Study)*, prepared by Linscott, Law & Greenspan Engineers (LLG), dated January 9, 2025, the project site generates 2,733 trips per day under the existing (baseline) condition, and 4,948 trips per day under the proposed project condition. [Table 5.10-6, Existing Traffic Noise Levels](#), provides the existing traffic noise levels in the project vicinity. These traffic noise levels are representative of a worst-case scenario that assumes a flat terrain and no shielding between the traffic and the noise contours.



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**Table 5.10-6 Existing Traffic Noise Levels**

Roadway Segment	ADT	dBA @ 100 Feet from Roadway Centerline	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)
Sunflower Avenue, between Harbor Boulevard and Susan Street	7,534	59.1	-	-	87
Sunflower Avenue, between Susan Street and Fairview Road	8,831	59.8	-	-	97
Harbor Boulevard, between Sunflower Avenue and South Coast Drive	29,963	65.6	-	109	235
Susan Street, between Sunflower Avenue and South Coast Drive	4,645	55.7	-	-	52
Fairview Road, between Sunflower Avenue and South Coast Drive	28,414	65.3	-	105	226
South Coast Drive, between Hyland Avenue and Harbor Boulevard	10,631	61.7	-	61	130
South Coast Drive, between Harbor Boulevard and Susan Street	8,091	60.7	-	-	111
South Coast Drive, between Susan Street and Fairview Road	6,569	60.0	-	-	100
Harbor Boulevard, between I-405 NB Ramps and I-405 SB Ramps	27,283	64.9	-	99	214

Source: Based on traffic data within the Traffic Study.

Notes: ADT = average daily traffic; CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels; I-405 = Interstate 405; NB = northbound; SB = southbound

### 5.11.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- N-1 Generation 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.
- N-2 Generation excessive groundborne vibration or groundborne noise levels.
- N-3 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, if the project would expose people residing or working in the project area to excessive noise levels.

### Significance Thresholds

#### Construction Noise Standards

The City of Costa Mesa does not have a quantitative threshold that applies to noise levels at active construction sites. To evaluate whether the proposed project would generate potentially significant temporary construction noise levels at off-site sensitive receiver locations, a construction-related noise level threshold was utilized from the Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH). As a division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction-related noise level threshold starts



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at 85 dBA for more than eight hours per day, and for every 3-dBA increase, the exposure time is cut in half. For the purposes of this analysis, the lowest, most conservative construction noise level threshold of 85 dBA  $L_{eq}$  was used as an acceptable threshold for construction noise at the nearby sensitive receiver locations. Since this construction-related noise level threshold represents the energy average of the noise source over a given time, they are expressed as  $L_{eq}$  noise levels. Therefore, the noise level threshold of 85 dBA  $L_{eq}$  over a period of eight hours or more is used to evaluate the potential project-related construction noise level impacts at the nearby sensitive receiver locations. Noise levels from construction equipment and activities were modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM).

#### *Construction and Operational Vibration Standards*

The FTA *Transit Noise and Vibration Impact Assessment Manual* identifies various vibration damage criteria for different building classes, as shown in [Table 5.11-2](#). As the nearest sensitive receptor structures to project site are residential uses, the architectural damage criterion for continuous vibrations at residential structures of 0.2 inch-per-second PPV is applied in the analysis.

#### *Stationary Noise Sources*

The CMMC, Chapter XIII Noise Control, was designed to control excessive noise from sources within and outside Costa Mesa. As such, the City of Costa Mesa's residential exterior noise standards would be applied when analyzing noise impacts for residential uses. A project would result in a significant impact if project-related operational (stationary-source) noise levels exceed the daytime exterior 55 dBA  $L_{eq}$  and nighttime exterior 50 dBA  $L_{eq}$  noise level standard at nearby sensitive receiver locations (based on the exterior noise level standards in Section 13-280 of the CMMC; refer to [Table 5.11-4](#) above).

#### *Mobile Noise Sources*

The primary source of noise associated with the operation of the proposed project would be from vehicular trips. An off-site traffic noise impact typically occurs when there is a discernable increase in traffic and the resulting noise level exceeds an established noise standard. In community noise considerations, changes in noise levels greater than 3 dB are often identified as discernible, while changes less than 1 dB would not be discernible to local residents. A 5 dB change is generally recognized as a clearly discernable difference. Thus, the project would result in a significant noise impact if a permanent increase in ambient traffic noise levels of 3.0 dB occurs upon project implementation and the resulting noise level at the receiving sensitive receptor exceeds the applicable exterior standard at a noise sensitive use.

### 5.11.3 Environmental Impacts

#### 5.11.1.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.



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**Impact 5.11-1: Construction activities would result in temporary noise increases in the project vicinity, but would not exceed applicable standards. [Threshold N-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Short-Term (Construction) Noise Impacts*

Typical activities associated with construction are a highly noticeable temporary noise source. Noise from construction activities is generated by two primary sources: (1) the transport of workers and equipment/materials to construction sites and (2) the noise related to active construction equipment. These noise sources can be a nuisance to local residents and businesses or, in some cases, unbearable to sensitive receptors (i.e., residences, hospitals, senior centers, schools, day care facilities, etc.).

Construction noise levels in the project vicinity would fluctuate depending on the type, number, and duration of usage for the varying equipment. The effects of construction noise largely depend on the type of construction activities occurring on any given day, noise levels generated by those activities, distances to noise-sensitive receptors, and the existing ambient noise environment in the receptor's vicinity. Construction generally occurs in several discrete phases, with each phase requiring different equipment with varying noise characteristics. These phases alter the characteristics of the noise environment generated on the proposed project site and in the surrounding community for the duration of the construction process.

The nearest sensitive receptors to the project site are the existing single- and multi-family uses located approximately 105 feet to the east of Phase 2 and Phase 3 construction activities. Phase 1 construction activities are expected to occur further away (approximately 190 feet) from the nearest sensitive receptors to the east. Section 5.2, *Air Quality*, Table 5.2-6, *Construction Assumptions*, summarizes the proposed construction schedule, the total construction area, and the estimated soil export volume of each phase. The estimated construction noise levels at the nearest noise-sensitive receptors are presented in Table 5.11-7, *Noise Levels Generated during all Construction Phases*. To present a conservative impact analysis, the estimated noise levels were calculated for a scenario in which all heavy construction equipment were assumed to operate simultaneously; refer to Appendix I. Results from RCNM also assume a clear line-of-sight and no other machinery or equipment noise that would mask project construction noise. The shielding of buildings and other barriers that interrupt line-of-sight conditions would help further reduce noise levels than what is shown in Table 5.11-7. The construction equipment list is based on CalEEMod, and the project would include the same type and amount of equipment during all construction phases.



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**Table 5.11-7 Noise Levels Generated during all Construction Phases**

Phases 1, 2, and 3	Estimated Exterior Construction Noise Level at 380 feet <sup>1</sup> (Center of Project Site) (dBA L <sub>eq</sub> )
Demolition	68.8
Grading	69.7
Building Construction	68.7
Paving	64.6
Architectural Coating	56.1
Noise Levels of the Overlapping Construction Phases	
Phase 1 and Phase 2 <sup>2</sup>	69.9
Phase 2 and Phase 3 <sup>3</sup>	69.9

Source: Federal Highway Administration, *Roadway Construction Noise Model (RCNM)*, 2006 (Appendix A).

Notes:

1. Although the nearest sensitive receptors to the project site are the existing single-family uses located approximately 105 feet to the east, the geographic center of the project site is approximately 380 feet from the closest sensitive receptor (residential use) to the east
2. Phase 1 architectural coating phase activities would overlap with Phase 2 demolition and grading phases. Architectural coating and grading phases overlapping would generate higher noise level and therefore is presented here as a worst-case. Overlapping noise level was calculated using the following formula:  
Combined Noise Level =  $10 * \log (10^{\wedge}(\text{Phase 1 Coating Noise Level}/10) + 10^{\wedge}(\text{Phase 2 Grading Noise Level}/10))$
3. Phase 2 architectural coating phase activities would overlap with Phase 3 demolition and grading phases. Architectural coating and grading phases overlapping would generate higher noise level and therefore is presented here as a worst-case. Overlapping noise level was calculated using the following formula:  
Combined Noise Level =  $10 * \log (10^{\wedge}(\text{Phase 2 Coating Noise Level}/10) + 10^{\wedge}(\text{Phase 3 Grading Noise Level}/10))$

According to the FTA *Transit Noise and Vibration Impact Assessment Manual*, General Noise Assessment methodology, noise can be considered as concentrated at the center of the site. As such, the estimated noise levels were calculated from the center of the project site. The geographic center of the project site is approximately 380 feet from the closest sensitive receptor (residential use) to the east.

As shown in [Table 5.11-7](#), the nearest receptors to the project site could be exposed to temporary and intermittent construction noise levels ranging from approximately 56.1 to 69.7 dBA L<sub>eq</sub> at the nearest residential use to the east. It should be noted that some of the construction phases would overlap. Phase 1 architectural coating activities would overlap with the Phase 2 demolition and grading phases, and the Phase 2 architectural coating would overlap with the Phase 3 demolition and grading phases. Therefore, as a conservative analysis, construction noise levels from these overlapping phases were also calculated. As shown in [Table 5.11-7](#), overlapping construction activities during Phases 1, 2, and 3 would result in a noise level of approximately 69.9 dBA L<sub>eq</sub> at the nearest sensitive receptor to the east. As such, construction noise would not have the potential to exceed the NIOSH significance threshold of 85 dBA L<sub>eq</sub>. In addition, it is acknowledged that the CMMC Section 13-279(b), *Exceptions for Construction*, exempts construction activities from the residential exterior noise control standards upon compliance with the permitted construction hours (PPP N-2). As such, construction activities would be required to comply with the permitted hours outlined in Section 13-279(b) of the CMMC, which restricts construction activities to the daytime hours of 7:00 a.m. to 7:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 pm. on Saturdays; construction activities are also prohibited on Sundays and the following federal holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (refer to PPP N-2 and SCA CONST HRS-2).

Therefore, construction impacts resulting from the proposed project would be less than significant.

***Plans, Programs, Policies:***

PPP N-2 Construction activities are required to comply with the following standards detailed in Municipal Code Section 13-279, *Exceptions for Construction*.





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- Allowed from 7:00 a.m. to 7:00 p.m. on Mondays through Fridays;
- Allowed from 9:00 a.m. to 6:00 p.m. on Saturdays; and
- Prohibited on Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

### *Standard Conditions of Approval:*

SCA CONST HRS-2 All noise-generating construction activities shall be limited to 7 a.m. to 7 p.m. Monday through Friday and 9 a.m. to 6 p.m. Saturday. Noise-generating construction activities shall be prohibited on Sunday and the following Federal holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

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**Impact 5.11-2: Long-term operational noise generated by the proposed project would not exceed applicable standards. [Threshold N-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

### *Impact Analysis:*

#### *Long-Term (Operational) Noise Impacts*

##### *On-Site Operational Noise*

The project proposes to demolish the existing Hive Creative Office Campus and Los Angeles Chargers practice field and construct a new multi-phased master-planned residential community ("Hive Live"). The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space. In addition to the publicly accessible open space areas, the proposed project would include approximately 142,147 square feet of private open space (i.e., indoor and outdoor amenities) throughout the project site available exclusively for residents. The indoor and outdoor amenities may include a leasing office, indoor and outdoor lounges, ground-level courtyards, dog park, general amenity space, mail room, bicycle storage space, artwork, co-work/flex space available to residents, move-in area, fitness room, and roof deck (including a fitness facility, roof lounge, and outdoor deck and pool). The project would result in stationary noise related to mechanical equipment, outdoor activity areas, and parking areas.



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#### *Mechanical Equipment Noise*

Typically, mechanical equipment, such as Heating, Ventilation, and Air Conditioning (HVAC) units, generate noise levels of 60 dBA at 20 feet from the source.<sup>2</sup> The nearest sensitive receptors are located at approximately 105 feet to the east of the project site when measured from the property line. HVAC noise levels at this distance would be approximately 46 dBA. It should be noted that the on-site HVAC equipment would be shielded with parapet walls to further reduce mechanical noise impacts at the nearest sensitive receptors. Therefore, HVAC noise level would not exceed the City's exterior daytime or nighttime noise standards of 55 dBA  $L_{eq}$  and 50 dBA  $L_{eq}$ , respectively (refer to PPP N-1). As shown in [Table 5.11-5](#), existing ambient noise levels near the residential uses is approximately 63.7 dBA  $L_{eq}$ , which is higher than the projected noise levels from HVAC units at this sensitive receptor. Further, HVAC equipment currently exist on the rooftops of existing buildings and would not represent new noise sources. As such, impacts would be less than significant in this regard.

#### *Outdoor Activity Areas*

Outdoor activity area noise that is typical of residential land uses includes children playing, pets, amplified music, pool and spa equipment operation. Noise from outdoor activities would primarily occur during the "daytime" activity hours assuming noises decrease during nighttime hours (e.g., people go to sleep and/or close their windows). Residential uses include multi-family residential uses in either mixed-use buildings or apartment/multi-family buildings. The potential noise impacts from such outdoor activity areas would be dependent on various factors, including the type, scale, and intensity of use of such facilities, the orientation of projects in relation to the activity area, the proximity of sensitive receptors, and the background ambient noise level. However, like all residential uses, the proposed project would be required to comply with Section 13-280 of the CMMC, *Exterior Noise Standards*, which prohibits any source of sound at any location from exceeding the City's exterior daytime and nighttime noise standards when measured on property line. The required compliance with the CMMC would ensure that potential noise impacts from the project would be less than significant. Moreover, per Assembly Bill 1307 and Public Resources Code Section 21085, "the effects of noise generated by [residential] project occupants and their guests on human beings is not a significant effect on the environment."

However, conservatively, noise impacts from outdoor activity areas are analyzed at the nearest sensitive receptors located approximately 105 feet to the east when measured from the property line. Although, the nearest sensitive use (residential use) is located approximately 105 feet to the east when measured from the property line, the distances to the nearest sensitive receptors when measured from the on-site stationary sources would be greater. Noise generated by groups of people (i.e., crowds) is dependent on several factors including vocal effort, impulsiveness, and the random orientation of the crowd members. According to Prediction of Crowd Noise, crowd noise is approximately 62 dBA at one meter (i.e., 3.28 feet) from the source.<sup>3,4</sup> Noise has a decay rate due to distance attenuation, which is calculated based on the Inverse Square Law. Based upon the

<sup>2</sup> Elliot H. Berger, Rick Neitzel, and Cynthia A. Kladden, *Noise Navigator Sound Level Database with Over 1700 Measurement Values*, July 26, 2015.

<sup>3</sup> Crowd noise is estimated at 60 dBA at one meter (3.28 feet) away for raised normal speaking. This noise level would have a +5 dBA adjustment for the impulsiveness of the noise source, and a -3 dBA adjustment for the random orientation of the crowd members. Therefore, crowd noise would be approximately 62 dBA at one meter from the source.

<sup>4</sup> Hayne, M.J., *Prediction of Crowd Noise*, November 2006.



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Inverse Square Law, sound levels decrease by 6 dBA for each doubling of distance from the source.<sup>5</sup> At the distance of 105 feet, crowd noise would be approximately 32 dBA. Therefore, outdoor activity areas noise levels would not exceed the City's exterior daytime or nighttime noise standards of 55 dBA  $L_{eq}$  and 50 dBA  $L_{eq}$ , respectively (refer to PPP N-1). As shown in [Table 5.11-5](#), existing ambient noise levels near the residential uses is approximately 63.7 dBA  $L_{eq}$ , which is higher than the projected noise levels from outdoor activity areas at this sensitive receptor. Therefore, a less than significant impact would occur.

#### ***Parking Areas***

The project would include a wrap-around (aboveground) parking structure for each proposed building. Traffic associated with parking activities is not of sufficient volume to exceed community noise standards that are based on a time averaged scale, such as the CNEL scale. However, the instantaneous maximum sound levels generated by a car door slamming, an engine starting up, and car passing by may be an annoyance to adjacent sensitive receptors. Conversations in parking areas may also be an annoyance to adjacent sensitive receptors. However, parking activities noise would occur within the parking structures and be surrounded by proposed buildings, which would block the line-of-sight between the parking areas and the nearest sensitive receptors. Therefore, parking activities noise would not be perceptible at nearest sensitive receptors. In addition, the nearest sensitive receptors are located to the east of the project site across Susan Street. As such, noise levels from the parking activities would be masked due to the traffic noise along Susan Street. Further, parking activity noise currently exists on-site and within the project vicinity and would not represent a new source of noise. Therefore, impacts would be less than significant.

#### ***Off-Site Operational Noise***

#### ***Mobile Noise Source***

##### Existing Conditions

Roadway segment noise levels for the "Existing" and "Existing with Project" scenarios were compared to evaluate project-related operational noise impacts. According to [Table 5.11-8](#), *Existing Traffic Noise Levels*, under the "Existing" scenario, noise levels at a distance of 100 feet from the roadway centerline would range from 55.7 dBA to 65.6 dBA. Under the "Existing with Project" scenario, noise levels at a distance of 100 feet from the roadway centerline would range from 57.7 dBA to 65.6 dBA.

[Table 5.11-8](#) also compares the increase of noise levels between the "Existing" scenario to the "Existing With Project" scenario. The increase in ambient noise between the two scenarios would range from 0.0 dBA to 2.0 dBA. As shown in [Table 5.11-8](#), nine of the roadway segments modeled and would generate noise levels above the 60 dBA CNEL standard with the exception of Susan Street (between Sunflower Avenue and South Coast Drive). However, the increase in ambient noise would not exceed the 3.0 dB threshold along these roadway segments. Therefore, a less than significant impact would occur as noise generated along roadway segments under the "Existing With Project" scenario would not exceed the 3.0 dB threshold.

<sup>5</sup> Hayne, M.J., *Prediction of Crowd Noise*, November 2006.



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**Table 5.11-8 Existing Traffic Noise Levels**

Roadway Segment	Existing	Existing with Project					Difference in dBA @ 100 Feet from Roadway Centerline <sup>1</sup>
	dBA @ 100 Feet from Roadway Centerline <sup>1</sup>	ADT	dBA @ 100 Feet from Roadway Centerline <sup>1</sup>	Centerline to 70 dBA CNEL (feet)	Centerline to 65 dBA CNEL (feet)	Centerline to 60 dBA CNEL (feet)	
Sunflower Avenue, between Harbor Boulevard and Susan Street	59.1	7,842	59.3	-	-	90	0.2
Sunflower Avenue, between Susan Street and Fairview Road	59.8	9,324	60.0	-	-	100	0.2
Harbor Boulevard, between Sunflower Avenue and South Coast Drive	65.6	29,963	65.6	-	109	235	0.0
Susan Street, between Sunflower Avenue and South Coast Drive	55.7	7,346	57.7	-	-	71	2.0
Fairview Road, between Sunflower Avenue and South Coast Drive	65.3	28,414	65.3	-	105	226	0.0
South Coast Drive, between Hyland Avenue and Harbor Boulevard	61.7	11,016	61.9	-	62	134	0.2
South Coast Drive, between Harbor Boulevard and Susan Street	60.7	9,385	61.3	-	57	123	0.6
South Coast Drive, between Susan Street and Fairview Road	60.0	7,170	60.4	-	-	106	0.4
Harbor Boulevard, between I-405 NB Ramps and I-405 SB Ramps	64.9	28,038	65.1	-	101	218	0.1

Source: Based on traffic data within the Traffic Study.

Notes: ADT = average daily traffic; CNEL = Community Noise Equivalent Level; dBA = A-weighted decibels; I-405 = Interstate 405; NB = northbound; SB = southbound

1. Numbers may be slightly off due to rounding.

#### Future Buildout Year (2050) Conditions

The “Future Buildout Year 2050 Without Project” and “Future Buildout Year 2050 With Project” scenarios were compared to evaluate long-term mobile source project impacts. According to Table 5.11-9, Future Buildout Year (2050) Traffic Noise Levels, under the “Future Buildout Year 2050 Without Project” scenario, noise levels would range from 58.5 dBA to 66.9 dBA. Under the “Future Buildout Year 2050 With Project” scenario, noise levels would range from 60.7 dBA to 68.1 dBA. Further, the increase in ambient noise between the two scenarios would range from -0.9 dBA to 2.4 dBA. As shown in Table 5.11-9, nine of the roadway segments modeled and would generate noise levels above the 60 dBA CNEL standard. However, the increase in ambient noise would not exceed the 3.0 dB threshold along these roadway segments. Therefore, a less than significant impact would occur.

#### ***Plans, Programs, Policies:***

PPP N-1 Residential stationary noise sources are required to comply with Municipal Code Section 13-280, *Exterior Noise Standard*:

- 50 dBA from 11:00 pm to 7:00 am; and
- 55 dBA from 7:00 am to 11:00 pm.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.



## 5. Environmental Analysis NOISE

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.11-3: The project would not generate excessive short- or long-term groundborne vibration or noise. [Threshold N-2]**

---

**Level of Significance Before Mitigation:** Less Than Significant Impact.

### **Impact Analysis:**

#### **Construction**

Project construction can generate varying degrees of groundborne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels.



## 5. Environmental Analysis

### NOISE

**Table 5.11-9 Future Buildout Year (2050) Traffic Noise Levels**

Segment	Future Buildout Year 2050 Without Project					Future Buildout Year 2050 With Project					Difference in dBA @ 100 Feet from Roadway Centerline <sup>1</sup>
	ADT	dBA @ 100 Feet from Roadway Centerline <sup>1</sup>	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline <sup>1</sup>	Distance from Roadway Centerline to: (Feet)			
			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour			70 CNEL Noise Contour	65 CNEL Noise Contour	60 CNEL Noise Contour	
Sunflower Avenue, between Harbor Boulevard and Susan Street	10,118	60.4	-	49	106	10,426	61.9	-	62	134	1.5
Sunflower Avenue, between Susan Street and Fairview Road	11,658	61.0	-	54	117	12,151	62.6	-	69	149	1.6
Harbor Boulevard, between Sunflower Avenue and South Coast Drive	40,203	66.9	-	133	286	40,203	68.1	74	160	344	1.2
Susan Street, between Sunflower Avenue and South Coast Drive	8,857	58.5	-	-	80	11,558	61.0	-	54	116	2.4
Fairview Road, between Sunflower Avenue and South Coast Drive	32,292	65.9	-	114	246	32,292	65.4	49	106	228	-0.5
South Coast Drive, between Hyland Avenue and Harbor Boulevard	13,850	62.9	-	72	156	14,235	61.9	-	62	133	-1.0
South Coast Drive, between Harbor Boulevard and Susan Street	12,319	62.5	-	68	147	13,613	61.7	-	60	130	-0.8
South Coast Drive, between Susan Street and Fairview Road	9,570	61.7	-	-	129	10,171	60.7	-	-	112	-0.9
Harbor Boulevard, between I-405 NB Ramps and I-405 SB Ramps	35,679	66.1	-	119	255	36,434	66.1	-	119	257	0.0

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level; - = Contour located within the roadway right of way.

1. Numbers may be slightly off due to rounding.

Source: Based on traffic data within the Traffic Study.



## 5. Environmental Analysis NOISE

Construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. The vibration level at which human annoyance is perceived is 0.2 inch/second PPV; refer to [Table 5.11-2](#). Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 25 feet from most construction vibration sources. This distance can vary substantially depending on the soil composition and underground geological layer between the vibration source and the receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. Construction activities that may result under the proposed project have the potential to generate ground-borne vibration. This evaluation uses the FTA architectural damage criterion for continuous vibrations of 0.2 inch/second PPV as the closest structures to the project site are residential use buildings. The nearest sensitive receptor building is located approximately 105 feet to the east of the project construction activities. As such, vibration impacts are analyzed at 105 feet to evaluate the architectural building damage criterion. It should be noted that the project would use vibratory rollers during construction. Groundborne vibration decreases rapidly with distance. As a result, vibration velocities from the construction equipment would be barely perceptible at this distance. Typical vibration produced by construction equipment is illustrated in [Table 5.11-10, \*Typical Vibration Levels for Construction Equipment\*](#).

**Table 5.11-10 Typical Vibration Levels for Construction Equipment**

Equipment	Approximate peak particle velocity at 25 feet (inch/sec)	Approximate peak particle velocity at 105 feet (inch/sec) <sup>1</sup>
Large bulldozer	0.089	0.0103
Loaded trucks	0.076	0.0088
Small bulldozer	0.003	0.0003
Vibratory Rollers	0.210	0.0244

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, September 2018.

Notes:

1. Calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$$

where: PPV<sub>equip</sub> = the peak particle velocity in in/sec of the equipment adjusted for the distance  
 PPV<sub>ref</sub> = the reference vibration level in in/sec from Table 7-4 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*  
 D = the distance from the equipment to the receiver

As shown in [Table 5.11-10](#), vibration velocities from typical heavy construction equipment operation would range from 0.003 to 0.210 inch/second PPV at 25 feet from the source of activity. The nearest structure to the project site is the existing residential use building located approximately 105 feet to the east of the project site. Vibration level during the operation of construction equipment would be approximately 0.0003 inch/second PPV to 0.0244 inch/second PPV at 105 feet; refer to [Table 5.11-10](#). As a result, construction groundborne vibration would not exceed the 0.2 inch/second PPV significance threshold for human annoyance or for building damage at the nearest structures.

### Operations

Operational groundborne vibration typically occurs for uses like railroads or subways. Upon project completion, the proposed multi-phased residential community would not generate groundborne vibration, and thus, no impact would occur.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.



## 5. Environmental Analysis

### NOISE

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.11-4: The proximity of the project site to the John Wayne Airport would not result in exposure of future residents and/or workers to excessive airport-related noise. [Threshold N-3]**

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**Level of Significance Before Mitigation:** No Impact.

**Impact Analysis:** The nearest airport to the project site is the JWA, located approximately 2.8 miles to the southeast. According to the *Airport Environs Land Use Plan for John Wayne Airport* (AELUP), the project site is located outside of the Airport Impact Zones, AELUP Notification Area, Federal Aviation Regulation Part 77 Notification Area, and Airport Safety Zones.<sup>6</sup> Additionally, the project site is not located within the vicinity of a private airstrip or related facilities. Therefore, project implementation would not expose people residing or working in the project area to excessive noise levels associated with aircraft. As such, the impacts would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

#### 5.11.4 Cumulative Impacts

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**Impact 5.11-5: Cumulative construction activities would not result in temporary noise increases that could exceed applicable standards. [Threshold N-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:**

Construction activities associated with the proposed project and cumulative projects may overlap, resulting in construction noise in the project vicinity. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. The closest project to the proposed project would be the AAA DA Project (APN 140-041-59), located at approximately 150 feet to the east. At this distance, short-term construction noise impacts related to the AAA DA Project would be audible at the sensitive receptors that are potentially affected by the proposed project. Further, construction activities at the AAA DA Project, and all related projects within the City, would be required to comply with the City's allowable construction hours

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<sup>6</sup> Orange County Airport Land Use Commission, *Airport Environs Land Use Plan for John Wayne Airport*, April 17, 2008.





## 5. Environmental Analysis NOISE

pursuant to CMMC Section 13-279 (PPP N-2 and SCA CONST HRS-2), and mitigate their respective construction noise impacts, as required. As the project's construction noise impacts would be less than significant, the project's cumulative impacts in this regard would not be cumulatively considerable. A less than significant impact would occur.

**Plans, Programs, Policies:** Refer to PPP N-2.

**Standard Conditions of Approval:** Refer to SCA CONST HRS-2.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

---

**Impact 5.11-6: Implementation of the proposed project, in combination with related projects, would not result in a cumulatively significant long-term operation-related noise impacts. [Threshold N-1]**

---

**Level of Significance Before Mitigation:** Less Than Significant Impact.

### **Impact Analysis:**

#### **Mobile Noise**

The cumulative mobile noise analysis is conducted in a two-step process. First, the combined effects from both the proposed project and other related projects are compared. Second, for combined effects that are determined to be cumulatively significant, the project's incremental effects then are analyzed. The project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "Future With Project" condition to "Existing" conditions. This comparison accounts for the traffic noise increase from the project generated in combination with traffic generated by projects in the cumulative projects list.

A significant impact would result only if both the combined (including an exceedance of the applicable exterior standard at a sensitive use) and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and reduces as distance from the source increases. Consequently, only the proposed project and growth due to developments occurring in the project site's general vicinity would contribute to cumulative noise impacts. [Table 5.11-11, Cumulative Noise Impact Scenario](#), lists the traffic noise effects along roadway segments in the project vicinity for "Existing," "Future Buildout Year 2050 Without Project," and "Future Buildout Year 2050 With Project" conditions, including incremental and net cumulative impacts.

As indicated in [Table 5.11-11](#), the incremental effects would range from up to 2.4 dBA and would exceed the incremental effects criterion of 1.0 dBA and the combined effects would range up to 5.2 dBA and would exceed the combined effects criterion of 3.0 dBA along Susan Street (between Sunflower Avenue and South Coast Drive). However, it should be noted that there is an existing eight-foot noise barrier wall and berm located between Susan Street and the sensitive receptors, which would reduce the traffic noise levels by at least 5 dBA



## 5. Environmental Analysis

### NOISE

CNEL<sup>7</sup>. As such, traffic noise levels along Susan Street would be reduced to up to 56 dBA CNEL, which is below the “Normally Acceptable” land use compatibility threshold for single-family residential uses (60 dBA CNEL; refer to [Table 5.10-2](#)). Therefore, the project, in combination with related projects, would not result in significant cumulatively considerable traffic noise impacts.

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<sup>7</sup> Federal Highway Administration, *Roadway Construction Noise Model User Guide, Appendix A*.



## 5. Environmental Analysis NOISE

**Table 5.11-11 Cumulative Noise Impact Scenario**

Roadway Segment	Existing	Future Buildout Year 2050 Without Project	Future Buildout Year 2050 With Project	Combined Effects	Incremental Effects	If Combined Effects > 3 dBA And Incremental Effects > 1 dBA Does Noise Level Exceed Normally Acceptable Noise Compatibility Standard?	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline <sup>2</sup>	dBA @ 100 Feet from Roadway Centerline <sup>2</sup>	dBA @ 100 Feet from Roadway Centerline <sup>2</sup>	Difference In dBA Between Existing and Future Buildout Year 2050 With Project <sup>2</sup>	Difference in dBA Between Future Buildout Year 2050 Without Project and Future Year 2050 With Project <sup>2</sup>		
Sunflower Avenue, between Harbor Boulevard and Susan Street	59.1	60.4	61.9	2.8	1.5	NA	<b>No</b>
Sunflower Avenue, between Susan Street and Fairview Road	59.8	61.0	62.6	2.8	1.6	NA	<b>No</b>
Harbor Boulevard, between Sunflower Avenue and South Coast Drive	65.6	66.9	68.1	2.5	1.2	NA	<b>No</b>
Susan Street, between Sunflower Avenue and South Coast Drive <sup>1</sup>	55.7	58.5	61.0	5.2	2.4	No	<b>No</b>
Fairview Road, between Sunflower Avenue and South Coast Drive	65.3	65.9	65.4	0.0	-0.5	NA	<b>No</b>
South Coast Drive, between Hyland Avenue and Harbor Boulevard	61.7	62.9	61.9	0.1	-1.0	NA	<b>No</b>
South Coast Drive, between Harbor Boulevard and Susan Street	60.7	62.5	61.7	1.0	-0.8	NA	<b>No</b>
South Coast Drive, between Susan Street and Fairview Road	60.0	61.7	60.7	0.7	-0.9	NA	<b>No</b>
Harbor Boulevard, between I-405 NB Ramps and I-405 SB Ramps	64.9	66.1	66.1	1.2	0.0	NA	<b>No</b>

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level; - = Contour located within the roadway right of way; NA = Not Applicable

1. Comparison with the noise compatibility standard includes a 5 dBA noise reduction due to the existing wall blocking the line-of-sight between the roadway and residences located along the roadway.

2. Numbers may be slightly off due to rounding.

Source: Based on traffic data within the Traffic Study.



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#### *Stationary Noise*

Although cumulative projects have been identified within the project vicinity, noise generated by stationary sources on a given site cannot be quantified due to the speculative nature of each development. Each cumulative project would require separate discretionary approval and CEQA assessment, which would address potential noise impacts and identify necessary attenuation measures, where appropriate. Additionally, as noise dissipates as it travels away from its source, noise impacts from stationary sources would be limited to each of the respective sites and their vicinities. The nearest cumulative project to the project site would be the AAA DA Project (APN 140-041-59), located at approximately 150 feet to the east. However, as noted above, the proposed project would not result in significant stationary noise impacts that would significantly affect surrounding sensitive receptors. Thus, the proposed project would not result in cumulatively considerable stationary noise impacts. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** Refer to PPP N-1.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.11-7: Implementation of the proposed project, in combination with related projects, would not cumulatively create excessive long-term or short-term groundborne vibration and groundborne noise. [Threshold N-2]**

---

**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** As stated above, construction activities associated with the proposed project and cumulative projects may overlap. However, cumulative development projects would be required to conduct project-specific analysis to determine potential impacts and implement any required mitigation measures that may be deemed necessary on a project-by-project basis. Despite the potential for overlap, groundborne vibration generated at the project site during construction would not exceed the FTA's 0.2 inch/second PPV threshold. The nearest cumulative project is located at AAA DA Project (APN 140-041-59), located at approximately 150 feet to the east. Given the distance, no cumulative short- or long-term vibration impacts would occur. As such, the project's contribution to cumulative vibration impacts would be less than cumulatively considerable.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



## 5. Environmental Analysis NOISE

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**Impact 5.11-8: Project development, in combination with related projects, would not cumulatively expose future residents and/or workers to excessive airport-related noise. [Threshold N-3]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* As stated, the closest airport to the project site is JWA, approximately 2.76 miles to the southeast in the City of Santa Ana. The project site is located outside the 60 dBA CNEL noise contour of JWA, and thus, no impacts would occur. Therefore, the project's contribution to cumulative airport-related noise hazards would be less than significant.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.11.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to noise have been identified.



## 5. Environmental Analysis

### NOISE

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## Chapter 5.12 Population and Housing



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## 5. Environmental Analysis

### 5.12 POPULATION AND HOUSING

This section of the Draft EIR examines the potential socioeconomic effects of the proposed project, including changes in population, employment generation, and demand for housing. This section evaluates the proposed project's relationship to regional and local housing and jobs policies of the Southern California Association of Governments (SCAG), and the adopted General Plan and Specific Plan, with a particular emphasis on jobs-housing balance in the City and County. Additionally, data has been obtained from the 2022 U.S. Census, California Department of Finance (DOF), and California Employment Development Department (EDD).

#### 5.12.1 Environmental Setting

##### 5.12.1.1 REGULATORY BACKGROUND

###### Regional

###### *Southern California Association of Governments*

SCAG is the responsible agency for developing and adopting regional housing, population, and employment growth forecasts for local governments from Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

SCAG's demographic data is developed to enable the proper planning of infrastructure and facilities to adequately meet the needs of anticipated growth. On April 4, 2024, SCAG adopted its *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS)*, which presents the transportation vision for the SCAG region through the year 2050 and provides a long-term investment framework for balancing future mobility and housing needs with economic, environmental, and public health goals.

###### *Regional Housing Needs Assessment (RHNA)*

State law requires jurisdictions provide their fair share of regional housing needs. The State of California Department of Housing and Community Development (HCD) is mandated to determine the Statewide housing need. In cooperation with HCD, local governments and Councils of Governments (e.g., SCAG) are charged with determining the existing and projected housing needs as a share of the Statewide housing need of their city or region.

The Regional Housing Needs Assessment (RHNA) is an assessment process performed periodically as part of housing element and general plan updates at the local level. The RHNA quantifies the housing need by income group within each jurisdiction during specific planning periods. The *6th Cycle Final RHNA Allocation Plan* was adopted by SCAG on March 4, 2021, and covers the planning period from October 2021 through October 2029. The RHNA allows communities to anticipate growth, so that collectively the region can grow in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address social equity and fair share housing needs.



## 5. Environmental Analysis

### POPULATION AND HOUSING

#### Local

##### *City of Costa Mesa 2021-2029 Housing Element*

The purpose of a housing element is to set forth policies and programs to encourage and facilitate housing development and preservation. Some of the State-required issues to be analyzed in a housing element include affordability, overcrowding, overpayment, governmental constraints, and opportunities for housing for people with disabilities and those experiencing homelessness. The *City of Costa Mesa 2021-2029 Housing Element* (Housing Element) was adopted in February 2022, and includes data demonstrating housing issues and trends in Costa Mesa, an inventory of resources pertaining to the existing conditions of the City, and specific housing goals, policies, and objectives.

The Housing Element includes the following goals, objectives, and policies relevant to the proposed project:

- **Policy HOU-1.1:** Assist low and moderate-income homeowners and renters through housing assistance programs as long as funds are available.
- **Policy HOU-1.2:** Minimize the displacement risk for existing residents when considering approval of future redevelopment and public projects.
- **Policy HOU-2.1:** Facilitate the development of housing that meets the needs of all segments of the population including affordable housing and households with specialized needs.
- **Policy HOU-2.4:** HOU-2-4 Encourage housing programs and future actions that address the need for affordable housing options as well as the housing needs of Costa Mesa's senior resident population and the large households population.
- **Policy HOU-3.1:** Encourage the conversion of existing marginal or vacant motels, commercial, and/or industrial land to residential, where feasible and consistent with environmental conditions that are suitable for new residential development.
- **Policy HOU-3.2:** Encourage the development of well-planned and designed residential or mixed-use projects which, through vertical or horizontal integration, provide for the development of compatible residential, commercial, industrial, institutional, or public uses within a single project, neighborhood, or geographic area within the City.
- **Policy HOU-3.5:** Encourage residential and mixed-use development along transportation routes and major commercial/mixed use corridors.

According to the *6th Cycle Final RHNA Allocation Plan*, SCAG determined the housing needs of the City for the 2021-2029 projection period to be 4,713 total units, comprised of:

- 2,919 units: Very Low Income (up to 50 percent of County Median Family Income [MFI]); and
- 1,794 units: Low Income (51 to 80 percent of County MFI);



## 5. Environmental Analysis POPULATION AND HOUSING

As detailed in the Housing Element, the City identified underutilized sites in the North Costa Mesa Specific Plan area with the capacity to accommodate 1,201 Very Low Income units and 695 Low Income units. Furthermore, the Housing Element identifies the project site as having future potential to accommodate the City’s 2021-2029 RHNA requirements.

### 5.12.1.2 EXISTING CONDITIONS

#### Population

##### Population Trends

Table 5.12-1, *Population Trends*, exhibits the population growth trends in the City and County.<sup>1,2</sup> While, population has fluctuated within the City over the past decade, there has been a general decrease; population in the County grew between 2014 and 2018, but has steadily declined between 2019 and 2023, with a change in the trend for 2024.

**Table 5.12-1 Population Trends**

Year	City of Costa Mesa		County of Orange	
	Population	Percent Change	Population	Percent Change
2014	112,409	--	3,122,962	--
2015	113,649	1.10%	3,144,663	0.69
2016	113,723	0.07%	3,160,401	0.50
2017	113,640	-0.07%	3,180,125	0.62
2018	113,535	-0.09%	3,186,254	0.19
2019	114,075	0.48%	3,185,378	-0.03
2020	113,667	-0.36%	3,180,491	-0.15
2021	112,093	-1.38%	3,172,352	-0.26
2022	111,060	-0.92%	3,158,071	-0.45
2023	109,765	-1.17%	3,141,065	-0.54
2024	109,423	-0.31%	3,150,835	0.31

Source: California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark, May 7, 2021; DOF, E5 City/County Population and Housing Estimates, January 1, 2024.

##### SCAG Population, Housing, and Employment Projections

SCAG’s regional forecast population, housing, and employment projections for 2019 and 2050 for the City and County are shown in Table 5.12-2, *SCAG Population, Housing, and Employment Projections*. Population, housing, and employment are anticipated to grow within the City and County over the next two decades. Specifically, SCAG anticipates the City’s population, housing, and employment to increase by 22,000 people, 12,300 units, and 3,300 jobs between 2019 and 2050.<sup>3</sup>

<sup>1</sup> California Department of Finance, E-4 Population Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark, May 7, 2021.

<sup>2</sup> California Department of Finance, E-5 City/County Population and Housing Estimates, January 1, 2024.

<sup>3</sup> Southern California Association of Governments, *Connect SoCal 2024, Demographics and Growth Forecast Technical Report*, adopted April 4, 2024.



## 5. Environmental Analysis POPULATION AND HOUSING

**Table 5.12-2 SCAG Population, Housing, and Employment Projections**

		2019	2050	Change, 2019-2050	Percent Change, 2019-2050
City of Costa Mesa	Population (persons)	112,300	134,300 <sup>1</sup>	22,000	19.59
	Housing (units)	42,100	54,400	12,300	29.22
	Employment (jobs)	101,600	104,900	3,300	3.25
County of Orange	Population (persons)	3,191,000	3,439,000	248,000	7.77
	Housing (units)	1,069,000	1,253,000	184,000	17.21
	Employment (jobs)	1,805,000	2,019,000	214,000	11.86

Source: SCAG, Connect SoCal 2024, Demographics and Growth Forecast Technical Report, adopted April 4, 2024.

Notes:

1. For *Connect SoCal 2024*, SCAG population projections below the county-level are developed for required modeling purposes only; as such this value was provided in a written letter from SCAG, dated June 20, 2024, in response to the Notice of Preparation published for the proposed project; refer to [Appendix B, NOP Comments](#).

### Housing

As shown in [Table 5.12-3, Existing Housing Units \(2024\)](#), the DOF estimates there are currently approximately 44,320 housing units in the City and 1,257,425 housing units Countywide.<sup>4</sup> Characteristics of occupied and vacant housing units in the City and County are also shown in [Table 5.12-3](#).

**Table 5.12-3 Existing Housing Units (2024)**

	City of Costa Mesa	County of Orange
<b>By Unit Type</b>		
Single-Family Detached	17,466	573,186
Single-Family Attached	4,652	144,754
Two to Four	5,657	94,581
Five Plus	15,648	312,718
Mobile Homes	897	32,186
<b>Total (units)</b>	<b>44,320</b>	<b>1,157,425</b>
Average Household Size	2.52	2.81
Vacancy Rate	4.3 percent	4.9 percent

Source: California Department of Finance, *E5 City/County Population and Housing Estimates*, January 1, 2024.

SCAG housing projections for the City and County are detailed in [Table 5.12-2](#) and show an increase of approximately 12,300 and 184,000 units, respectively, by 2050.

### Employment

According to the U.S. Census Bureau, [Table 5.12-4, City Employment by Industrial Sector \(2022\)](#), details the City's estimated employment in 2022 based on industrial sectors.<sup>5</sup> The industrial sector with the greatest number of jobs is educational services, and health care and social assistance (17.4 percent).

<sup>4</sup> California Department of Finance, *E-5 City/County Population and Housing Estimates*, January 1, 2024.

<sup>5</sup> U.S. Census Bureau, *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03, Selected Economic Characteristics, 2022*.



## 5. Environmental Analysis POPULATION AND HOUSING

**Table 5.12-4 City Employment by Industrial Sector (2022)**

Industry Sector	City of Costa Mesa	
	Jobs	Percent of Total Jobs
Agriculture, forestry, fishing and hunting, and mining	518	0.8
Public administration	912	1.4
Information	1,208	1.9
Wholesale trade	1,919	3.0
Transportation and warehousing, and utilities	2,201	3.4
Other services, except public administration	3,678	5.7
Construction	5,166	8.0
Manufacturing	5,304	8.2
Finance and insurance, and real estate and rental and leasing	6,511	10.1
Retail trade	7,094	11.0
Arts, entertainment, and recreation, and accommodation and food services	7,972	12.4
Professional, scientific, and management, and administrative and waste management services	10,670	16.6
Educational services, and health care and social assistance	11,209	17.4
<b>Total</b>	<b>64,362</b>	<b>100%</b>

Source: U.S. Census Bureau, *American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP03, Selected Economic Characteristics, 2022.*

Current employment data for the City and County is estimated at 62,000 jobs and 1,524,600 jobs and, respectively.<sup>6</sup> SCAG employment projections for the City and County are detailed in [Table 5.12-2](#) and show an increase of 3,300 new jobs and 214,000 new jobs, respectively, by 2050.

### Jobs-Housing Balance

The jobs/housing ratio is used as a general measure of balance between a community's employment opportunities and the housing needs of its residents. However, it does not indicate the types of jobs available or if wages are commensurate with housing prices. A ratio of 1.0 or greater generally indicates that a community provides adequate employment opportunities, potentially allowing its residents to work within the community (rather than commuting to neighboring cities). Currently, the City's jobs-housing ratio is approximately 1.4 and the County's job-housing ratio is 1.32.

As shown in [Table 5.12-5, Jobs-Housing Ratio](#), the jobs-housing ratios in the City and County are forecasted to decrease slightly between 2019 and 2050 from 2.4 to 1.92, and 1.7 to 1.6, , respectively. This trend represents a more equal balance where additional housing becomes available to the local workforce.

**Table 5.12-5 Jobs-Housing Ratio**

Jurisdiction	Year	Employment (jobs)	Housing (units)	Jobs-Housing Ratio
City of Costa Mesa	2019	101,600	42,100	2.4
	2050	104,900	54,400	1.92
County of Orange	2019	1,805,000	1,069,000	1.7
	2050	2,019,000	1,253,000	1.6

Source: SCAG, *Connect SoCal 2024, Demographics and Growth Forecast Technical Report*, adopted April 4, 2024.

<sup>6</sup> California Employment Development Department, Labor Market Information Division, *Monthly Labor Force Data for Cities and Census Designated Places (CDP) May 2024 - Preliminary*, June 21, 2024.



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### 5.12.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- PH-1 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).
- PH-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

No impacts relating to Threshold PH-2 were identified, as substantiated in Section 8.0, *Effects Found Not to Be Significant*. This threshold is not addressed in the following analysis.

### 5.12.3 Environmental Impacts

#### 5.12.1.1 METHODOLOGY

The proposed project's demographics are examined in the context of existing and projected populations for the City and County and consider consistency with the growth projections in the 2024-2050 RTP/SCS and General Plan. Information on population, housing, and employment is obtained from several sources, including the U.S. Census, DOE, and SCAG.

Potential project impacts were evaluated relative to the City and County's existing and projected population, housing, employment, and jobs-housing balance. The proposed project would be considered consistent with the General Plan and 2024-2050 RTP/SCS if it is compatible with the general intent of such plans and would not preclude attainment of their primary goals.

#### 5.12.1.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.12-1: The proposed project would not directly or indirectly result in substantial unplanned population growth in the project area. [Threshold PH-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The project proposes to demolish the existing Hive Creative Office Campus and Los Angeles Chargers practice field and construct a new multi-phased master-planned residential community. The project proposes up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space. Of the 1,050 total units proposed, 45 of the units would be provided as affordable housing and would assist the City in meeting its RHNA requirements.



## 5. Environmental Analysis POPULATION AND HOUSING

It should be noted that SCAG's 2024-2050 RTP/SCS was recently published in 2024, whereas the General Plan was adopted in 2016 and includes existing conditions data and buildout information reflective of that year. As such, this analysis compares the project's buildout to SCAG's data and not the General Plan to provide a more current analysis.

### *Population*

According to [Table 5.12-4](#), the City has an average household size of 2.52 residents per dwelling unit. Using this average, the proposed 1,050 units have the potential to support up to 2,646 residents. As shown in [Table 5.12-2](#), SCAG projects the City's population to increase from 112,300 to 134,300<sup>7</sup> people by 2050, an increase of approximately 22,000 people. Thus, the residents generated by the proposed project would account for approximately 12 percent of the population growth forecasted by SCAG in Costa Mesa between 2019 and 2050.

The project proposes a Specific Plan Amendment to update the existing Specific Plan Table 4A, *Segerstrom Home Ranch Sub-Areas*, to be consistent with the proposed project's anticipated development potential, zoning, and land uses. Under existing conditions, residential uses are not permitted on-site. Approval of the proposed Specific Plan Amendment would allow residential densities ranging from 67.3 to 77.9 dwelling units per acre, resulting in a maximum buildout of 1,050 units. Therefore, the proposed project would be consistent with the Specific Plan's density and planned population following approval of the Specific Plan Amendment; refer to [Table 3-3](#), *Segerstrom Home Ranch Sub-Area Development Potential*. It should also be noted the project is located in an urban area with existing infrastructure that can support the proposed infill development. All proposed infrastructure improvements (i.e., sewer, water, storm drains, and dry utilities) are located on-site to support anticipated growth generated by the project. The potential physical environmental impacts of such improvements are analyzed in [Section 5.17](#), *Utilities and Service Systems*. No additional infrastructure improvements (e.g., roadways and utilities) would be implemented that could indirectly induce substantial unplanned population growth elsewhere in the City. As such, project impacts regarding substantial unplanned population growth would be less than significant.

### *Housing*

The project proposes to develop 1,050 dwelling units. As SCAG projects the City's housing stock to grow by 12,300 units by 2050, project buildout would account for approximately 8.5 percent of this growth. Therefore, the units added by the proposed project are within SCAG's projected housing growth for the City. Additionally, the project would provide 45 affordable units (i.e., very low-income units), which would assist the City in meeting its RHNA requirements. Therefore, impacts regarding housing would be less than significant.

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<sup>7</sup> For *Connect SoCal 2024*, SCAG population projections below the county-level are developed for required modeling purposes only; as such this value was provided in a written letter from SCAG, dated June 20, 2024, in response to the Notice of Preparation published for the proposed project; refer to [Appendix B](#), *NOP Comments*.



## 5. Environmental Analysis

### POPULATION AND HOUSING

#### *Employment*

##### *Construction*

Project construction would generate temporary employment opportunities, including short-term design, engineering, and construction jobs. Construction-related jobs would not result in a significant population increase as they would be filled by workers in the region and would only last for the duration of the construction and design stage. Additionally, it is unlikely that workers would relocate as permanent residents of Costa Mesa for temporary jobs. Therefore, temporary construction-related jobs would not result in substantial unplanned population growth in the City, and impacts would be less than significant.

##### *Operation*

The proposed project would replace three existing two-story office buildings with 3,692 square feet of retail use. Under existing conditions, approximately 175 employees work on site; the project is expected to generate approximately 95 jobs, thereby resulting in a net decrease of 80 jobs. As such, the project would not result in a net increase in jobs on-site after full buildout, and project-related employment growth impacts would not occur.

##### *Jobs-Housing Balance*

As detailed above, the City currently has 62,000 jobs and 44,320 housing units, resulting in a jobs-housing ratio of 1.4. Project implementation would slightly decrease employment in the City (decrease in 80 employees) but would increase the housing stock by 1,050 units, thereby slightly reducing the City's jobs-housing ratio from 1.4 to 1.36. This reduction is considered a beneficial impact as the project would improve the City's jobs-housing ratio by introducing more housing in a job-rich area. Additionally, project buildout would not affect the County's anticipated jobs-housing balance as it would remain 1.32.

##### *Conclusion*

Overall, buildout of the proposed project would introduce up to 2,646 residents and 1,050 dwelling units in Costa Mesa and reduce employment on-site. The proposed residential community would provide housing in a job-rich City and County and provide an opportunity for existing and future employees to live close to where they work. The anticipated population and housing growth generated by the project would be within SCAG projections for year 2050. Further, given that the project would provide 45 units as affordable housing, the project would help the City meet its affordable housing allocations and contribute towards the City's future housing goals.

Given the proposed General Plan Amendment, Specific Plan Amendment, and Zone Change from industrial to residential and commercial uses, it is acknowledged that the project involves unplanned population growth outside of the scope of the General Plan, Specific Plan, and SCAG projections. However, the environmental impacts of such unplanned population growth are evaluated, planned for, and mitigated as part of the project throughout this EIR. Additionally, implementation of the proposed project would not induce indirect unplanned population growth. The project would not result in land use changes that substantially increase employment opportunities, nor implement any new policies that could induce substantial unplanned population





## 5. Environmental Analysis POPULATION AND HOUSING

growth. Further, the project site is situated within an urban area and would not install new infrastructure that could induce substantial unplanned population growth. Thus, impacts would be less than significant in this regard.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### 5.12.4 Cumulative Impacts

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**Impact 5.12-2 Development of the proposed project and related projects would not result in cumulatively considerable impacts related to substantial unplanned population growth. [Threshold PH-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative impacts involving population and housing are analyzed in terms of consistency with General Plan and SCAG growth assumptions for Costa Mesa. As stated above, the project would introduce up to 2,646 additional people and 1,050 additional dwelling units to the City, but would reduce employment on-site. Although the project involves unplanned population growth not previously considered in the General Plan, Specific Plan, and SCAG projections, project's population and housing growth are still within SCAG projections for the City and the environmental impacts of such unplanned population growth are evaluated, planned for, and mitigated as part of the project throughout this EIR. Additionally, the project would not result in land use changes that substantially increase employment opportunities, nor implement any new policies that could induce substantial unplanned population growth. The project's population growth would also be offset by the more substantial increase in housing units, a portion of which would include affordable housing to help meet the City's 6th cycle RHNA allocations. Additionally, the project does not involve any infrastructure improvements that would induce unplanned population growth elsewhere in the City. As such, development of the proposed project in conjunction with the related projects listed in [Table 4-1, Cumulative Projects](#) would not result in cumulatively considerable unplanned population and housing impacts. It should be noted the proposed project would also improve the jobs-housing balance in the City.

Related projects would be reviewed by the City and required to show consistency with adopted State and City plans and policies to minimize the effect of potential population and housing growth on the environment. The City would also continue to monitor the extent of residential and nonresidential development and monitor employment growth and housing production in order to enhance the jobs-housing balance in the City. Overall, the project would not result in cumulatively considerable impacts in this regard, and impacts would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.



## 5. Environmental Analysis POPULATION AND HOUSING

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.12.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to population and housing have been identified.



## Chapter 5.13 Public Services



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## 5. Environmental Analysis

### 5.13 PUBLIC SERVICES

This section of the Draft EIR addresses the proposed project's impacts to public services, including fire protection and emergency services, police protection, school services, library services, and park facilities and recreational services. The analysis in this section is based in part on the following correspondence:

- *Costa Mesa Hive Live Fire Department Services Questionnaire*, Nikki Johnson, Assistant Fire Marshal, Costa Mesa Fire & Rescue, August 2024;
- *Costa Mesa Hive Live Police Protection Services Questionnaire*, Bryan Wadkins, Captain, City of Costa Mesa Police Department, August 2024;
- *Costa Mesa Hive Live School Services Questionnaire*, Erica DiCioccio, Facilities Planning Coordinator, November 2024;
- *Costa Mesa Hive Live Park Services Questionnaire*, Brian Gruner, Director, City of Costa Mesa Parks and Community Services Department, August 2024; and
- *Costa Mesa Hive Live Library Services Questionnaire*, Julie Oakley, Administrative Director, Orange County Public Libraries, August 2024.

Complete copies of this correspondence are provided in this Draft EIR ([Appendix L, \*Public Services and Utilities Correspondence\*](#)).

#### 5.13.1 Environmental Setting

##### 5.13.1.1 REGULATORY BACKGROUND

###### Fire Protection Services

###### *State*

###### *California Fire Code*

The California Fire Code (California Code of Regulations Title 24, Part 9) is based on the International Fire Code and contains complete regulations and general construction building standards, including administrative, fire and life safety, and field inspection provisions. The California Fire Code is updated every three years; the 2022 California Fire Code takes effect on January 1, 2023.

###### *California Health and Safety Code Sections 13000 et seq.*

Sections 13000 et seq. of the California Health and Safety Code include fire regulations for building standards (also in the California Building Code [CBC], California Code of Regulations Title 24 Part 2); fire protection and notification systems; fire protection devices, such as extinguishers and smoke alarms; high-rise building and childcare facility standards; and fire suppression training.



## 5. Environmental Analysis

### PUBLIC SERVICES

#### *Local*

#### ***General Plan***

The Safety and Land Use Elements of the General Plan includes the following goals, objectives, and policies related to fire protection and emergency services within the City:

- **Goal S-2:** Provide a high level of security in the community to prevent and reduce crime, and to minimize risks of fire to people, property, and the environment.
  - **Objective S-2A:** Plan, promote, and demonstrate a readiness to respond and reduce threats to life and property through traditional and innovative emergency services and programs.
    - **Policy S-2.4:** Provide a high level of police and fire service in the community. Secure adequate facilities, equipment, and personnel for police and fire.
    - **Policy S-2.5:** Consult with neighboring jurisdictions and partner agencies to respond appropriately to emergencies and incidents in all parts of the City.
    - **Policy S-2.6:** Require that water supply systems for development are adequate to combat structural fires in terms of location and minimum required fire-flow pressures.
    - **Policy S-2.7:** Require development to contribute its fair share toward funding the provision of appropriate fire and emergency medical services as determined necessary to adequately serve the project.
    - **Policy S-2.9:** Emphasize prevention and awareness of fire safety guidelines to minimize risk and potential damage to life, property, and the environment. In areas designated by the Costa Mesa Fire & Rescue Department as having a high fire hazard, ensure adequate fire equipment, personnel, firebreaks, facilities, water, and access for a quick and efficient response in any area.
    - **Policy S-2.12:** Continue to maintain adequate police and fire staffing, facilities, equipment, and maintenance sufficient to protect the community.
  - **Objective LU-5A:** Ensure availability of adequate community facilities and provision of the highest level of public services possible, taking into consideration budgetary constraints and effects on the surrounding area.
    - **Policy LU.5.5:** Ensure that new development pays its fair share of impact fees such as park fees and traffic impact fees. This can also include impact fees related to community services (police protection services and fire emergency response services) or library facilities, once adopted and applicable.



## 5. Environmental Analysis PUBLIC SERVICES

### *Municipal Code*

Municipal Code Title 5, *Buildings and Construction*, requires building construction activities to comply with all adopted State construction codes, including the CBC and California Fire Code.

Municipal Code Sections 7-14, *Adoption of the California Fire Code*, adopt, with modifications, the triennially updated California Fire Code. Municipal Code Section 13-270, *Establishment of Development Impact Fee*, details the City's development impact fee based on the Costa Mesa Fire Protection System Fee Study. The revenues raised by the development impact fee are used to fund fire protection facilities and equipment.

### **Police Protection Services**

#### *Local*

#### *General Plan*

The Safety and Land Use Elements of the General Plan includes the following goals, objectives, and policies related to police protection services within the City:

- **Goal S-2:** Provide a high level of security in the community to prevent and reduce crime, and to minimize risks of fire to people, property, and the environment.
  - **Objective S-2A:** Plan, promote, and demonstrate a readiness to respond and reduce threats to life and property through traditional and innovative emergency services and programs.
    - **Policy S-2.1:** Promote crime prevention strategies and provide a high level of response to incidents.
    - **Policy S-2.2:** Emphasize and prioritize crime prevention strategies, such as pedestrian-scale lighting in targeted areas.
    - **Policy S-2.3:** Timely response to incidents and monitoring areas with high crime rates should be part of a comprehensive strategy to reduce crime in the community.
    - **Policy S-2.4:** Provide a high level of police and fire service in the community. Secure adequate facilities, equipment, and personnel for police and fire.
    - **Policy S-2.5:** Consult with neighboring jurisdictions and partner agencies to respond appropriately to emergencies and incidents in all parts of the City.
    - **Policy S-2.12:** Continue to maintain adequate police and fire staffing, facilities, equipment, and maintenance sufficient to protect the community.



## 5. Environmental Analysis

### PUBLIC SERVICES

- **Objective LU-5A:** Ensure availability of adequate community facilities and provision of the highest level of public services possible, taking into consideration budgetary constraints and effects on the surrounding area.
  - **Policy LU.5.5:** Ensure that new development pays its fair share of impact fees such as park fees and traffic impact fees. This can also include impact fees related to community services (police protection services and fire emergency response services) or library facilities, once adopted and applicable.

### School Services

#### *State*

#### ***Senate Bill 50***

Senate Bill 50 (SB 50) was enacted in 1998 to address how schools are financed and how development projects may be assessed for associated school impacts. It has been incorporated into State law as Government Code Section 65995. SB 50 establishes a process for determining the amount of fees developers may be charged to mitigate the impact of development on school facilities resulting from increased enrollment and allows the State to offer funding to school districts to acquire school sites, construct new school facilities, and modernize existing school facilities.

SB 50 provides three ways to determine funding levels for school districts. The Newport-Mesa Unified School District (NMUSD) falls under the default level (Level 1) fee structure, which allows it to levy development fees to support school construction necessitated by development and receive a 50 percent match from State bond money. According to Government Code Section 65996, development fees authorized by SB 50 are deemed to be “full and complete school facilities mitigation.”

#### *Local*

#### ***Newport-Mesa Unified School District Developer Fees***

As stated above, NMUSD utilizes a Level 1 fee structure to establish developer fees anticipated to offset development impacts on existing NMUSD facilities and resources. Based on the current fee structure, NMUSD charges \$1.84 per square foot of residential development and \$0.30 per square foot of commercial development.<sup>1</sup>

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<sup>1</sup> Newport-Mesa Unified School District, *NMUSD Developer Fees*, <https://web.nmusd.us/departments/business-services/fiscal-services/accounting/nmusd-developer-fees>, accessed August 19, 2024.





## 5. Environmental Analysis PUBLIC SERVICES

### Library Services

#### *Local*

#### *General Plan*

The Land Use Element of the General Plan includes the following goals, objectives, and policies related to library services within the City:

- **Objective LU-5A:** Ensure availability of adequate community facilities and provision of the highest level of public services possible, taking into consideration budgetary constraints and effects on the surrounding area.
  - **Policy LU.5.5:** Ensure that new development pays its fair share of impact fees such as park fees and traffic impact fees. This can also include impact fees related to community services (police protection services and fire emergency response services) or library facilities, once adopted and applicable.

### Park Facilities and Recreation Services

#### *State*

#### *California Public Park Preservation Act*

The primary instrument for protecting and preserving parkland is the State's Public Park Preservation Act of 1971. Cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation, land, or both are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

#### *Quimby Act*

The Quimby Act (Government Code Section 66477), established in 1965, provides provisions in the State Subdivision Map Act for the dedication of parkland and/or payment of in-lieu fees as a condition of approval of certain types of residential projects. The Quimby Act authorizes local jurisdictions to require dedication of parkland and/or payment of fees in the amount of up to three acres of parkland per 1,000 added residents; local jurisdictions may require higher ratios for affected development projects. Before 2018, a city or county could only use these fees to provide parks that served the developer's proposed subdivision. However, Assembly Bill 1359 (AB 1359), signed in 2013, allows cities and counties to use developer-paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located. Overall, AB 1359 provides cities and counties with opportunities to improve parks and create new parks in areas that would not have benefited before. It also allows a city or county to enter a joint/shared use agreement with one or more public districts to provide additional park and recreational access.



## 5. Environmental Analysis PUBLIC SERVICES

### *Local*

#### *General Plan*

The Open Space and Recreation Element of the General Plan includes the following goals, objectives, and policies related to park facilities and recreation services within the City:

- **Goal OSR-1:** Provide a high-quality environment through the development of recreation resources and preservation of open space that meets community needs in Costa Mesa.
  - **Objective OSR-1A:** Maintain and preserve existing parks, and strive to provide additional parks, public spaces, and recreation facilities that meet the community's evolving needs.
    - **Policy OSR-1.1:** Maintain a system of Neighborhood and Community Parks that provide a variety of active and passive recreational opportunities throughout the City.
    - **Policy OSR-1.2:** Provide parks and recreation facilities appropriate for the individual neighborhoods in which they are located and reflective of the needs and interests of the population they serve.
    - **Policy OSR-1.5:** Maximize public space by requiring plazas and public gathering spaces in private developments that can serve multiple uses, including recreation and social needs.
    - **Policy OSR-1.6:** Provide maximum visibility and accessibility for future public parks by locating facilities in close proximity to public streets.
    - **Policy OSR-1.8:** Require that parks and recreation facilities reflect new trends and population changes, and are developed with facilities appropriate to all ages, including athletic fields, active play areas, passive open space, tot lots, and picnic areas.
    - **Policy OSR-1.13:** Design and reform parks to reflect the latest recreational features that respond to demographic changes and community needs.
    - **Policy OSR-1.18:** Provide a minimum of 4.26 acres of parkland per 1,000 residents.
    - **Policy OSR-1.20:** Enhance pedestrian, bicycle, and transit linkages to meet the needs of residents and to provide better access to parks, recreation, and public spaces.
    - **Policy OSR-1.21:** Provide opportunities for public access to all open space areas, except where sensitive resources may be threatened or damaged, public health and safety may be compromised, or access would interfere with the managed production of resources.



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### *Municipal Code*

Municipal Code Article 5, *Park and Recreation Dedications*, requires dedication of land and/or payment of in-lieu fees by residential development projects meeting certain criteria in the amount of 4.26 acres per 1,000 residents added by such residential projects. The City's parkland standard is 4.26 acres per 1,000 residents; the City also arranges with the NMUSD to provide an additional 1.5 acres of school sites per 1,000 residents available for public park and recreation purposes.

Measure Z, passed in November 2016, adds Article 4 to Municipal Code Title 13, Chapter XII, *Special Fee Assessments*, to establish an open space and public park impact fee. The fee is applicable to all new development located both north of the I-405 Freeway and west of Fairview Drive and is due upon issuance of a certificate of occupancy. The fee is established to offset the impact of development upon recreational opportunities and is used solely for the purpose of increasing active recreation, open space, and public park facilities within the City.

### 5.13.1.2 EXISTING CONDITIONS

#### Fire Protection Services

The Costa Mesa Fire & Rescue Department (CMFD) provides fire protection and emergency medical services to the project site. CMFD has six fire stations in the City that are staffed 24 hours a day, every day. The closest station that responds to calls at the project site is Station 1, located at 1570 Adams Avenue, approximately 1.4 miles south and reconstructed in 2018. The next closest station that responds to calls at the project site is Station 2, located at 800 West Baker Street, approximately 1.67 miles southeast of the site.<sup>2</sup>

The CMFD currently has 97 full-time staff (85 sworn positions and 12 non-sworn positions) and part-time staff amounting to 2.25 full-time-equivalent positions.<sup>3</sup> In 2023, CMFD responded to 13,845 incidents, of which approximately 75 percent (10,439) were emergency medical services/rescue calls, 13 percent (1,843) were good intent calls, two percent (261) were fire calls, and the remaining nine percent (1,302) were other types of calls.<sup>4,5</sup>

#### *Automatic Aid*

All fire departments in Orange County participate in an automatic aid agreement to ensure the closest resources are dispatched to an emergency. Automatic aid includes engines, trucks, paramedics, and battalion chiefs. The two nearest service areas of other departments to the project site are the Orange County Fire Authority (OCFA), which serves the nearby City of Santa Ana, and the Fountain Valley Fire Department, which serves the City of Fountain Valley. The nearest fire station, outside of the CMFD, to the project site is Orange County

<sup>2</sup> City of Costa Mesa, *Station Locations*, <https://www.costamesaca.gov/government/departments-and-divisions/fire-rescue/station-locations>, accessed August 19, 2024.

<sup>3</sup> City of Costa Mesa, *About*, <https://www.costamesaca.gov/government/departments-and-divisions/fire-rescue/about#:~:text=Both%20divisions%20are%20supported%20by,Fire%20Administration>, accessed August 19, 2024.

<sup>4</sup> Costa Mesa Fire and Rescue, *2023 Annual Report*, <https://www.costamesaca.gov/home/showpublisheddocument/57154/638531883562200000>, accessed August 19, 2024.

<sup>5</sup> Good intent calls are often mistakes, such as calls regarding steam or dust mistaken for smoke or multiple fire alarms pulled for one fire.



## 5. Environmental Analysis

### PUBLIC SERVICES

Fire Authority Fire Station Number 77 at 2317 South Greenville Street in Santa Ana, approximately 1.63 miles to the north.<sup>6</sup>

#### *Calls for Service and Response Times*

Historical incident response data to the project site was obtained from CMFD through a questionnaire; refer to [Appendix L](#). Based on the questionnaire, it was concluded that travel times to the project site is approximately seven minutes and 13 seconds to 3333 Susan Street and eight minutes and 25 seconds to 3335 Susan Street. Travel time discussed above would require 1:30 minutes for dispatch processing time and up to two minutes for crew turnout time (structure fires require more protective clothing to be donned compared to a medical response). As such, total response time to a fire-related emergency call would range from ten minutes and 43 seconds to 11 minutes and 55 seconds. According to the CMFD, there were a total of six emergency calls for 3333 Susan Street and four emergency calls for 3335 Susan Street in the last five years. These calls comprise of five medical aid transport calls, four false alarms (due to faulty smoke detector and panel malfunctions), and one call regarding smoke from a storm drain.

#### **Police Protection Services**

The Costa Mesa Police Department (CMPD) provides police protection services to the City, including the project site. CMPD is divided into three department divisions: Administration, Field Operations, and Support Services. According to the questionnaire filled out by the CMPD, CMPD staffing currently consists of 119 full-time sworn police officers and has a current budget for a total of 142 full-time sworn police officers; refer to [Appendix L](#). Based on the City's existing service population of 112,780 residents and 119 sworn officers, the City's existing per capita ratio is 1.19 officers per 1,128 residents.

In 2023, City crime statistics totaled 11,059 crimes, consisting of 4,404 Part 1 crimes and 6,655 Part 2 crimes.<sup>7,8</sup> The CMPD station is located at 99 Fair Drive about 2.1 miles southeast of the project site. According to CMPD, the existing use on-site generated nine calls for police service over the last five years.

#### *Mutual Aid Agreements*

The City also participates in local mutual aid agreements under the Orange County Chiefs' of Police and Sheriff's Association.<sup>9</sup> The Orange County Sheriff's Department Law Enforcement Mutual Aid Bureau provides mutual aid to law enforcement agencies in Orange County. Participation in mutual aid agreements ensures CMPD and neighboring jurisdictions' police departments have additional support in regard to resources and staffing to respond to calls in the region.

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<sup>6</sup> Orange County Fire Authority, *Fire Stations*, <https://ocfa.org/AboutUs/FireStations.aspx>, accessed August 19, 2024.

<sup>7</sup> City of Costa Mesa, *2023 Crime Statistics*, <https://www.costamesaca.gov/home/showpublisheddocument/56436/638527695403800000>, accessed August 19, 2024.

<sup>8</sup> Part I crimes consist of violent felonies such as homicide, rape, and robbery, and some serious property crimes such as larceny. Part II crimes are less serious offenses such as other assault, fraud, vandalism, and drug abuse violations.

<sup>9</sup> Orange County Sheriff's Department, *Mutual Aid Bureau*, <https://www.ocsheriff.gov/commands-divisions/investigations-special-operations-command/special-operations/mutual-aid-bureau-9>, accessed August 19, 2024.



## 5. Environmental Analysis PUBLIC SERVICES

### School Services

The NMUSD boundary spans approximately 59 square miles and includes the cities of Costa Mesa and Newport Beach. NMUSD consists of 32 schools, including 22 elementary schools, two intermediate schools, two middle/high schools (grades 7-12), two high schools (grades 9-12), three alternative schools/programs, and one adult education program (partnered with the Huntington Beach Adult School). District-wide enrollment in the 2023-2024 school year was 17,768 students.<sup>10</sup>

The project site is located in the attendance boundaries of the five schools listed in Table 5.13-1, NMUSD Schools Serving the Project Site.

**Table 5.13-1 NMUSD Schools Serving the Project Site**

School and Address	Enrollment (2023-2024)	Capacity
Costa Mesa Middle and High School 2650 Fairview Road, Costa Mesa	1,758	2,170
College Park Elementary School 2380 Notre Dame Road, Costa Mesa	452	690
Killybrooke Elementary School 3155 Killybrooke Lane, Costa Mesa	463	545
Paularino Elementary School 1060 Paularino Avenue, Costa Mesa	377	640
Sonora Elementary School 966 Sonora Road, Costa Mesa	366	675

Sources: Newport-Mesa Unified School District, Erica DiCioccio, *Costa Mesa Hive Live School Services Questionnaire*, November 2024; refer to Appendix L

### Library Services

The Orange County Public Library (OCPL) provides library services to the City, including the project site. OCPL has 33 branch libraries in 24 incorporated cities and unincorporated areas of the County and has a system-wide collection of approximately 2.5 million items.<sup>11</sup> The City has two branch libraries operated by OCPL: the Donald Dungan Library, located at 1855 Park Avenue, and the Mesa Verde Library, located at 2969 Mesa Verde Drive. The closest library to the project site is the Mesa Verde Library approximately 1.1 miles to the south. OCPL is a special district governed by the Orange County Board of Supervisors and, thus, is funded mostly by taxes (e.g., property, sales, and utility taxes).<sup>12</sup>

### Park Facilities

According to the City’s Parks and Community Services Department, the City categorizes parks into three categories: neighborhood parks, community parks, and special use parks. The City has a total of 416.05 acres of parkland space (82.93 acre of neighborhood parks, 102.51 acres of community parks, and 230.61 acres of

<sup>10</sup> California Department of Education (CDE). 2024. *District Profile: Newport-Mesa Unified*. <https://www.cde.ca.gov/sd/profile/details.aspx?cds=30665970000000>. Accessed July 22, 2024.

<sup>11</sup> Orange, County of (Orange). 2005. Orange County General Plan Chapter V Public Services and Facilities Element.

<sup>12</sup> Davis Companies, The. *Orange County Public Libraries Facilities and Financing Study Final Report*. [https://www.ocfa.org/\\_uploads/pdf/sr\\_ewg121017-03.pdf](https://www.ocfa.org/_uploads/pdf/sr_ewg121017-03.pdf), accessed August 19, 2024.



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special use parks). Additionally, the Costa Mesa Golf Course, located at 1701 Golf Course Drive, provides the City with an additional 237.20 acres of parkland for a total of 653.25 (416.05 plus 237.20) acres of parkland. The nearest City-owned parks to the project site include:

- *Gisler Park*: The 4.1-acre Gisler Park is located at 1250 Gisler Street, about 2,000 feet south of the project site across the I-405 Freeway. Gisler Park has a playground, volleyball court, and picnic tables.<sup>13</sup>
- *Wimbledon Park*: The 3.36-acre Wimbledon Park is located at 3440 Wimbledon Way, approximately 0.5 mile east of the project site. Wimbledon Park contains a basketball court, exercise areas, playgrounds, and picnic tables.<sup>14</sup>
- *Paularino Park*: Paularino Park is 2.3 acres and is located at 1040 Paularino Avenue, approximately 0.8 miles southeast of the project site. Paularino Park has playground and picnic tables.<sup>15</sup>

Additionally, Fairview Park, located at 2501 Placentia Avenue, is the largest City park in Costa Mesa, totaling 210 acres and is approximately two miles southwest of the project site. Amenities at Fairview Park include a miniature railroad, shelters, picnic tables, and restrooms.<sup>16</sup>

### 5.13.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- PS-1      Result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
- i)      Fire protection;
  - ii)     Police protection;
  - iii)    Schools;
  - iv)    Parks; or
  - v)     Other public facilities.

<sup>13</sup> City of Costa Mesa, *Gisler Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/gisler-park>, accessed August 19, 2024.

<sup>14</sup> City of Costa Mesa, *Wimbledon Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/wimbledon-park>, accessed August 19, 2024.

<sup>15</sup> City of Costa Mesa, *Paularino Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/paularino-park>, accessed August 19, 2024.

<sup>16</sup> City of Costa Mesa, *Fairview Park*, <https://www.costamesaca.gov/community/fairview-park>, accessed August 19, 2024.



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### 5.13.3 Environmental Impacts

#### 5.13.1.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

#### Fire Protection Services

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**Impact 5.13-1: The proposed project would increase the intensity of the project site, but would not result in the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives. [Threshold PS-1(i)]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

#### *Impact Analysis:*

##### *Construction*

Development of the proposed project would require the demolition of the existing Hive Creative Office Campus and Los Angeles Chargers practice field and construction of a new multi-phased master-planned residential community. Construction activities would be subject to compliance with applicable State and local regulations in place to reduce risk of fire, such as installation of a temporary construction fencing to restrict site access and maintenance of a clean construction site. Specifically, construction would be subject to Municipal Code Title 5, *Buildings and Structures*, and all adopted State construction codes, including the CBC and California Fire Code (refer to PPP FS-2). Specifically, Municipal Code Section 7-14, *Adoption of the California Fire Code* (refer to PPP FS-1), includes site access requirements and fire safety precautions associated with construction activities. Project compliance with applicable State and local regulations related to fire protection would result in less than significant construction-related impacts.

##### *Operations*

Upon construction completion, the proposed project is anticipated to introduce up to 2,646 residents. The proposed project would also replace the three existing two-story office buildings with 1,050 dwelling units and 3,692 square feet of retail use. While the project would result in a decrease in employees on-site, the proposed 1,050 dwelling units would result in an increase of people residing on-site. As such, project development would generate a net increase in demands for fire protection and emergency medical services due to an overall increase in the population residing on-site. As stated above, the existing industrial building on-site generated a total of ten calls for service in the last five years. Based on input from CMFD, the implementation of the proposed project would significantly impact the call for service volume based on the historical data for the site. Specifically, the CMFD determined that the proposed 1,050 dwelling units would generate up to approximately 185 calls for service per year, resulting in an increase of approximately 175 calls for service per year.



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The City's demands on CMFD's services would be offset through the collection of development impact fees established based on the Costa Mesa Fire Protection System Fee Study, the proportional increase in the City's General Fund through taxes (or other similar revenues) generated by the project, and/or as required per the Development Agreement, implementation of the proposed Preliminary Fire Access Plan, and Municipal Code Section 13-270, *Establishment of Development Impact Fee* (PPP FS-3). Overall, the final project plans would be reviewed and approved by the CMFD, which would ensure adequate emergency access, appropriate fire flow, and compliance with all applicable State and local codes and standards.

According to the questionnaire from CMFD, there are no current plans to increase the number of personnel service in the project area, additional staffing, apparatus, and facilities need to be considered. It should be noted that there is a plot of land on the Segerstrom Farmland that would potentially be used for the relocation of an existing facility or construction of a seventh station in the City. CMFD is currently conducting a comprehensive Citywide Standards of Coverage Assessment and deployment analysis that is independent of the proposed project. The City is also concurrently conducting a Development Impact Fee Study to account for similar changes of use that result in net increases to call volumes. In the meantime, to mitigate the impacts of the project-generated increase in anticipated calls for service, CMFD has accepted PPP FS-3, which requires the negotiation of fees through the Development Agreement with an understanding that the developer will be required to pay its pro-rata share of additional staffing, apparatus, and facilities. As stated above, the project would be required to pay development impact fees established based on the Citywide Standards of Coverage Assessment and the Development Impact Fee Study and as required in the Development Agreement in accordance with PPP FS-3 and Municipal Code Section 13-270, *Establishment of Development Impact Fee*. The revenues raised by the development impact fee, the Development Agreement, and the proportionate revenues generated through the project's ongoing payment of taxes (and other similar project-related revenues) would fund fire protection staffing, facilities, and equipment and would offset the project's incremental impacts to fire services. Therefore, with implementation of all relevant PPPs, impacts related to fire protection services would be less than significant.

#### ***Plans, Programs, Policies:***

- |          |   |
|----------|---|
| PPP FS-1 | The proposed project is required to comply with the 2022 edition of the California Fire Code.   |
| PPP FS-2 | The proposed project is required to comply with Municipal Code Title 5, <i>Buildings and Structures</i> , and all adopted State construction codes.                       |
| PPP FS-3 | The project is required to pay development impact fees established based on the Costa Mesa Fire Protection System Fee Study and as required in the Development Agreement. |

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.





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### Police Protection Services

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**Impact 5.13-2: The proposed project could significantly increase the intensity of development at the site, thereby increasing the demand for police protection facilities and personnel. [Threshold PS-1(ii)]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

#### *Impact Analysis:*

##### *Construction*

Construction activities may create a temporary increase in demand for CMPD services to the construction site. However, project construction activities would be required to comply with Municipal Code Title 5, *Buildings and Structures*, and all adopted State construction codes (refer to PPP FS-2). Specifically, the CBC includes emergency site access requirements that would minimize site safety hazards and potential construction-related impacts to police services. Therefore, with compliance with these requirements, the project construction would not result in the need for additional police protection facilities, the construction of which could cause significance environmental impacts, and would not adversely impact service ratios, response times, or other CMPD performance standards. A less than significant impact would occur in this regard.

##### *Operations*

Project operation is anticipated to introduce up to 2,646 residents, as well as 1,050 multi-family residential units, 3,692 square feet of retail use, and a 335,958 square feet of open space area. The project would not introduce new land uses to the surrounding area (which already includes residential and commercial land uses). The project would result in a more intensive use as more people would be living in the project area compared to existing conditions. As discussed before, the existing office use experiences around nine police service calls per year. According to the CMPD questionnaire, the 2,646 residents from the proposed development would be projected to result in approximately 500 to 600 calls for service per year based on a similar development (size and location). As the proposed project would increase calls from nine to a maximum of 600 calls per year, the proposed project would increase traffic flows, existing community policing, and crime prevention outreach in the surrounding regions. Additionally, the proposed development would result in a shift in patrol strategies due to the new land uses, which would affect patrol response times. As such, the implementation of the proposed project would result in an increase demand for police services than existing conditions, would shift CMPD patrol strategies, and increase response times in the surrounding area.

Based on input from the CMPD through the questionnaire, in order to help deter and investigate crime on the proposed project, the applicant would install an Automated License Plate Reader (refer to Mitigation Measure PS-1). The CMPD currently utilize the Automated License Plate Reader program to help in investigation of crimes and utilize a total of 46 public and 10 private cameras citywide to help deter crime. The applicant would be required to install the Automated License Plate Reader at all entrances of the property and would be responsible for the initial; and future funding of the Automated License Plate Reader program on the property.



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The proposed project would include installation of security features and natural surveillance (i.e., providing observable spaces in the community). Project lighting would illuminate pathways, stairways, entrances and exits to the project site, parking areas, mail box areas, children's play areas, recreation areas, pools, dumpster areas and other locations as required by the City and CMPD. For the proposed residential buildings, project landscaping and site lighting would be designed to avoid creating blind spots or hiding places; paving treatments would be installed to guide visitors to desired entrances and pedestrian pathways; and pedestrian walkways would be unobstructed from outdoor furniture, ground-level lighting, and landscaping. For the commercial areas, tenant space would be fully illuminated at night; shrubbery height would be maintained at three feet; private recreation areas would be visible from residential units; and parking areas and pedestrian walkways would be illuminated adequately during nighttime hours. For parking garages, the interior would be designed to maximize visibility; all parking areas and driving lanes would be fully illuminated and under surveillance of security cameras; stairwells would be visible with no solid walls; emergency telephones would be provided on all parking garage levels; and elevators would be installed close to main entrances. All outdoor security lighting would be installed with recommendations from the City of Costa Mesa Development Services Department and/or CMPD (refer to SCA PD-1). For the open space, all benches would have seat dividers; all trash receptacles would be durable and vandal-resistant; and open space rules would be posted at the entry to the open space.

The City does not have an established development impact fee for new development or an adopted generation factor to determine the appropriate number of additional personnel or patrol cars based on population, response times, or other similar metrics. However, considering the City's existing per capita ratio of 1.19 officers per 1,128 residents, the project's contribution of 2,646 additional residents to the City's population would reduce the service ratio below existing levels. Based on the change in the character of the area and the resulting demand for additional police patrols, the CMPD has determined a minimum of two additional sworn police personnel and associated police vehicles would be necessary in order to meet the increase in service demands resulting from the project. However, the incremental increase in sworn police personnel does not warrant the construction of a new police station or expansion to existing stations or any other similar physical improvement.

The City's demands on CMPD services are addressed through the City's General Fund, whose revenues are collected from property, sales, and utilities taxes. Further, the project would be required to provide additional funding consistent with the terms of the Development Agreement. According to the City of Costa Mesa Fiscal Year 2022-2023 Development Impact Fee Report, police services does not have an established development impact fee. Thus, the proportional increase in the City's General Fund through taxes (or other similar revenues) generated by the project, and/or payment of funds as required per the Development Agreement would ensure the applicant provides adequate funds to address its fair share demand for CMPD services. Additionally, new staffing and equipment would not result in substantial adverse physical impacts or require the need for new or physically altered CMPD facilities, the construction of which could cause significant environmental impacts.

Overall, development of the proposed project would result in an increase in demands on CMPD services. As stated above, the CMPD is a full-service police agency providing a wide range of crime suppression, education, and prevention services to the community. CMPD would continue to add staff and equipment on an as-needed basis to accommodate the incrementally increasing demands from future development, including the proposed



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project. With implementation of PPP FS-2 and Mitigation Measure PS-1, impacts on CMPD services would be less than significant.

**Plans, Programs, Policies:** Refer to PPP FS-2.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

SCA PD-1 Outside security lighting shall be provided under the direction and upon the recommendation of the City of Costa Mesa Development Services Department and/or the Police Department.

### **Mitigation Measures:**

PS-1 The applicant shall coordinate with the Costa Mesa Police Department for the installation and operation of an Automated License Plate Reader on all vehicle entrances to the project site. The applicant shall be responsible for the initial and future funding of the Automated License Plate Reader program on the property.

**Level of Significance After Mitigation:** Less Than Significant Impact with Mitigation Incorporated.

### **School Services**

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**Impact 5.13-3: The proposed project would introduce new students into the NMUSD service area, but would not adversely impact school enrollment capacities. [Threshold PS-1(iii)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

### **Impact Analysis:**

#### **Construction**

The project does not propose the construction of any new or physically altered school facilities. Additionally, the project is not located near any existing schools such that its construction would disrupt school services. Due to its temporary nature, project construction activities would not generate additional students, and no impacts to school services would occur.

#### **Operations**

As shown in [Table 5.13-2, Project-Generated Students](#), the proposed project is estimated to generate approximately 314 students, consisting of 156 elementary school (grades K-6) students, 53 middle school (grades 7-8) students, and 105 high school (grades 9-12) students. This is based on the NMUSD questionnaire and their student generation rate of 0.15 elementary school students, 0.05 middle school students, and 0.1 high school student per ever multi-family dwelling unit; refer to [Appendix L](#).



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**Table 5.13-2 Project-Generated Students**

School Level (Grades)	Student Generation Rate Per Unit	Project Buildout	Students Generated
Elementary (K-6)	0.15	1,050 dwelling units	156
Middle (7-8)	0.05		53
High (9-12)	0.10		105
<b>Total</b>	<b>0.30</b>		<b>314</b>

Sources: Newport-Mesa Unified School District, Erica DiCioccio, *Costa Mesa Hive Live School Services Questionnaire*, November 2024; refer to [Appendix L](#)  
Note: Number rounded to the nearest whole number

The residual capacities at the schools serving the project site include 412 seats at the Costa Mesa Middle and High School and a combine total of 892 at the elementary schools serving the project site (College Park, Killybrooke, Paularino, and Sonoroa Elementary School). Therefore, the project’s generation of approximately 158 middle and high school students (105 plus 53) and 156 elementary school students would be adequately served by existing schools serving the project site. Thus, there is adequate existing capacity at the NMUSD schools serving the project site to accommodate future students associated with the proposed project.

Additionally, pursuant to SB 50, the project applicant is required to pay developer fees per square foot for residential and commercial construction to offset development impacts on NMUSD’s facilities and resources (refer to PPP SS-1). Specifically, NMUSD states that the developer fee rate would be approximately \$1.84 per square feet of qualifying residential space and \$0.30 per square feet of qualifying commercial space. As the project would be required to pay these developer fees, which are deemed to be full mitigation, and existing school capacities would accommodate future students generated by the project, impacts to school services would be less than significant.

***Plans, Programs, Policies:***

PPP SS-1 The project applicant shall pay developer fees per square foot for residential and commercial construction pursuant to the Newport-Mesa Unified School District (NMUSD) requirements.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

### Park Facilities

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**Impact 5.13-4: Project development would introduce additional residents in the City, but would not substantially increase demands for park facilities. [Thresholds PS-1(iv)]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

***Impact Analysis:*** The proposed project would introduce up to 1,050 dwelling units which would result in a net increase of approximately 2,646 residents into the City. The City currently has a parkland standard of 4.26 acres of parkland per 1,000 residents. As such, the proposed project would be required to provide a total of 11.27 acres of parkland.



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According to the questionnaire response from the City's Parks and Community Services Department, the City categorizes parks into three categories: neighborhood parks, community parks, and special use parks. The City has a total of 416.05 acres of parkland space (82.93 acre of neighborhood parks, 102.51 acres of community parks, and 230.61 acres of special use parks). Additionally, the Costa Mesa Golf Course, located at 1701 Golf Course Drive, provides the City with an additional 237.20 acres of parkland for a total of 653.25 (416.05 plus 237.20) acres of parkland; refer to [Appendix L](#).

According to the population trends for the City, the current 2024 population is approximately 109,423 residents.<sup>17</sup> The proposed project would introduce up to 2,646 residents which would increase the City's population to 112,069. Based on the City's parkland standard of 4.26 acres of parkland per 1,000 residents, the existing 653.25 acres of parkland would meet the demands of 112,069 residents. As such, the implementation of the proposed project would not substantially increase demands of parkland facilities.

It should also be noted that the implementation of the proposed project would include 335,958 square feet (7.71 acres) of private and public open space. The project's open space would come in the form of open space courtyards, dog park, and a public plaza. Additionally, the proposed project would include a rear paseo adjacent to the existing Rail Trail, a bicycle path that would run along the western perimeter of the project site. The project would also improve connections to the Rail Trail. Additionally, the project is also located near two regional parks in the City, the 210-acre Fairview Park and 180-acre Talbert Regional Park owned and maintained by OC Parks. As such, the proposed project would be adequately serviced by open space located on-site and by other nearby parks serviced by the City's Parks and Community Services Department and OC Parks.

The project is also required to comply with the Quimby Act and Measure Z, which require dedication of parkland and/or payment of in-lieu fees and payment of impact fees related to open space (refer to PPP R-1). Therefore, the project applicant would be required to pay in-lieu fees under the terms and conditions of the Development Agreement. Compliance with these regulatory requirements, along with the development of the proposed recreational amenities, would ensure project impacts to park and recreational services are less than significant.

### ***Plans, Programs, Policies:***

PPP R-1            The proposed project shall comply with Government Code Section 66477 (Quimby Act) and Measure Z as required by the Development Agreement, related to payment of an open space and public park impact fee.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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<sup>17</sup> California Department of Finance, *E-4 Population Estimates for Cities, Counties, and the State, 2011-2020, with 2010 Census Benchmark*, May 7, 2021; DOF, *E5 City/County Population and Housing Estimates*, January 1, 2024.



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#### Library Services

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**Impact 5.13-5: Project development would not significantly increase residents in the OCPL service area, such that new or physically altered library service facilities would be needed, the construction of which could cause significant environmental impacts. [Threshold PS-1(v)]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Construction*

The project does not propose the construction of any new or physically altered library facilities. Due to its temporary nature, project construction activities would not generate an increase in the City's population, and no impacts in this regard would occur.

*Operations*

Project operations are anticipated to introduce up to 2,646 people to the City, thereby increasing demands for OCPL facilities and resources. The OCPL service standards is determined by a systemwide Library Advisory Board Resource Deployment Formula which is adjusted as needed. According to the questionnaire filled out by OCPL, the increase of up to 2,646 new residents into the City would have potentially significant impacts on OCPL's service capabilities, specifically, the Mesa Verde Library in the City; refer to [Appendix L](#).

While OCPL would experience a large influx of new users, funding for OCPL services is provided through County property taxes dedicated to the library. These funds would be used to upgrade and expand existing facilities, as needed. Project impacts are anticipated to be adequately funded by an increase in tax revenue, over an extended period of time, relative to the increase in development intensity. Additionally, the Donald Dungan Library and Mesa Verde Library in Costa Mesa would have access to a circulation of more than two million volumes at all branch libraries of the OCPL system, including those in surrounding communities.

As such, the project would not significantly increase residents in the OCPL service area, such that new or physically altered library service facilities would be required, the construction of which could cause significant environmental impacts.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.



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### 5.13.4 Cumulative Impacts

#### Fire Protection Services

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**Impact 5.13-6: The project, combined with other related projects, could increase demand for CMFD services, but would not cause significant environmental impacts. [Threshold PS-1(i)]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* For purposes of fire protection services analysis, cumulative impacts are considered for projects which would also contract with CMFD (i.e., related projects within the City). However, cumulative development would also be subject to payment of development impact fees to offset their respective increases in demand for fire and emergency services. Related projects would also be required to comply with applicable State and local regulations intended to reduce risk of fire and impacts on fire protection services. Cumulative projects would be evaluated on a case-by-case basis at the project-level, as they are implemented, for their potential to impact CMFD's services.

As discussed, project implementation would introduce new multi-family residential and retail uses, which would increase demands for CMFD fire protection and emergency services. The project would be required to pay development impact fees collected in accordance with Municipal Code Section 13-270, *Establishment of Development Impact Fee*, or as required per the Development Agreement (refer to PPP FS-3).

As such, the project would be subject to conformance with PPP FS-1 through PPP FS-3, which reduce risk of fire. As the project would result in less than significant impacts regarding fire facilities with implementation of and all applicable PPPs, the project's cumulative impacts to fire protection services would not be cumulatively considerable. Impacts in this regard are less than significant.

*Plans, Programs, Policies:* Refer to PPP FS-1 through PPP FS-3.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

#### Police Protection Services

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**Impact 5.13-7: The project, combined with other cumulative projects, could substantially increase demand for CMPD services that could cause significant environmental impacts. [Threshold PS-1(ii)]**

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* For purposes of police protection services analysis, cumulative impacts are considered for projects which would also receive CMPD services (i.e., future development within Costa Mesa). Cumulative development would also contribute to the City's General Fund through collection of property, sales, and utilities



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taxes. Future cumulative projects would be reviewed by the CMPD prior to development permit approval to ensure adequate security measures are provided for each site-specific development. Overall, cumulative development would be evaluated on a case-by case basis at the project level, as they are implemented, for their potential to impact CMPD services.

Project implementation would introduce residential, retail use, and open space uses, which would increase demands for CMPD services. However, the project's impact to police protection services would be reduced through implementation of the Development Agreement, which includes payment to provide two sworn police personnel and associated vehicles, as well as collection of property, sales and utilities taxes that contribute to the City's General Fund. As discussed above, the proposed project would result in an increase of approximately 500 to 600 calls from the existing nine calls for police services. To help deter and investigate crime, the applicant would be responsible for the initial and future funding for an Automated License Plate Reader at all vehicle entrances to the project site (refer to Mitigation Measure PS-1). With the implementation of MM PS-1, impacts would result in less than significant impacts regarding police protection services and the project's less than significant impacts would not be cumulatively considerable.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** Refer to SCA PD-1

**Mitigation Measures:** Refer to Mitigation Measure PS-1.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

### School Services

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**Impact 5.13-8: Development of the proposed project, in combination with related projects, would not adversely impact NMUSD's facilities and resources. [Threshold PS-1(iii)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** For purposes of school services analysis, cumulative impacts are considered for projects also within the NMUSD school boundary (i.e., projects within Costa Mesa and Newport Beach). Cumulative projects would also be subject to SB 50 development impact fees, where are deemed to be full mitigation.

Project implementation would introduce additional residential development, which would increase demands for NMUSD school services. However, project implementation would be subject to SB 50, which allows school districts to collect impact fees from developers of new residential and retail building space. Per PPP SS-1, the project would be required to pay these development impact fees, which are deemed to be full mitigation. Additionally, the NMUSD schools that would serve the project site have adequate capacity to accommodate future students associated with the project. As the project would result in less than significant impacts regarding school services, the project's less than significant impacts would not be cumulatively considerable. A less than significant impact would occur in this regard.

**Plans, Programs, Policies:** Refer to PPP SS-1.





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**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Park Facilities

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**Impact 5.13-9: The project, combined with other cumulative projects, would not substantially increase demand for park facilities that could cause significant environmental impacts. [Thresholds PS-1(iv)]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** For purposes of parkland and recreational facilities analysis, cumulative impacts are considered for projects which would also result in increased demands on City parks and recreational facilities (i.e., future residential development within Costa Mesa). Cumulative development would also be subject to conformance with PPP R-1 and dedication of parkland and/or payment of in-lieu fees. Cumulative development would be evaluated on a case-by case basis at the project level, as they are implemented, for their potential to impact City-owned parks and recreational facilities.

Project implementation would introduce residents in the City that could increase demands for City parks and recreational facilities. However, as discussed before, the implementation of the proposed project would meet the City's parkland standard of 4.26 acres for every 1,000 residents. Additionally, the project's impact to existing parks and recreational services would be further reduced following conformance with PPP R-1. Specifically, the project would be required to pay in-lieu fees or other impact fees as required per the Development Agreement to offset the project's anticipated parkland demands. The project would also propose 335,958 square feet of open space (i.e., courtyards, public open space, public plaza, etc.), The Rail Trail public connection improvements, general amenity spaces, and residential recreational amenities. As the project would result in less than significant impacts regarding park and recreation services, the project's cumulative impacts would not be cumulatively considerable, and impacts in this regard would be less than significant.

**Plans, Programs, Policies:** Refer to PPP R-1.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.



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#### Library Services

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**Impact 5.13-10: The project, combined with other cumulative projects, would not substantially increase demands for OCPL services that could cause significant environmental impacts. [Threshold PS-1(v)]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* For purposes of library service analysis, cumulative impacts are considered for projects which would also be within the OCPL service area (i.e., future development within the County). Cumulative projects would proportionally fund the County's funds from property taxes, a portion of which would be dedicated to OCPL services. Cumulative development would be evaluated on a case-by case basis at the project level, as they are implemented, for their potential to impact OCPL services.

Project implementation would introduce residents into OCPL's service area and increase demands for library services. However, the project would contribute towards County property taxes that fund OCPL services throughout the County. These funds would be utilized to upgrade and expand existing and/or planned library facilities and resources, as needed. As the project would result in less than significant impacts in regard to library services, the project's cumulative impacts would not be cumulatively considerable and would be less than significant.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

#### 5.13.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to public services have been identified.



## Chapter 5.14 Recreation



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## 5. Environmental Analysis

### 5.14 RECREATION

This section of the Draft EIR addresses the proposed project's impacts to recreation. The analysis in this section is based in part on the following correspondence:

- *Costa Mesa Hive Live Recreation Questionnaire*, Monique Villasenor, Manager, Costa Mesa Park and Community Services Department, August 2024.

A complete copy of this correspondence is provided in this Draft EIR ([Appendix L, \*Public Services and Utilities Correspondence\*](#)).

#### 5.14.1 Environmental Setting

##### 5.14.1.1 REGULATORY BACKGROUND

###### Recreation Services

###### *State*

###### *California Public Park Preservation Act*

The primary instrument for protecting and preserving parkland is the State's Public Park Preservation Act of 1971. Cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation, land, or both are provided to replace the parkland acquired. This ensures no net loss of parkland and facilities.

###### *Quimby Act*

The Quimby Act (Government Code Section 66477), established in 1965, provides provisions in the State Subdivision Map Act for the dedication of parkland and/or payment of in-lieu fees as a condition of approval of certain types of residential projects. The Quimby Act authorizes local jurisdictions to require dedication of parkland and/or payment of fees in the amount of up to three acres of parkland per 1,000 added residents; local jurisdictions may require higher ratios for affected development projects. Before 2018, a city or county could only use these fees to provide parks that served the developer's proposed subdivision. However, Assembly Bill 1359 (AB 1359), signed in 2013, allows cities and counties to use developer-paid Quimby Act fees to provide parks in neighborhoods other than the one in which the developer's subdivision is located. Overall, AB 1359 provides cities and counties with opportunities to improve parks and create new parks in areas that would not have benefited before. It also allows a city or county to enter a joint/shared use agreement with one or more public districts to provide additional park and recreational access.



## 5. Environmental Analysis RECREATION

### *Local*

#### *General Plan*

The Open Space and Recreation Element of the General Plan includes the following goals, objectives, and policies related to park facilities and recreation services within the City:

- **Goal OSR-1:** Provide a high-quality environment through the development of recreation resources and preservation of open space that meets community needs in Costa Mesa.
  - **Objective OSR-1A:** Maintain and preserve existing parks, and strive to provide additional parks, public spaces, and recreation facilities that meet the community's evolving needs.
    - **Policy OSR-1.1:** Maintain a system of Neighborhood and Community Parks that provide a variety of active and passive recreational opportunities throughout the City.
    - **Policy OSR-1.2:** Provide parks and recreation facilities appropriate for the individual neighborhoods in which they are located and reflective of the needs and interests of the population they serve.
    - **Policy OSR-1.5:** Maximize public space by requiring plazas and public gathering spaces in private developments that can serve multiple uses, including recreation and social needs.
    - **Policy OSR-1.6:** Provide maximum visibility and accessibility for future public parks by locating facilities in close proximity to public streets.
    - **Policy OSR-1.8:** Require that parks and recreation facilities reflect new trends and population changes, and are developed with facilities appropriate to all ages, including athletic fields, active play areas, passive open space, tot lots, and picnic areas.
    - **Policy OSR-1.13:** Design and reform parks to reflect the latest recreational features that respond to demographic changes and community needs.
    - **Policy OSR-1.18:** Provide a minimum of 4.26 acres of parkland per 1,000 residents.
    - **Policy OSR-1.20:** Enhance pedestrian, bicycle, and transit linkages to meet the needs of residents and to provide better access to parks, recreation, and public spaces.
    - **Policy OSR-1.21:** Provide opportunities for public access to all open space areas, except where sensitive resources may be threatened or damaged, public health and safety may be compromised, or access would interfere with the managed production of resources.



## 5. Environmental Analysis RECREATION

### *Municipal Code*

Municipal Code Article 5, *Park and Recreation Dedications*, requires dedication of land and/or payment of in-lieu fees by residential development projects meeting certain criteria in the amount of 4.26 acres per 1,000 residents added by such residential projects. The City's parkland standard is 4.26 acres per 1,000 residents; the City also arranges with the NMUSD to provide an additional 1.5 acres of school sites per 1,000 residents available for public park and recreation purposes.

Measure Z, passed in November 2016, adds Article 4 to Municipal Code Title 13, Chapter XII, *Special Fee Assessments*, to establish an open space and public park impact fee. The fee is applicable to all new development located both north of the I-405 Freeway and west of Fairview Drive and is due upon issuance of a certificate of occupancy. The fee is established to offset the impact of development upon recreational opportunities and is used solely for the purpose of increasing active recreation, open space, and public park facilities within the City.

### 5.14.1.2 EXISTING CONDITIONS

#### Recreation Services

The City's Parks and Community Services Department provides recreation services at City parks, and the City's Public Services Department maintains the City parks. Overall, the City maintains 30 parks, totaling approximately 415 acres. The nearest City parks to the project site include:

- *Gisler Park*: The 4.1-acre Gisler Park is located at 1250 Gisler Street, about 2,000 feet south of the project site across the I-405 Freeway. Gisler Park has a playground, volleyball court, and picnic tables.<sup>1</sup>
- *Wakeham Park*: The 10-acre Wakeham Park is located at 3400 Smalley Street, approximately 0.8 mile east of the project site. Wakeham Park contains a volleyball court, basketball courts, playgrounds, and picnic areas.<sup>2</sup>
- *Wimbledon Park*: The 3.36-acre Wimbledon Park is located at 3440 Wimbledon Way, approximately 0.5 mile east of the project site. Wimbledon Park contains a basketball court, exercise areas, playgrounds, and picnic tables.<sup>3</sup>
- *Paularino Park*: Paularino Park is 2.3 acres and is located at 1040 Paularino Avenue, approximately 0.8 miles southeast of the project site. Paularino Park has playground and picnic tables.<sup>4</sup>

<sup>1</sup> City of Costa Mesa, *Gisler Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/gisler-park>, accessed August 19, 2024.

<sup>2</sup> City of Costa Mesa, *Wakeham Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/wakeham-park>, accessed August 19, 2024.

<sup>3</sup> City of Costa Mesa, *Wimbledon Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/wimbledon-park>, accessed August 19, 2024.

<sup>4</sup> City of Costa Mesa, *Paularino Park*, <https://www.costamesaca.gov/government/departments-and-divisions/parks-and-community-services/map-of-city-parks-facilities/map-of-city-parks/paularino-park>, accessed August 19, 2024.



## 5. Environmental Analysis

### RECREATION

Additionally, the City's Park and Community Services Department has other recreational facilities in the form of community centers, golf course, senior center, and tennis center. The closest listed facility from the project site is the Costa Mesa Country Club, located approximately 1.6 miles south.

Additionally, Fairview Park, located at 2501 Placentia Avenue, is the largest City park in Costa Mesa, totaling 210 acres and is approximately two miles southwest of the project site. Amenities at Fairview Park include a miniature railroad, shelters, picnic tables, and restrooms.<sup>5</sup>

#### *Regional Recreation Facilities*

##### *Santa Ana River Trail*

The Santa Ana River Trail extends 30 miles in Orange County from Huntington Beach to the Riverside County boundary and another 40 miles intermittently in parts of Riverside and San Bernardino counties. Several City parks have access to the Santa Ana River Trail, including Moon Park, Suburbia Park, Fairview Park, and Vista Park.

Near the project site, an access trail near Sunflower Avenue and Cadillac Avenue extends westerly towards the Santa Ana River Trail, located adjacent to the I-405 Freeway. The Santa Ana River channel is owned and operated by the Orange County Flood Control District and is not open to the public.

##### *OC Parks Facilities*

Talbert Regional Park is a 180-acre OC Parks facility consisting mostly of native habitat and a large trail system. The park is located at 1298 Victoria Street in Costa Mesa and abuts the southwest side of Fairview Park).<sup>6</sup>

Mile Square Regional Park, a 607-acre urban park at 16801 Euclid Street in the City of Fountain Valley, is 2.8 miles north of the project site. Park amenities include three golf courses, three soccer fields, three baseball fields, three softball diamonds, an archery range, a nature area, two fishing lakes, bicycle and paddle boat concessions, and picnic areas with shelters.<sup>7</sup>

### 5.14.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- R-1            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?

<sup>5</sup> City of Costa Mesa, *Fairview Park*, <https://www.costamesaca.gov/community/fairview-park>, accessed August 19, 2024.

<sup>6</sup> OC Parks, *Talbert Regional Park*, <https://www.ocparks.com/parks-trails/talbert-regional-park>, accessed August 19, 2024.

<sup>7</sup> OC Parks, *Miles Square Regional Park*, <https://www.ocparks.com/parks-trails/mile-square-regional-park>, accessed August 19, 2024.





## 5. Environmental Analysis RECREATION

R-2 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?

### 5.14.3 Environmental Impacts

#### 5.14.1.1 METHODOLOGY

This analysis evaluates if the proposed project would result in the use of existing neighborhood and regional parks or other recreational facilities, the potential for the construction or expansion of recreational facilities, as well as potential impacts associated with proposed recreational facilities.

#### 5.14.1.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.14-1: The project would not 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. [Threshold R-1]**

---

*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The proposed project would introduce up to 1,050 dwelling units which would result in a net increase of approximately 2,646 residents into the City. The 2,646 new residents into the City due to the implementation of the proposed project would result in an increase demand and use of existing neighborhood parks, regional parks, and other recreational facilities. Specifically, the proposed project would result in an increase in use of the Gisler Park, Wimbledon Park, Wakeham Park, Paularino Park, Talbert Regional Park, and Miles Square Regional Park.

Future residents associated with the project could accelerate the normal wear and tear on existing nearby park facilities, including Gisler Park, Wimbledon Park, Wakeham Park, and the Paularino Park. Additionally, future residents from the project would also deteriorate the two regional parks within the City: the 210-acre Fairview Park and 180-acre Talbert Regional Park owned and maintained by OC Parks. According to the City Park and Community Services Department, Gisler Park, Wimbledon Park, and the Paularino Park has adequate capacity to serve the project. However, the Wakeham Park would require the replacement of outdated playground equipment and shade structures.

The project is also required to comply with the Quimby Act and Measure Z, which require dedication of parkland and/or payment of in-lieu fees and payment of impact fees related to open space (refer to PPP R-1). Specifically, the City would require the payment of \$5,000 per dwelling units as outlined in the Parkland Impact Fees. Payment of such fees would be required and utilized by the City for maintenance and/or renovating existing facilities, including at Wakeham Park. Therefore, the project applicant would be required to dedicate land and/or pay in-lieu fees under the terms and conditions of the Development Agreement. Compliance with these regulatory requirements and payment of required impact fees, would ensure project impacts to park and recreational services are less than significant.



## 5. Environmental Analysis RECREATION

### *Plans, Programs, Policies:*

PPP R-1            The proposed project shall comply with Government Code Section 66477 (Quimby Act) and Measure Z as required by the Development Agreement, related to payment of an open space and public park impact fee.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.14-2: The project includes recreational facilities, but the construction of such recreational facilities would not have an adverse physical effect on the environment. [Threshold R-2]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

***Impact Analysis:*** As discussed above, the proposed project would introduce a total of 2,646 residents into the City. The increase of 2,646 residents into the City would increase the use of existing recreational facilities near the project site. However, as discussed, the implementation of the proposed project would only impact Wakeham Park. Specifically, Wakeham Park would require the renovation of playground infrastructure and shade structures located in the park. As discussed above, payment of \$5,000 per dwelling unit as outlined in the City's Parkland Impact Fees would be utilized for the maintenance and/or renovation of park facilities, including Wakeham Park. As such, with the renovation of Wakeham Park, the existing recreational facilities within the City would have adequate capacity to serve the project site and as such, the project's increase in population would not require the construction or expansion of recreational facilities. Thus, impacts would be less than significant in this regard.

However, it should be noted that the proposed project would construct a total of 335,958 square feet of open space. Public open space areas would include a rear paseo adjacent to the Rail Trail, landscaped perimeter, public plaza, general amenity space, bicycle storage space, and retail space; refer to Exhibit 3-6, *Conceptual Landscape Plan*. In addition to the publicly accessible open space areas, the proposed project would include open space (i.e., indoor and outdoor amenities) throughout the project site available exclusively for residents. The indoor and outdoor amenities may include a leasing office, indoor and outdoor lounges, ground-level courtyards and pools, dog park, general amenity space, mail room, bicycle storage space, art exhibit, art work, co-work/flex space available to residents, move-in area, fitness room, and roof deck (including a fitness facility, roof lounge, and outdoor deck and pool). While the project would propose the construction of recreational facilities (i.e., open space) on-site, the construction and implementation of these facilities are considered throughout this EIR. The construction of 335,958square feet of public and private open space as analyzed throughout Section 5.0, *Environmental Analysis* determined that the implementation of such facilities would not result in significant impacts to the environment. As such, impacts would be less than significant in this regard.



## 5. Environmental Analysis RECREATION

Nevertheless, the proposed project would be required to comply with the Quimby Act and Measure Z (refer to PPP R-1) Compliance with these regulatory requirements, along with the development of the proposed recreational amenities, would ensure project impacts are less than significant.

*Plans, Programs, Policies:* Refer to PPP R-1.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.14.4 Cumulative Impacts

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**Impact 5.14-3: The project, combined with other related projects, would not 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. [Threshold R-1]**

---

*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* For purposes of recreation services analysis, cumulative impacts are considered for projects which would also be served by the City's Parks and Community Services Department. However, cumulative development would also be subject to payment of development impact fees (Quimby Act and Measure Z) to offset their respective increases in demand for recreational services (open space and public parks). Related projects would also be required to comply with applicable State and local regulations intended to preserve and create new open space and parks. Cumulative projects would be evaluated on a case-by-case basis at the project-level, as they are implemented, for their potential to impact the City's parks.

As discussed, project implementation would introduce additional residents into the City, which would increase demands for recreational and open space. The City Park and Community Services Department determined that the implementation of the proposed project would require the renovation of Wakeham Park. Specifically, Wakeham Park would require the replacement of outdated playground infrastructure and shade structures. The project would comply with the Quimby Act and Measure Z, which require dedication of parkland and/or payment of in-lieu fees and payment of impact fees related to open space (refer to PPP R-1). Specifically, the project would be required to pay impact development fees that would be used for the maintenance and/or renovation of recreational facilities in the City, including at Wakeham Park. As the project would result in less than significant impacts regarding park facilities with implementation PPP R-1 and the project's cumulative impacts to park facilities and open spaces would not be cumulatively considerable. Impacts in this regard are less than significant.

*Plans, Programs, Policies:* Refer to PPP R-1.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.



## 5. Environmental Analysis RECREATION

*Level of Significance After Mitigation:* Less Than Significant Impact.

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**Impact 5.14-4: The project, combined with other cumulative projects, include recreational facilities, but would not have an adverse physical effect on the environment. [Threshold R-2]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

**Impact Analysis:** For purposes of recreation services analysis, cumulative impacts are considered for projects which would also be served by the City's Parks and Community Services Department. However, cumulative development would also be subject to payment of development impact fees (Quimby Act and Measure Z) to offset their respective increases in demand for recreational services (open space and public parks). Related projects would also be required to comply with applicable State and local regulations intended to preserve and create new open space and parks. Cumulative projects would be evaluated on a case-by-case basis at the project-level, as they are implemented, for their potential to impact the City's parks.

As discussed above, the proposed project would result in a population increase of up to 2,646 residents. However, according to the City Park and Community Services Department, only Wakeham Park would require the replacement of outdated playground infrastructure and shade structures. The project would pay development impact fees which would be used for the maintenance and/or renovation of recreational facilities, including at Wakeham Park. However, it should be noted that the renovation of Wakeham Park would not expand the existing park. As such, the project would not require the expansion or construction of recreational facilities. Additionally, the project includes a total of 335,958 square feet of public and private open space. As analyzed throughout Section 5.0, *Environmental Analysis*, the construction and implementation of the proposed project would not cause an adverse physical impact on the environment. Additionally, compliance with the Quimby Act and Measure Z, would ensure that the project would provide dedication of parkland and/or payment of in-lieu fees and payment of impact fees related to open space (refer to PPP R-1). As the project would result in less than significant impacts regarding park facilities with implementation PPP R-1 and the project's cumulative impacts to park facilities and open spaces would not be cumulatively considerable. Impacts in this regard are less than significant.

**Plans, Programs, Policies:** Refer to PPP R-1.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.14.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to public services have been identified.



## Chapter 5.15 Transportation



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## 5. Environmental Analysis

### 5.15 TRANSPORTATION

This section evaluates the potential transportation-related impacts resulting from construction and operation of the proposed project. This section is primarily based on the *Vehicle Miles Traveled (VMT) Analysis for the Proposed Hive Apartments - Costa Mesa, CA* (VMT Analysis), prepared by Linscott, Law & Greenspan Engineers (LLG), dated January 7, 2025; refer to [Appendix J](#), *Transportation Study*.

#### 5.15.1 Environmental Setting

##### 5.15.1.1 REGULATORY BACKGROUND

###### State

###### *Sustainable Communities and Climate Protection Act*

The Sustainable Communities and Climate Protection Act (Senate Bill [SB] 375) was signed into law on September 30, 2008. SB 375 provides incentives for cities and developers to bring housing and jobs closer together and to improve public transit. The goal behind SB 375 is to reduce automobile commuting trips and length of automobile trips, thus helping to meet the Statewide targets for reducing greenhouse gas (GHG) emissions set by the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32). SB 375 requires each metropolitan planning organization to add a broader vision for growth, called a “sustainable communities strategy” (SCS), to its transportation plan. The SCS must lay out a plan to meet the region’s transportation, housing, economic, and environmental needs in a way that enables the area to lower greenhouse gas emissions. The SCS should integrate transportation, land use, and housing policies to plan for achievement of the regional emissions target.

###### *Senate Bill 743*

On September 27, 2013, SB 743 was signed into law. The legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the State had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce VMT and thereby contribute to the reduction of greenhouse gas emissions, as required by AB 32.

In 2013, SB 743 was adopted, starting a process that fundamentally changed the way transportation impact analysis is conducted under CEQA. SB 743 identifies Vehicle Miles Traveled (VMT) as the most appropriate CEQA transportation metric and eliminates auto delay, or level of service (LOS), and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts under CEQA. In December 2018, the California Natural Resource Agency integrated VMT into the CEQA Guidelines (14 California Code of Regulations Section 15064.3) pursuant to the provisions of SB 743. The VMT guidelines became effective Statewide beginning July 1, 2020. These new guidelines are contained within the *City of Costa Mesa Transportation Impact Analysis Guidelines* (TIA Guidelines), dated, October 2020, and provide screening criteria and methodology for VMT analysis.



## 5. Environmental Analysis TRANSPORTATION

### Regional

#### *Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized Metropolitan Planning Organization (MPO) for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and State law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District (SCAQMD), California Department of Transportation (Caltrans), and other agencies in preparing regional planning documents. SCAG has developed regional plans to achieve specific regional objectives, as discussed below.

#### *2024-2050 Reginal Transportation Plan/Sustainable Communities Strategy – Connect SoCal 2024*

On April 4, 2024, SCAG's Regional Council adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS). The 2020-2045 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2024-2050 RTP/SCS closely integrates land use and transportation strategies to increase mobility options and achieve a more sustainable growth pattern. SCAG works closely with local jurisdictions to develop the 2024-2050 RTP/SCS, which incorporates local growth forecasts, projects, and programs, and includes complementary regional policies and initiatives. The 2024-2050 RTP/SCS includes a financial plan that identifies revenues committed, available, or reasonably available to support the SCAG region's surface transportation investments. The 2024-2050 RTP/SCS also includes a sustainable communities strategy which sets forth a forecasted development pattern for the region which would reduce GHGs from automobiles and light trucks to the regional GHG targets set by California Air Resource Board for the SCAG region. The overall goals of 2024-2050 RTP/SCS are to:

- Support investments that are well-maintained and operated, coordinated, resilient and result in improved safety, improved air quality and minimized greenhouse gas emissions.
- Ensure that reliable, accessible, affordable, and appealing travel options are readily available, while striving to enhance equity in the offerings in high-need communities.
- Support planning for people of all ages, abilities, and backgrounds.
- Create human-centered communities in urban, suburban, and rural settings to increase mobility options and reduce travel distances.
- Develop communities that are resilient and can mitigate, adapt to, and respond to chronic and acute stresses and disruptions, such as climate change.





## 5. Environmental Analysis TRANSPORTATION

- Integrate the region’s development pattern and transportation network to improve air quality, reduce greenhouse gas emissions and enable more sustainable use of energy and water.
- Conserve the region’s resources.
- Improve access to jobs and educational resources.
- Advance a resilient and efficient goods movement system that supports the economic vitality of the region, attainment of clean air and quality of life for our communities.

### *Orange County Transportation Authority Congestion Management Plan*

The *Orange County Congestion Management Program* (OCCMP) was developed by Orange County Transportation Authority (OCTA) in June 1990 in accordance with Proposition 111. The goals of the OCCMP are to support regional mobility objectives by reducing traffic congestion, to provide a mechanism for coordinating land use and development decisions that support the regional economy, and to support gas tax funding eligibility. To meet these goals, the OCCMP contains a number of policies designed to monitor and address system performance issues. OCTA developed the policies that makeup the OCCMP in coordination with local jurisdictions, Caltrans, and the SCAQMD. The OCCMP performance measures provide an index of the effectiveness and efficiency of Orange County’s fixed-route bus and commuter rail services.

### **Local**

#### *General Plan*

The Circulation Element and the Growth Management Element of the General Plan include goals, objectives, recommendations, and policies related to circulation and mobility. The Active Transportation Plan (ATP)—divided in the Circulation Element into a bicycle component and pedestrian component—responds to direct comments from residents for more active transportation facilities and increased connectivity throughout the City and regional destinations. The relevant goals, policies, and objectives referenced in this analysis are identified below.

#### *Circulation Element*

- **Goal C-1:** Implement “Complete Streets” Policies on Roadways in Costa Mesa. Plan, develop, and implement a comprehensive transportation system that serves all users and modes of travel.
  - **Objective C-1A:** Create a transportation network that meets the mobility needs of all Costa Mesa residents, businesses, and visitors.
  - **Policy C-1.7:** Encourage community participation in City processes and programs focused on improving mobility and transportation facilities.
  - **Objective C-1B:** Preserve the character of our residential neighborhoods.



## 5. Environmental Analysis

### TRANSPORTATION

- **Policy C-1.10:** Encourage non-motorized transportation in residential areas by providing sidewalks and implementing bicycle friendly design of local streets.
- **Goal C-3:** Enhance Regional Mobility and Coordination. Encourage development of a regional transportation network that addresses regional mobility needs for all modes of travel.
  - **Objective C-3A:** Promote development of transportation projects along regional corridors.
  - **Policy C-3.3:** Support the goals and objectives of the SCAG *Regional Transportation Plan/ Sustainable Communities Strategy* (RTP/SCS), including expansion of transportation system choices, improvement of transportation system performance, and sustainability of transportation infrastructure.
- **Goal C-4:** Promote Transportation Demand Management, Transit, and Efficiency. Utilize Transportation Demand Management strategies to manage demand and maximize available capacity.
  - **Objective C-4A:** Encourage greater utilization of Transportation Demand Management (TDM) strategies to reduce dependence on single-occupancy vehicles.
  - **Policy C-4.1:** Support South Coast Air Quality Management District (SCAQMD) trip reduction programs, including park and ride lots, transit subsidies, carpool and vanpool programs, flexible working hours, bicycle facilities, and other traffic reduction strategies.
  - **Policy C-4.9:** Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.
  - **Objective C-4B:** Promote regional and local transit services as an alternative to automobile travel.
  - **Policy C-4.14:** Encourage new development along major transit corridors to provide efficient and safe access to transit stops and public sidewalks.
  - **Policy C-4.21:** Require discussion of transit service needs and site design amenities for transit ridership in EIR for major projects.
- **Goal C-5:** Ensure coordination between the Land Use and Circulation Systems. Facilitate close coordination between development of land use and circulation system.
  - **Objective C-5A:** Coordinate land use policies and development activities that support a sustainable transportation system.
  - **Policy C-5.2:** Require that large developments and redevelopments provide short-term and long-term vehicular traffic impact studies.



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- **Policy C-5.3:** Encourage permitted General Plan land uses which generate high traffic volumes to be located near major transit and transportation corridors to minimize vehicle use, congestion, and delay.
- **Policy C-5.5:** Promote development of mixed-use projects to reduce number of vehicle trips.
- **Policy C-5.6:** Coordinate the design and improvement of pedestrian and bicycle ways in major residential, shopping and employment centers, parks, schools, other public facilities, public transportation facilities, and bicycle networks with adjacent cities.
- **Policy C-5.12:** Support consistency with the Orange County *Sustainable Communities Strategy* (OC SCS) and SCAG RTP/SCS by providing an integrated land use and transportation plan to meet mandated emissions reduction targets consistent with SB 375.
- **Objective C-5B:** Establish strategies and processes that allow large developments to analyze and mitigate traffic impacts and infrastructure needs.
- **Policy C-5.13:** Require that new development projects improve access to and accommodations for multimodal transportation.
- **Policy C-5.15:** Consider the needs of the transportation and infrastructure system early for large developments and coordinate with developers to design projects that minimize traffic impacts and infrastructure demands, and implement complete streets wherever feasible. Alternatively, address transportation and infrastructure system impacts through the implementation of development agreements.
- **Goal C-7:** Promote a Friendly Active Transportation System in Costa Mesa. Create a bicycle and pedestrian friendly environment throughout Costa Mesa for all types of users and all trip purposes in accordance with the five “Es:” Education, Encouragement, Enforcement, Engineering, and Evaluation.
  - **Objective C-7A:** Expand, enhance, and protect the existing bicycle and pedestrian network to provide a comprehensive, system of Class I, Class II, Class III, and Class IV facilities to increase connectivity between homes, jobs, schools transit, and recreational resources in Costa Mesa.
  - **Recommendation C-7.1:** Develop an extensive bicycle and pedestrian backbone network through the use of standard and appropriate innovative treatments.
  - **Recommendation C-7.4:** Where feasible, Class I shared-use paths should be a priority for future developments.
  - **Objective C-7B:** Provide end-of-trip facilities that support the bicycle network.
  - **Recommendation C-7.26:** Prioritize the installation of bicycle-scale and/or pedestrian-scale lighting.



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- **Objective C-8B:** Develop bicycle and pedestrian facilities with approved uniform design standards, and implementation of way-finding signage providing information on various destinations.
- **Recommendation C-8.4:** Develop a list of acceptable plant materials for shared use paths that will not damage, create security problems or hazards for bicyclists. Incorporate canopy trees and native, drought-tolerant landscaping as a standard Class I facility (shared use path) feature. Encourage the use of sustainable drainage designs, such as bio-swales.
- **Objective C-9B:** Integrate bicycle and pedestrian facility improvements during planning, design and implementation of transportation projects.
- **Recommendation C-9.2:** Ensure that all current and proposed land use planning is consistent with the Costa Mesa Bicycle and Pedestrian Master Plan.
- **Recommendation C-9.3:** Require new developments provide adequate bicycle parking and pedestrian access.
- **Recommendation C-9.5:** Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.
- **Recommendation C-9.8:** Make commercial and recreational areas more enjoyable for pedestrians by implementing measures such as providing shade, planting trees, eliminating visible parking lots and vacant land, and minimizing long stretches of building façade.

#### *Growth Management Element*

- **Goal C-1:** Inter-jurisdictional Coordination.
  - **Objective GM-1A:** Coordinate land use and transportation planning policies with State, regional, and local growth management efforts.
  - **Policy GM-1.5:** Continue to require that any new large developments prepare a master plan and environmental impact analysis. This allows the City to anticipate the impacts of large projects prior to development of any portion and permits more time to plan for public services and facilities needed to support the project.

#### *North Costa Mesa Specific Plan*

The Specific Plan implements the policies of the General Plan through the adoption of development standards. These standards recognize the development potential of the plan area and the need to sensitively integrate new development with the surrounding areas, and, therefore, promote both resident and business community confidence in the long-term vision for the plan area. The relevant development standards referenced in this analysis are identified below.



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- **14:** New development shall provide linkages to the public sidewalk system where appropriate. In the Urban Center Commercial areas, pedestrian walkways should be aligned with the pedestrian walkways in adjacent developments to promote walking.

### *City of Costa Mesa Municipal Code*

Section 13-270, *Development Impact Fees*, of the Municipal Code imposes fees on any project requiring a building permit or other land development permit that will result in the attraction or generation of traffic trips. Traffic attraction and generation are determined through a special study that also serves to apportion a project's "fair share" impact on existing or future infrastructure. These funds are permitted to be used for any traffic-related capital improvement project, meaning transportation planning, preliminary engineering, engineering design studies, land surveys, right-of-way acquisition, engineering, permitting, construction, and inspection of all the necessary features for any road construction project.

### 5.15.1.2 EXISTING SETTING

#### Existing Street System

Regional access to the project site from the west and east is available via Interstate 405 (I-405), from the south via the San Joaquin Hills Transportation Corridor (State Route [SR]-73), and the east via the Costa Mesa Freeway (State Route 55 [SR-55]). Harbor Boulevard, Fairview Road, and Sunflower Avenue are the major roadways that provide local access to the project site. The following is a brief description of the roadway network in the project site area:

- **Harbor Boulevard:** Harbor Boulevard is a north-south, seven-to-eight-lane divided roadway, located to the west of the project site. Parking is not permitted along either side of this roadway in the vicinity of the proposed project. The posted speed limit on Harbor Boulevard is 40 miles per hour (mph). Traffic signals control the nearby intersections of Harbor Boulevard at South Coast Drive, I-405 northbound ramps, and I-405 southbound ramps.
- **Fairview Road:** Fairview Road is a north-south, six-lane divided roadway, located to the east of the project site. The posted speed limit on Fairview Road is 40 mph within the vicinity of the proposed project. Parking is not permitted along either side of the roadway in the vicinity of the proposed project. Traffic signals control the nearby intersections of Fairview Road at South Coast Drive and Sunflower Avenue.
- **Susan Street:** Susan Street is a north-south, four-lane divided roadway between South Coast Drive and Sunflower Avenue, a three-lane divided roadway south of South Coast Drive, and a two-lane divided roadway north of Sunflower Avenue. Susan Street borders the project site to the east. The posted speed limit on Susan Street is generally 30 mph within the vicinity of the proposed project. Parking is not permitted along either side of the roadway in the vicinity of the proposed project. Traffic signals control the nearby intersections of Susan Street at Sunflower Avenue and South Coast Drive.
- **Sunflower Avenue:** Sunflower Avenue is an east-west, four-lane, divided roadway, located to the north of the project site. The posted speed limit on Sunflower Avenue is 40 mph in the vicinity of the proposed



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project. Parking is not permitted along either side of the roadway. A traffic signal controls the nearby intersections of Sunflower Avenue at Susan Street and Fairview Road.

- **South Coast Drive:** South Coast Drive is an east-west, four-lane divided roadway west of Fairview Road and a three-lane divided roadway east of Fairview Road. South Coast Drive borders the project site to the south. The posted speed limit on South Coast Drive is 40 mph west of Fairview Road and 35 mph east of Fairview Road in the vicinity of the proposed project. Parking is not permitted along either side of the roadway in the vicinity of the proposed project. Traffic signals control the nearby intersections of South Coast Drive at Hyland Avenue, Harbor Boulevard, Susan Street, and Fairview Road.

### Existing Transit Facilities

Public transit bus service for the project site is provided in the project area by the OCTA. OCTA provides transit services throughout Orange County and offers a wide range of fixed-route bus services. OCTA has developed an extensive network of transit routes to connect residents and commuters of Costa Mesa to key destinations. Three OCTA bus routes operate within the vicinity of the project site: Route 43 along Harbor Boulevard (nearest stops at Harbor Boulevard at Sunflower Avenue), Route 47 along Fairview Road (nearest stops at Fairview Road at Sunflower Avenue), and Route 150 along Sunflower Avenue (nearest stops at Harbor Boulevard at Sunflower Avenue, and Fairview Road at Sunflower Avenue). Routes 43 and 47 operate on approximate 20-minute headways, and Route 150 operates on approximate 40-minute headways.

### Existing Bicycle and Pedestrian Facilities

Costa Mesa follows Caltrans' standards and recognizes four classes of bicycle facilities: Class I – Bike Paths or Multi-Use Trails, Class II – Bike Lanes/Buffered Bike Lanes, Class III – Bike Routes (On-Street), and Class IV – Protected Bike Lanes. The City promotes bicycling as a means of mobility and a way in which to improve the quality of life within its community. The City's Conceptual Bicycle Master Plan, contained within the Circulation Element, recognizes the needs of bicycle users and aims to create a complete and safe bicycle network throughout the city. The City provides an extensive network of existing and future bicycle facilities in close proximity to the project site. A Class II bike lane is currently provided along Susan Street, between South Coast Drive and Sunflower Avenue, as well as along Sunflower Avenue, South Coast Drive, Hyland Avenue, and Fairview Road within the vicinity of the project. Future Class II bike lanes are proposed along Harbor Boulevard, south of South Coast Drive, and Sunflower Avenue, between Fairview Road and Bristol Street.

Existing pedestrian facilities include sidewalks along Sunflower Avenue, Susan Street, and South Coast Drive bordering the project site. Additionally, the project site is bound by a public trail (the "Rail Trail") to west. The Rail Trail provides both bicycle and pedestrian access and is considered a Shared Use Path (Class I).



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### 5.15.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- T-1 Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- T-2 Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
- T-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- T-4 Result in inadequate emergency access.

### 5.15.3 Environmental Impacts

#### 5.15.1.1 VMT SCREENING METHODOLOGY

Project screening is used to determine if a project would be required to conduct a detailed VMT analysis. The City's TIA Guidelines state three types of screening that can be applied to screen projects from project-level assessment. These screening steps are summarized below:

- **Step 1: Transit Priority Area (TPA) Screening:** Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. This presumption may NOT be appropriate if the project:
  - Has a Floor Area Ratio (FAR) of less than 0.75;
  - Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction;
  - Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]); or
  - Replaces affordable residential units with a smaller number of moderate- or high- income residential units
- **Step 2: Low VMT Screening Area:** Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per service population that is similar to the existing land uses in the low VMT-area.



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- **Step 3: Project Type Screening:** Some project types have been identified as having the presumption of a less than significant impact. The following uses can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:
  - Local-serving K-12 public schools
  - Local parks
  - Day care centers
  - Local-serving retail uses less than 50,000 square feet, including:
    - Gas stations
    - Banks
    - Restaurants
    - Shopping Center
    - Student housing projects or adjacent to college campuses
    - Local-serving assembly uses (places of worship, community organizations)
    - Community institutions (public libraries, fire stations, local government)
    - Assisted living facilities
    - Senior housing (as defined by HUD)
    - Projects generating less than 110 daily vehicle trips

To confirm whether a project generates 110 daily trips or less, the analyst should consult with City staff.

#### 5.15.1.2 VMT SIGNIFICANCE THRESHOLDS

A project that does not meet the screening criteria requires the preparation of a detailed transportation analysis. The project VMT is evaluated in order to determine if the project is expected to cause a significant transportation impact. The analysis should include both “project-generated VMT” and “project’s effect on VMT” under a baseline condition scenario, a baseline “plus project” scenario, a cumulative “no project” scenario, and a cumulative “plus project” scenario. The VMT significance criteria as stated in the City’s TIA Guidelines are detailed below:

- **Project-generated VMT:** A project would result in a significant project-generated VMT impact if it resulted in either of the following conditions:





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- The baseline project-generated VMT per service population exceeds 15 percent below the City of Costa Mesa baseline VMT per service population (85 percent of the Costa Mesa baseline VMT per service population), or
  - The cumulative project-generated VMT per service population exceeds 15 percent below the City of Costa Mesa baseline VMT per service population (85 percent of the Costa Mesa baseline VMT per service population).
- **Project's effect on VMT:** The project's effect on VMT would be considered significant if it resulted in either of the following conditions:
- The baseline link-level Citywide VMT per service population increases under the “plus project” condition compared to the “no project condition;” or
  - The cumulative link-level Citywide VMT per service population increases under the “plus project” condition compared to the “no project condition.”

It should be noted that the cumulative no project must reflect the adopted RTP/SCS; as such, if a project is consistent with the SCAG RTP/SCS, then the cumulative impacts project effect on VMT would be considered less than significant subject to consideration of other substantial evidence.

### 5.15.1.3 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which there may be potentially significant or less than significant impacts. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.15-1: The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Threshold T-1]**

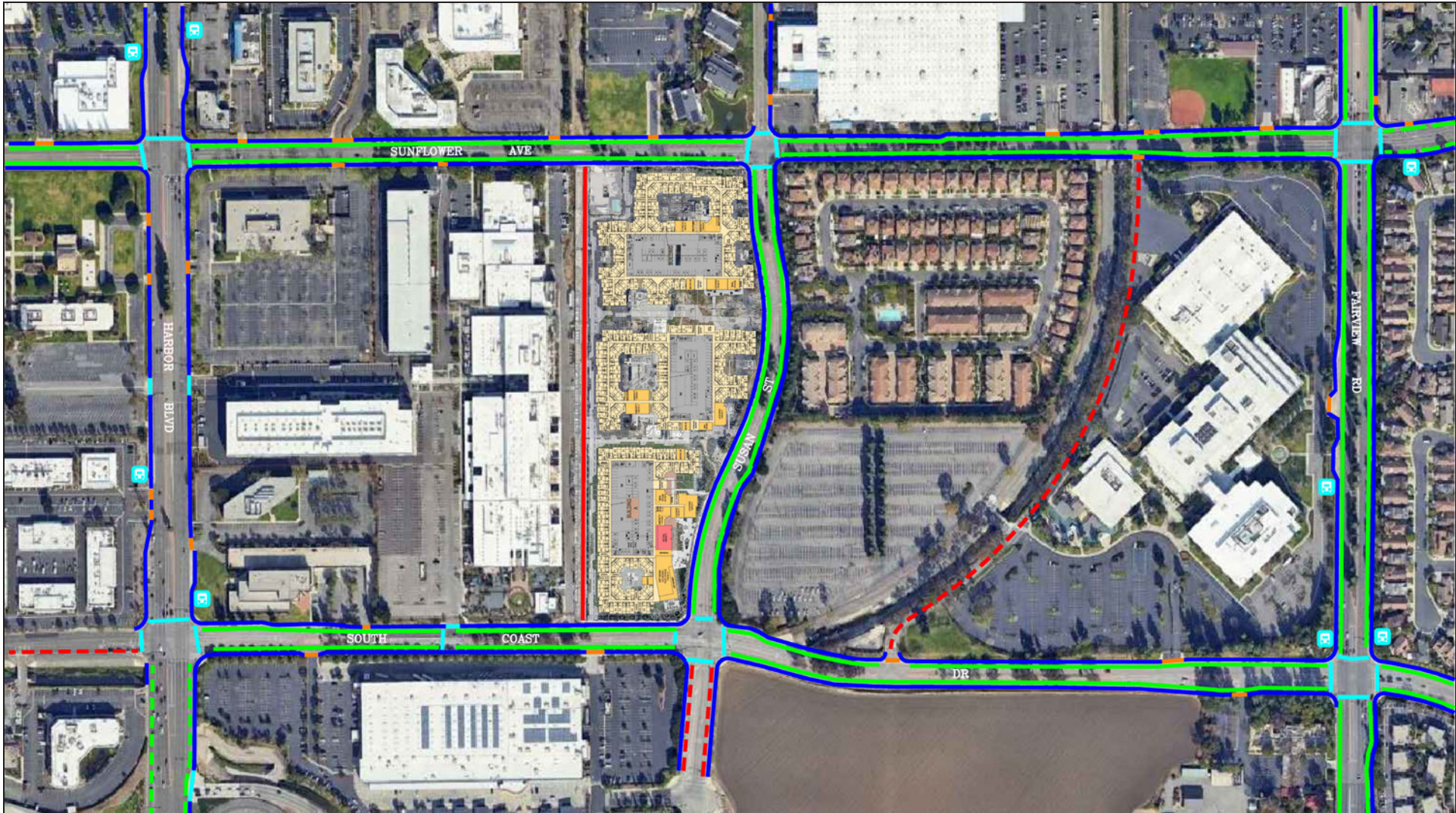
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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Bicycles, Pedestrians, and Transit*

The City of Costa Mesa pursues strategies and programs for vehicle circulation along with other forms of mobility, including but not limited to bicycles, pedestrians, and transit. The City applies a “complete streets” strategy for street improvements. As substantiated by the discussion below, the proposed project would uphold the City’s policy to require new development projects to improve access to and provide accommodations for multimodal transportation; refer to [Exhibit 5.15-1, \*Multimodal Transportation\*](#).



**LEGEND**

- = SIDEWALKS
- = SIGNALIZED CROSSWALKS
- = UNSIGNALIZED CROSSINGS
- = SHARED USE PATH (CLASS I)
- = BICYCLE LANE (CLASS I)
- 3 = OCTA BUS STOP LOCATIONS
- = EXISTING
- = FUTURE TO BE CONSTRUCTED

Source: LLG, December 2024



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### *Bicycles*

The General Plan Circulation Element provides goals and policies for a bikeway system throughout the City; refer to [Section 5.15.1](#). A Class II Bicycle Lane currently exists along Susan Street (on both sides of the street), between South Coast Drive and Sunflower Avenue, as well as along Sunflower Avenue, South Coast Drive, Hyland Avenue, and Fairview Road within the vicinity of the project. A Class I Shared-Use Path currently exists on the project's western boundary (i.e., the Rail Trail). Upon project completion, bicycle circulation would continue to be provided via the Rail Trail and adjacent roadways and sidewalks, accordingly.

As depicted in Figure C-3, *Conceptual Bicycle Master Plan*, of the Circulation Element, the following bicycle facilities are proposed to be constructed by the City or other developments in the area:

- A Class I Shared-Use Path on South Coast Drive, west of Harbor Boulevard;
- A Class II Bike Lane on Harbor Boulevard, south of South Coast Drive; and
- A Class II Bike Lane on Sunflower Avenue, between Fairview Road and Bristol Street.

Upon completion of the future bicycle facilities, the proposed project would be adequately served by a bikeway system, consistent with the Circulation Element ATP. Additionally, the project proposes to provide bicycle storage space in all three buildings, including adjacent to the Rail Trail. As such, the proposed project would support and enhance existing bicycle facilities and would be consistent with the City's goals, policies, and recommendations in place to promote development of active transportation systems. A less than significant impact would occur in this regard.

### *Pedestrians*

The General Plan Circulation Element provides goals and policies for pedestrian mobility throughout the City; refer to [Section 5.15.1](#). The City supports the integration of pedestrian-oriented improvements and amenities within the circulation system to improve walkability. As discussed above, pedestrian connection to adjacent uses, as well as to nearby public transit stops, is provided via existing sidewalks on both sides of Sunflower Avenue, Susan Street, and South Coast Drive. The project would maintain the existing sidewalk along the project frontage on Susan Street; refer to [Exhibit 5.15-1](#). The proposed project would include a paseo adjacent to the Rail Trail, a landscaped site perimeter, public plaza, and general amenity space. Internal pedestrian pathways would connect to the proposed public plaza, paseo, and Rail Trail. As such, the proposed project would support and enhance existing pedestrian facilities, and the proposed project would be consistent with the City's goals of promoting active transportation systems. As such, the proposed project would be adequately served by pedestrian facilities, consistent with the Circulation Element ATP. A less than significant impact would occur in this regard.

### *Transit*

The OCTA provides bus service for the City of Costa Mesa and in the vicinity of the project site; refer to [Exhibit 5.15-1](#). As noted in [Section 5.15.1](#), the project site is served by Route 43 along Harbor Boulevard



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(nearest stops at Harbor Boulevard at Sunflower Avenue), Route 47 along Fairview Road (nearest stops at Fairview Road at Sunflower Avenue), and Route 150 along Sunflower Avenue (nearest stops at Harbor Fairview Road at Sunflower Avenue). Ridership may increase slightly with the addition of residents and workers to the project area. However, the project would not interrupt or displace any bus routes or facilities. A less than significant impact would occur in this regard.

### 2024-2050 RTP/SCS

SCAG's 2024-2050 RTP/SCS was approved by SCAG's Regional Council in April 2024. The 2024-2050 RTP/SCS outlines a vision for a more resilient and equitable future, with investment, policies, and strategies for achieving the region's shared goals through 2050. Outlined in Chapter 3, *The Plan*, of the 2024-2050 RTP/SCS are the Implementation Strategies organized within the pillars of Mobility, Communities, Environment, and Economy. Table 5.7-4, Consistency With Connect SoCal 2024, in Section 5.7, Greenhouse Gas Emissions, provides a project consistency analysis with applicable Implementation Strategies. As shown therein, the project would not conflict with SCAG's regional planning goals and policies.

### City of Costa Mesa General Plan and North Costa Mesa Specific Plan

Refer to Section 5.10, Land Use and Planning, and specifically Table 5.1-1, General Plan Consistency Analysis, and Table 5.1-2, North Costa Mesa Specific Plan Consistency Analysis, for an analysis of the project's consistency with relevant policies of the General Plan's Circulation Element and Growth Management Element, as well as the Specific Plan. As shown therein, the project would not conflict with the City's General Plan or the Specific Plan.

### City of Costa Mesa Municipal Code

Section 13-270, *Development Impact Fees*, of the Municipal Code establishes imposes fees on any project requiring a building permit or other land development permit that will result in the attraction or generation of traffic trips (refer to PPP T-2). Traffic attraction and generation are determined through a special study that also serves to apportion a project's "fair share" impact on existing or future infrastructure (refer to PPP T-3). These funds are permitted to be used for any traffic-related capital improvement project, meaning transportation planning, preliminary engineering, engineering design studies, land surveys, right-of-way acquisition, engineering, permitting, construction, and inspection of all the necessary features for any road construction project. Upon payment of traffic impact fees and fair share impact fees the proposed project would be consistent with the Municipal Code's policies related to transportation.

Overall, the proposed project would not conflict with adopted policies, plans, or programs related to roadway, transit, bicycle, or pedestrian facilities. Impacts would be less than significant in this regard.

#### *Plans, Programs, Policies:*

PPP T-2            The City of Costa Mesa has a traffic impact fee program. This is a cumulative impact fee which would be determined in consultation with City of Costa Mesa Transportation Services Division staff to be paid in addition to direct project improvements required of the applicant. The City of Costa Mesa Transportation Services Division shall collect the project's traffic



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impact fee prior to issuance of the project's first residential building permit or as otherwise agreed to in the project's Development Agreement.

PPP T-3 The City of Costa Mesa has a fair share program. As projects are approved, and a need for a capital improvement(s) are identified, the City's Capital Improvement Projects (CIP) list is updated accordingly on an annual basis. The master CIP list, overseen by the Public Works Department, identifies (by each specific capital improvement) the necessary improvement, the specific funding amount, and the status of the improvement.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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### **Impact 5.15-2: The project could conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). [Thresholds T-2]**

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**Level of Significance Before Mitigation:** Potentially Significant Impact.

**Impact Analysis:** As detailed in [Section 5.15.3.2, VMT Significance Thresholds](#), above, project screening is used to determine if a project would be required to conduct a detailed VMT analysis. According to the VMT Analysis, the proposed project is not located within a TPA (Step 1), is not located in a Low VMT Area (Step 2), and is not the type of project within the listed categories or a project that would generate 110 daily trips or less (Step 3). As such, the proposed project does not meet any of the screening criteria provided by the City's TIA Guidelines. Therefore, a full VMT analysis was prepared for the proposed project; refer to [Appendix J](#).

### **Full VMT Analysis**

The average VMT per service population and regional boundary VMT per service population values utilize the Orange County Transportation Analysis Model (OCTAM) for the City and the proposed project. The project site is located in Traffic Analysis Zone (TAZ) 1233. The proposed development totals were converted into socio-economic data and input into OCTAM.

#### **Project-Generated VMT**

As shown in [Table 5.15-1, Baseline \(Year 2019\) VMT Per Service Population](#), the proposed project baseline project-generated VMT per service population requires a 1.67 percent reduction compared to the City's baseline VMT per service population threshold.



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**Table 5.15-1 Baseline (Year 2019) VMT Per Service Population**

Baseline City of Costa Mesa VMT/Service Population (SP)	28.54
15 Percent Below the City of Costa Mesa VMT/SP (Threshold)	24.26
Project TAZ Total VMT	136,017
Project TAZ SP	5,514
Project-Generated VMT/SP	24.67
<b>Compared to the City of Costa Mesa Threshold</b>	<b>1.67 Percent Reduction Needed</b>

Source: VMT Analysis; refer to [Appendix J](#).

As shown in [Table 5.15-2, Cumulative \(Year 2050\) VMT Per Service Population](#), the proposed project cumulative project-generated VMT per service population is 6.09 percent below the City’s cumulative VMT per service population threshold.

**Table 5.15-2 Cumulative (Year 2050) VMT Per Service Population**

Baseline City of Costa Mesa VMT/Service Population (SP)	28.54
15 Percent Below the City of Costa Mesa VMT/SP (Threshold)	24.26
Project TAZ Total VMT	183,550.61
Project TAZ SP	8,059
Project-Generated VMT/SP	22.78
<b>Compared to the City of Costa Mesa Threshold</b>	<b>6.09 Percent Lower</b>

Source: VMT Analysis; refer to [Appendix J](#).

Overall, the proposed project’s baseline project-generated VMT would exceed the City’s threshold and result in a potentially significant impact, but the cumulative project-generated VMT would be below the City’s threshold. As such, Mitigation Measure TRA-1 would require that the project Applicant provide Community-Based Travel Planning (CBTP), which is an outreach approach that provides households with customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles, thereby reducing household VMT and associated GHG emissions. Based on the VMT Analysis, implementation of CBTP could reasonably reduce project-generated VMT by 2.3 percent. As such, following implementation of Mitigation Measure TRA-1, impacts regarding project-generated VMT for the baseline condition would be less than significant.

#### *Project’s Effect on VMT*

As shown in [Table 5.15-3, Baseline \(Year 2019\) Boundary VMT Per Service Population](#), the baseline plus project link-level Citywide boundary VMT per service population would be 0.91 percent below the City’s baseline boundary VMT per service population threshold.

**Table 5.15-3 Baseline (Year 2019) Boundary VMT Per Service Population**

Baseline No Project Link-Level Boundary Citywide VMT/SP (Threshold)	14.82
Baseline Plus Project Link-Level Boundary Citywide VMT	3,762,910.11
Baseline Plus Project Citywide Service Population	256,222
Baseline Plus Project Link-Level Boundary Citywide VMT/SP	14.69
<b>Compared to the City of Costa Mesa Threshold</b>	<b>0.91 Percent Lower</b>

Source: VMT Analysis; refer to [Appendix J](#).



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As shown in Table 5.15-4, *Cumulative (Year 2050) Boundary VMT Per Service Population*, the cumulative plus project link-level Citywide boundary VMT per service population would be 0.51 percent below the City’s cumulative boundary VMT per service population threshold.

**Table 5.15-4 Cumulative (Year 2050) Boundary VMT Per Service Population**

Cumulative No Project Link-Level Boundary Citywide VMT/SP (Threshold)	14.22
Cumulative Plus Project Link-Level Boundary Citywide VMT	3,905,641.64
Cumulative Plus Project Citywide Service Population	276,066
Cumulative Plus Project Link-Level Boundary Citywide VMT/SP	14.15
<b>Compared to the City of Costa Mesa Threshold</b>	<b>0.51 Percent Lower</b>

Source: VMT Analysis; refer to Appendix J.

### Conclusion

Overall, the proposed project’s effect on VMT would not exceed the City’s baseline or cumulative thresholds with compliance with Mitigation Measure TRA-1. Therefore, impacts in this regard would be reduced to less than significant levels.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

### Mitigation Measures:

**TRA-1 Community-Based Travel Planning.** The project Applicant shall provide community-based travel planning (CBTP) to project residents, including but not limited to customized information, incentives, and support to encourage the use of transportation alternatives in place of single occupancy vehicles.

**Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

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**Impact 5.15-3: The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Threshold T-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** The proposed project would allow for the development of a residential community. These uses are typical of an urban area, such as the City of Costa Mesa, and do not represent an incompatible use.

Under existing conditions, vehicular access to the project site is provided by the two driveways along Susan Street and one driveway along Sunflower Avenue. The proposed project would continue to utilize the two driveways along Susan Street, while the existing driveway along Sunflower Avenue and a new driveway at South Coast Drive would be limited to fire protection services only; refer to Impact 5.15-4 regarding emergency access. The northernmost driveway along Susan Street would separate Building B and Building C, and the southernmost driveway would separate Building A and Building B. Both driveways would connect to the



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project's internal roadways and three wrap-around (aboveground) parking structures. The proposed circulation layout includes adequate curb return radii for passenger cars, service/delivery trucks, and trash trucks, and project traffic is not anticipated to cause significant internal queuing/stacking at the project driveways.<sup>1</sup> Both driveways would be improved with decorative paving and wayfinding signage for enhanced visibility.

As mentioned in Impact 5.15-1, the project proposes public open space areas, including a plaza, paseo, and art installation space. Specifically, the public plaza and art installation space would be located along the project site's Susan Street frontage, accessible via the existing sidewalk and bicycle facilities. The paseo would be accessible from the existing, adjacent Rail Trail; additionally, multi-modal pathways would connect Susan Street to the Rail Trail through the project site. Project lighting would be installed to illuminate driveways, public walkways, public and private amenity areas, public retail areas, pathways, stairways, entrances and exits, and other locations required by the City to meet minimum safety requirements. The proposed layout would not create significant vehicle-pedestrian conflict points.<sup>2</sup>

As detailed above, the project accounts for the circulation and accessibility for all modes of travel and is consistent with the City's complete streets vision. All site improvements that intersect with the public right-of-way would be constructed in accordance with the City's design standards. Therefore, the proposed project would not increase hazards due to a geometric design feature, and a less than significant impact would occur.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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### **Impact 5.15-4: The project would not result in inadequate emergency access. [Threshold T-4]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Project construction activities could result in short-term temporary impacts to street traffic along Susan Street, South Coast Drive, and Sunflower Avenue. While temporary lane closures may be required, travel along surrounding roadways would remain open and would not interfere with emergency access in the site vicinity. Per the City's Circulation Element, a detour would be required to be provided around the construction zone that would be designed to ensure the safety of cyclists and pedestrians (PPP T-1). Construction-related impacts would be less than significant in this regard.

Under existing conditions, vehicular access to the project site, including emergency access, is provided by two driveways along Susan Street and a driveway along Sunflower Avenue. The project proposes to limit the driveway along Sunflower Avenue to emergency access only. Additionally, a second new emergency access driveway is proposed along South Coast Drive near the southwestern corner of Building A. Both emergency

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<sup>1</sup> Linscott, Law & Greenspan Engineers, *Traffic Impact Analysis: Hive Apartments*, Costa Mesa, California, November 21, 2024.

<sup>2</sup> Linscott, Law & Greenspan Engineers, *Traffic Impact Analysis: Hive Apartments*, Costa Mesa, California, November 21, 2024.





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access driveways would be fenced off (with a six-foot in height metal louver fence and gate). The two all-access driveways along Susan Street (i.e., secondary emergency access roads) would provide access to “fire turnaround” areas adjacent to the Rail Trail. All four driveways would be 20 feet wide; refer to [Exhibit 5.15-2, \*Fire Access Plan\*](#). As discussed above, the proposed project would result in a less than significant impact to site access. As such, the proposed project would not result in inadequate site access or design elements, and operational impacts to emergency access would be less than significant.

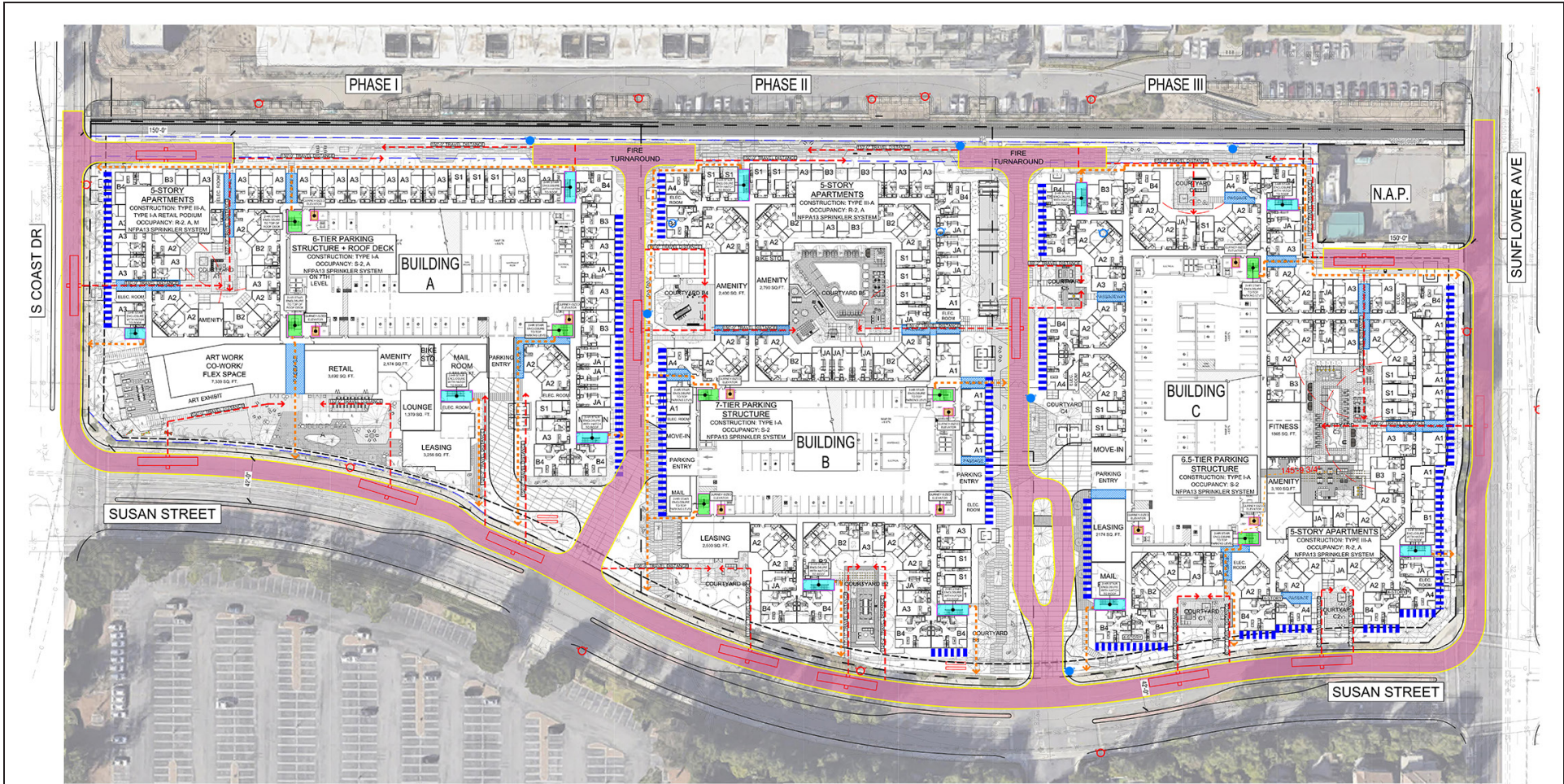
### ***Plans, Programs, Policies:***

PPP T-1 Pursuant to Circulation Element Recommendation C-9.14, the applicant would provide detours through or around construction zones that are designed for safety and convenience, and with adequate signage for cyclists and pedestrians.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

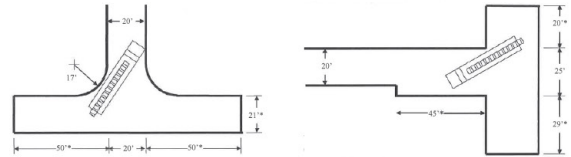
***Level of Significance After Mitigation:*** Less Than Significant Impact.



**LEGEND**

- |  |                                       |  |                           |  |  |
|--|---------------------------------------|--|---------------------------|--|--|
|  | FIRE TRUCK APPARATUS                  |  | ROOF ACCESSIBLE STAIR     |  | 150' MAX. FIRE HOSE PULL               |
|  | EXISTING FIRE HYDRANT                 |  | GURNEY-SIZED ELEVATOR     |  | PATH OF EXIT                           |
|  | EXISTING FIRE HYDRANT TO BE RELOCATED |  | 20'-WIDE FIRE ACCESS ROAD |  | AERIAL TRUCK LADDER ACCESS TO BUILDING |
|  | PROPOSED FIRE HYDRANT                 |  | 2-HR FIRE RATED PASSAGE   |  |  |
|  | STANDPIPE                             |  |                           |  |  |

**DEAD-END FIRE TURNAROUND TEMPLATES N.T.S.**



Source: A0, August 2024



## 5. Environmental Analysis TRANSPORTATION

### 5.15.4 Cumulative Impacts

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**Impact 5.15-5: Development of the proposed project and related projects would not cumulatively conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. [Thresholds T-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* Pursuant to future development identified in Table 4-2, Related Projects, as cumulative projects are developed in the area, overall demands on the transportation system would increase. Cumulative development would be required to be reviewed by the cities of Costa Mesa, Fountain Valley, and Santa Ana, as well as SCAG and Caltrans, as applicable. As such, each jurisdiction would ensure that future development, on a project-by-project basis, would comply with State and local municipal code requirements. In addition, projects within the City of Costa Mesa would be required to comply with the Municipal Code Section 13-270, *Development Impact Fees*, which imposes fees on any project requiring a building permit or other land development permit that will result in the attraction or generation of traffic trips (refer to PPP T-2). Traffic attraction and generation are determined through a special study that also serves to apportion a project's "fair share" impact on existing or future infrastructure (refer to PPP T-3).

Overall, the proposed project would not conflict with adopted policies, plans, or programs related to transit, bicycle, or pedestrian facilities. Impacts would be less than significant in this regard. The project supports a multi-modal transportation network and would provide and encourage alternative modes of transportation through the provision of various pedestrian, bicyclist, and transit opportunities. As such, the proposed project would not result in a cumulatively considerable impact in this regard and impacts would be less than significant.

*Plans, Programs, Policies:* Refer to PPP T-2 and PPP T-3.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

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**Impact 5.15-6: Development of the proposed project and related projects could cumulatively conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). [Thresholds T-2]**

---

*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* Cumulative projects have the potential to increase the City's average VMT per capita/employee and total VMT. Each cumulative project would be evaluated on a project-level basis to determine the project's generated VMT in order to compare to the City's average and total VMT. Additionally, each cumulative project would be required to comply with project-specific mitigation measures, as needed, on a project-by-project basis.



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The Office of Planning and Research states that a project's cumulative impacts are based on a determination of whether the "incremental effects of an individual 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." When using an absolute VMT metric, i.e., total VMT, analyzing the combined impacts for a cumulative impact analysis may be appropriate. A project that falls below the threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a less than significant project impact would imply a less than significant cumulative impact, and vice versa. As stated in Impact 5.15-2, following implementation of Mitigation Measure TRA-1, the proposed project would result in less than significant VMT impacts. Therefore, the project would not contribute to a cumulatively considerable impact and impacts in this regard would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** Refer to Mitigation Measure TRA-1. **Level of Significance After Mitigation:** Less Than Significant Impact With Mitigation Incorporated.

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**Impact 5.15-7: Development of the proposed project and related projects would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). [Threshold T-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative projects could result in an increase in hazards due to a geometric design feature or incompatible use. However, cumulative projects would be evaluated on a case-by-case basis through the development review process of their respective cities to determine the appropriate land use permit for authorizing their use and the conditions for their establishment and operation. The development review would ensure that safe access and circulation to and within the development area would be provided. Additionally, access to development sites would be required to comply with all applicable Municipal Code and City design standards and would be reviewed by their respective cities to ensure that inadequate design features or incompatible uses do not occur as development occurs.

As discussed in Impact 5.15-3, project traffic is not anticipated to cause significant internal queuing/stacking at project driveways, and the proposed multi-modal layout would not create significant vehicle-pedestrian conflict points.<sup>3</sup> Overall, the proposed project is not anticipated to result in significant safety design hazards. As a result, the project would not combine with other related projects to result in cumulatively considerable impacts due to geometric design features or incompatible uses. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

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<sup>3</sup> Linscott, Law & Greenspan Engineers, Traffic Impact Analysis: Hive Apartments, Costa Mesa, California, November 21, 2024.



## 5. Environmental Analysis TRANSPORTATION

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.15-8: Development of the proposed project and related projects would not result in cumulatively considerable impacts to emergency access. [Threshold T-4]**

---

**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative projects could result in inadequate emergency access in the area. However, future projects would be required to comply with their respective city's development review process on a case-by-case basis, including pertaining to maintaining/providing emergency access. New developments would also be required to comply with all applicable fire and building codes and ordinances for construction and access to the site during both construction and operational phases. This would ensure that new developments would provide adequate emergency access to and from each site.

As discussed in Impact 5.15-3, project construction activities would not result in inadequate emergency access during construction or operations. Although short-term construction activities along Susan Street, South Coast Drive, and Sunflower Avenue may require temporary lane closures, travel along surrounding roadways would remain open and would not interfere with emergency access in the site vicinity. Per the City's Circulation Element, a detour would be required to be provided around the construction zone that would be designed to ensure the safety of cyclists and pedestrians (PPP T-1). As a result, the project would not combine with other related projects to result in cumulatively considerable impacts to emergency access or create hazardous conditions. Impacts in this regard would be less than significant.

**Plans, Programs, Policies:** Refer to PPP T-1.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### 5.15.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to transportation have been identified.



## 5. Environmental Analysis TRANSPORTATION

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## Chapter 5.16 Tribal Cultural Resources



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## 5. Environmental Analysis

### 5.16 TRIBAL CULTURAL RESOURCES

Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American Tribe. This section of the Draft EIR evaluates the potential for project implementation to impact tribal cultural resources. Other potential impacts to cultural resources (i.e., historical, archaeological, and disturbance of human remains) are evaluated in [Section 5.4, \*Cultural Resources\*](#) and [Section 8.0, \*Effects Found Not to Be Significant\*](#). The analysis in this section is based in part on the following information:

- *Cultural and Paleontological Resources Identification Memorandum for the Costa Mesa Hive Live Project, City of Costa Mesa, Orange County, California*, (Cultural and Paleo Resources Memo), prepared by Michael Baker International, dated June 3, 2024.

A copy of this study is provided in the technical appendices of this Draft EIR (refer to [Appendix E, \*Cultural and Paleontological Resources Identification Memorandum\*](#)).

#### 5.16.1 Environmental Setting

##### 5.16.1.1 REGULATORY BACKGROUND

###### Federal

###### *Archaeological Resources Protection Act*

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on Federal lands and Indian lands. Recognizing that archaeological resources are an irreplaceable part of America's heritage, the Act's purpose was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals.

###### *Native American Graves Protection and Repatriation Act*

The Native American Graves Protection and Repatriation Act is a Federal law passed in 1990 that provides a process for museums and Federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Indian tribes.

###### State

###### *California Public Resources Code*

Archaeological resources are protected pursuant to several State policies and regulations enumerated under the California Public Resources Code. In addition, cultural resources are recognized as a nonrenewable resource and, therefore, receive protection under the California Public Resources Code and CEQA.



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### TRIBAL CULTURAL RESOURCES

California Public Resources Code 5097.9–5097.991 provides protection to Native American historical and cultural resources, and sacred sites and identifies the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

#### *California Health and Safety Code*

The discovery of human remains is regulated per California Health and Safety Code Section 7050.5, which states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation...until the coroner...has determined...that the remains are not subject to...provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible.... The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and...has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

#### *Senate Bill 18*

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious, ceremonial sites, shrines, burial grounds, prehistoric ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 (SB 18) on Traditional Tribal Cultural Places (TTCP) was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near traditional tribal cultural places TTCPs. SB 18 requires local jurisdictions to provide opportunities for involvement of California Native Americans in the land planning process for the purpose of preserving traditional tribal cultural places. The Final Tribal Guidelines recommend the NAHC provide written information as soon as possible, but no later than, 30 days after receiving notice of the project to inform the lead agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond to a local government if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation, or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR.



## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

Per SB 18, the law institutes a new process which would require a city or county to consult with the NAHC and any appropriate Native American tribe for the purpose of preserving relevant TTCP prior to the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention consultation or notice requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advise that SB 18 requirements extend to specific plans as well, since State planning law requires local governments to use the same process for amendment or adoption of specific plans as general plans (defined in Government Code Section 65453). In addition, SB 18 provides a new definition of TTCP, requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code Section 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

### *Assembly Bill 52*

The Native American Historic Resource Protection Act (AB 52) took effect July 1, 2015, and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. Projects that require a Notice of Preparation of an EIR or Notice of Intent to adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND) are subject to AB 52. A significant impact on a TCR is considered a significant environmental impact, requiring feasible mitigation measures.

TCRs must have certain characteristics:

1. Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. (Public Resources Code Section 21074(a)(1))
2. The lead agency, supported by substantial evidence, chooses to treat the resource as a TCR. (Public Resources Code Section 21074(a)(2))

The first category requires the TCR qualify as an historical resource according to Public Resources Code Section 5024.1. The second category gives the lead agency discretion to qualify that resource under the conditions that it supports its determination with substantial evidence and considers the resource's significance to a California tribe. The following is a brief outline of the process (Public Resources Code Sections 21080.3.1–3.3).

1. A California Native American tribe asks agencies in the geographic area with which it is traditionally and culturally affiliated to be notified about projects. Tribes must ask in writing.
2. Within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.
3. A tribe must respond within 30 days of receiving the notification if it wishes to engage in consultation.



## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

4. The lead agency must initiate consultation within 30 days of receiving the request from the tribe.
5. Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a TCR, or a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached.
6. Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on TCRs and discuss feasible alternatives or mitigation that avoid or lessen the impact.

### Local

#### *General Plan*

The Historical and Cultural Resources Element of the General Plan includes the following goals, objectives, and policies to protect tribal cultural resources within the City:

- **Goal HCR-1:** Historical, Archeological, and Paleontological Resource Preservation. The City of Costa Mesa supports focused efforts to provide residents with a sense of community and history through the protection and preservation of historical and cultural resources.
  - **Objective HCR-1A** Encourage preservation and protection of the City's archaeological, paleontological, and historical resources.
    - **Policy HCR-1.4:** Require, as part of the environmental review procedure, an evaluation of the significance of paleontological, archaeological, and historical resources, and the impact of proposed development on those resources.
    - **Policy HCR-1.7:** Require cultural resources studies (i.e., archaeological and historical investigations) for all applicable discretionary projects, in accordance with CEQA regulations. The studies should identify cultural resources (i.e., prehistorical sites, historical sites, and isolated artifacts and features) in the project area, determine their eligibility for inclusion in the California Register of Historical Resources, and provide mitigation measures for any resources in the project area that cannot be avoided. Cultural resources studies shall be completed by a professional archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards in prehistorical or historical archaeology.
    - **Policy HCR-1.8:** Comply with requirements of the California Environmental Quality Act regarding protection and recovery of archaeological resources discovered during development activities.

#### *Municipal Code*

Municipal Code Article 14, *Historic Preservation*, is intended to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, sites, districts, neighborhoods, natural features, and significant permanent landscaping



## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

having special historical, archaeological, cultural, architectural, or community value in the City. Pursuant to Article 14, no person, owner, or other entity shall restore, rehabilitate, alter, develop, construct, demolish, remove, or change the appearance of any cultural resource on the local Register of Historic Places without first having applied for and been granted a certificate of appropriateness to do so by the planning commission (or other commission/committee designated by the City Council).

### 5.16.1.2 EXISTING CONDITIONS

#### Natural Setting

The project site is located within the Peninsular Ranges Geomorphic Province of California, which extends from the Los Angeles region to the tip of Baja California in Mexico. This region is characterized as a series of northwest-trending mountain ranges separated by fault zones and a coastal plain of landforms. The mountain ranges are underlain primarily by Mesozoic metamorphic rocks that were intruded by rocks of the western Peninsular Ranges, while the coastal plain is underlain by subsequently deposited marine and nonmarine sedimentary formations. The site is located within the coastal plain portion of the region and is underlain by Quaternary, Late Holocene to Late Pleistocene alluvial deposits.

#### Ethnography and Historic Context

This project site is located in a region traditionally important to multiple Native American groups. In particular, these include the Gabrieliño (including the Tongva and Kizh), the Juaneño or Acjachemen, and the Luiseño. The terms Tongva, Kizh, and Acjachemen are preferred by many descendant groups over the Spanish words that have historically been used to describe them, while the Luiseño are typically identified by their band (including La Jolla, Pala, Pauma, Pechanga, Rincon, Soboba, and San Luis Rey). Each group is described below.

Spanish explorers first visited the coast of southern California in 1542, but European settlement did not begin in the area until 1769 when Gaspar de Portola led an exploratory mission intended to open up Alta California to settlement. On September 8, 1771, Franciscan friars established Mission San Gabriel Arcángel, approximately 30 miles northwest of the project site. The Franciscans called the local Native Americans Gabrieliños after the mission. The Tongva and Acjachemen Native American tribes are most closely tied to the Costa Mesa area. When the Spanish missionaries from Mission San Juan Capistrano visited the area, it was referred to by the Natives who lived there as Lukup.

#### *Gabrielino (or Tongva and Kizh)*

The term “Gabrieliño” is a general term that refers to those Native Americans whom the Spanish sent to the Mission San Gabriel Arcángel. Two indigenous terms are commonly used by tribal groups to refer to themselves and are preferred by descendant groups: Tongva and Kizh.

Prior to European colonization, the Gabrieliño occupied a diverse area that included the watersheds of the Los Angeles, San Gabriel, and Santa Ana Rivers; the Los Angeles basin; and the islands of San Clemente, San Nicolas, and Santa Catalina. Their neighbors included the Chumash and Tataviam to the north, the Serrano and Cahuilla to the east, and the Juaneño to the south. The Gabrieliño are reported to have been second only to



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### TRIBAL CULTURAL RESOURCES

the Chumash in terms of population size and regional influence. The Gabrieliño language was part of the Takic branch of the Uto-Aztecan language family.

Gabrieliño villages were most common along the coast and along the region's major rivers, where villages formed of domed semipermanent structures, the Spanish likened to half-oranges centered around a temple and the home of the village chief. The project area is located between two known Gabrieliño village locations: Pasbenga, approximately 4 miles to the northeast, and Lukupa, approximately 4.5 miles to the southwest of the project site. Other villages, the names of which are not recorded, may have also existed in the area. By the early 1800s, as introduced diseases led to population decline, and Spanish use of the land for agriculture and grazing made the Gabrieliños' reliance on their traditional lifestyle increasingly untenable, the majority of California's coastal Native American populations had entered the mission system.

The Gabrieliño Indians were hunter-gatherers and lived in permanent communities located near the presence of a stable food supply. Subsistence consisted of hunting, fishing, and gathering. Small terrestrial game was hunted with deadfalls and rabbit drives and by burning undergrowth, while larger game, such as deer, were hunted using bows and arrows. Fish were taken by hook and line, nets, traps, spears, and poison. The primary plant resources were acorns, gathered in the fall and processed in mortars and pestles, and various seeds that were harvested in late spring and summer and ground with manos and metates. The seeds included chia and other sages, various grasses, and islay or holly-leaved cherry. Community populations generally ranged from 50 to 100 inhabitants, although larger settlements may have existed. The Gabrieliño are estimated to have had a population numbering around 5,000 in the pre-contact period.

#### *Juaneño (or Acjachemen)*

As the preferred term of the descendant community, the term Acjachemen is used hereafter to refer to the group more widely known to historians and anthropologists as the Juaneño. The Acjachemen spoke a language belonging to the Cupan group of the Takic subfamily of the Uto-Aztecan language family. They were known as Juaneño because of their association with Mission San Juan Capistrano.

The Acjachemen were linguistically and culturally related to the neighboring Luiseño (with whom they are often grouped), Cahuilla, and Cupeño. Acjachemen territory extended from San Onofre Canyon in the south and inland from the Pacific Ocean to Santiago Peak and the ridges above Lake Elsinore. The northern Acjachemen border has been described as either just above Aliso Creek or somewhere somewhat farther north, possibly the Santa Ana River or somewhere in the vicinity of Newport Beach. However, Acjachemen descendant communities dispute this claim. Santa Ana is seen by the modern Acjachemen as shared territory with the Gabrieliño.

The Acjachemen lived in sedentary autonomous villages located in diverse ecological zones. Each settlement claimed specific fishing and collecting regions. Typically, villages were located in valley bottoms, along coastal strands and streams, and near mountain foothills. Villages were usually sheltered in coves or canyons, on the side of slopes near water, and in good defensive spots.

Trails, hunting sites, temporary hunting camps, quarry sites, and ceremonial and gaming locations were communally owned, while individuals or families owned houses, gardens, tools, ritual equipment, and



## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

ornamentation. Most groups had fishing and gathering sites along the coast that they visited annually from January to March when inland supplies were scarce. October to November was an acorn-gathering time when most of the village would settle in the mountain oak groves. Houses were conical in form, partially subterranean, covered with thatch, reeds, brush, or bark. Sweathouses were round and earth-covered. Each village was enclosed with a circular fence and had a communal ceremonial structure at the center.

### *Luiseno*

The Luiseno are a tribal group located south and west of the Acjachemen. Like the Gabrieliño and Acjachemen, they take their English name from the Spanish mission to which most of them were assigned, San Luis Rey de Francia, located in today's Oceanside. Luiseno language and culture are so closely related to those of the Acjachemen that the authors of the Smithsonian Institution's *Handbook* treat them as a single tribe.

### **Tribal Cultural Resources**

#### *Sacred Lands File Search*

On April 11, 2024, Michael Baker International contacted the Native American Heritage Commission (NAHC), requesting a review of the Sacred Lands Files (SLF) for any Native American cultural resources that might be impacted by the project. The NAHC responded in a letter dated April 24, 2024, that the SLF had been searched with negative results.

#### *Tribal Consultation*

On May 7, 2024, the City sent notification letters to each of the applicable NAHC individuals and tribal organizations to consult in accordance with California Government Code 65352 (SB 18 of 2004) and AB 52 of 2014. The Santa Rosa Band of Cahuilla Indians responded to the notification letters on May 8, 2024 within the response period indicating the tribe did not have any comments regarding the proposed project. The Gabrieleño Band of Mission Indians – Kizh Nation responded to the notification letters on May 20, 2024 within the response period requesting formal consultation with the City. A consultation meeting was held on July 16, 2024 between the City and Gabrieleño Band of Mission Indians – Kizh Nation; a follow up consultation meeting was held on October 2, 2024.

### **5.16.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- TCR-1 Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or



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

No impact relating to Threshold TCR-1(i) was identified, as substantiated in Section 8.0, *Effects Found Not to be Significant*, of this Draft EIR. This threshold will not be addressed in the following analysis.

### 5.16.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which significant impacts could occur. The applicable thresholds are identified in brackets after the impact statement.

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**Impact 5.16-1: Development of the proposed project could impact unknown tribal cultural resources. [Threshold TCR-1(ii)]**

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***Level of Significance Before Mitigation:*** Potentially Significant Impact.

***Impact Analysis:*** As stated above, the City sent letters inviting tribes to consult on the project per AB 52 and SB 18 on May 7, 2024. The tribes had 30 days to respond to the City's request for consultation pursuant to AB 52 and 90 days pursuant to SB 18. The Santa Rosa Band of Cahuilla Indians responded to the notification letters on May 8, 2024 within the response period indicating the tribe did not have any comments regarding the proposed project. The Gabrieleño Band of Mission Indians – Kizh Nation responded to the notification letters on May 20, 2024 within the response period requesting formal consultation with the City.

Tribal consultation between the City and the Gabrieleño Band of Mission Indians – Kizh Nation occurred on July 16, 2024, with a follow up consultation meeting held on October 2, 2024 and December 2024. As part of the consultation process, the Gabrieleño Band of Mission Indians – Kizh Nation requested information regarding prior on-site soil disturbance and the proposed project's anticipated level of soil disturbance. The City provided a copy of the Geotechnical Investigation (provided in Appendix F) and Cultural and Paleo Resources Memo (provided in Appendix E) to the Gabrieleño Band of Mission Indians – Kizh Nation. Based on consultation efforts, the City acknowledges the sensitivity of the area for potential unknown tribal cultural resources to be present in on-site soil. As such, Mitigation Measure TCR-1 would require retain a Native American monitor from the Native American tribe that is culturally and ancestrally affiliated with the project site: such as the Gabrieleño Band of Mission Indians – Kizh Nation, as approved by the City (herein referenced as the Native American Monitor. The Native American Monitor shall monitor the proposed project's ground disturbing activities (e.g., demolition, grubbing/clearing, rough grading, precise grading, mass grading, trenching, excavation, boring, auguring, and weed abatement on previously disturbed and undisturbed ground). The Native American Monitor would be required to prepare daily monitoring logs that include descriptions of the relevant ground disturbing activities, locations of such activities, observed soil types, and the presence or absence of tribal cultural-related materials. In the event resources are discovered during any phase of ground disturbing activities, and it is determined by the Native American Monitor, in consultation with the City, to be





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Native American in origin, then all construction work within 50 feet (15 meters) of the find must cease until the Native American Monitor can assess the find. Work would be allowed to continue outside of the buffer zone. The Native American Monitor would determine the appropriate treatment of the discovered resource that is consistent with the tribe's cultural practices, including reinterment on site in an appropriate area determined by the tribe in consultation with the City and the applicant, or retention of the discovered resource for educational purposes. Construction work within the buffer area surrounding a tribal cultural resource discovery shall resume only after the Native American Monitor has (1) appropriately inventoried and documented the resource and any surrounding material of significance to the tribe, and (2) completed the appropriate treatment of the resource. Monitoring for tribal cultural resources by the Native American Monitor would be considered concluded upon the City's receipt of written confirmation from the Native American Monitor that ground disturbing activities with potential impacts to discovered and/or undiscovered tribal cultural resources are complete.

Further, State Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County coroner has made a determination of origin and disposition pursuant to State Public Resources Code Section 5097.98 (PPP TCR-1). The County coroner must be notified of the find immediately. If the remains are determined to be Native American, the County coroner would notify the NAHC, which would determine and notify a Most Likely Descendent (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

Following implementation of Mitigation Measure TCR-1 and compliance with existing State regulations (PPP TCR-1), impacts to tribal cultural resources would be reduced to less than significant levels.

### ***Plans, Programs, Policies:***

PPP TCR-1      The proposed project is required to comply with California Public Resources Code 5097.9-5097.991 (which protects Native American historical and cultural resources, and sacred sites) and Health and Safety Code Section 7050.5 (pertaining to the discovery or recognition of any human remains).

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** Refer to Mitigation Measure CUL-1 in [Section 5.4, \*Cultural Resources\*](#). In addition, the following mitigation would apply:



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### TRIBAL CULTURAL RESOURCES

TCR-1 Prior to issuance of any grading permits, the Applicant shall formally retain a Native American monitor from the Native American tribe that is culturally and ancestrally affiliated with the Project location: the Gabrieleño Band of Mission Indians – Kizh Nation. The Applicant shall allow at least 45 days from initial contact with the first preference tribe (Kizh Nation) to enter into a contract for monitoring services. If the Applicant can demonstrate they were unable to secure an agreement with the first preference tribe after a good faith effort, or if the contracted tribe fails to fulfill its obligation under the contract terms, then the Applicant may retain an alternative qualified tribal monitor approved by the City. The City approved qualified tribal monitor (the “Monitor”), shall monitor all “ground-disturbing” Project activities, which includes but is not limited to: demolition, grubbing/clearing, rough grading, precise grading, mass grading, trenching, excavation, boring, auguring, and weed abatement on previously disturbed and undisturbed ground (collectively “ground disturbing activities”). A copy of the executed contract shall be submitted to the Costa Mesa Development Services Department prior to the issuance of any permit necessary to commence ground-disturbing activities.

The Monitor shall prepare daily monitoring logs that include descriptions of the relevant ground disturbing activities, locations of such activities, observed soil types, and the presence or absence of tribal cultural-related materials. Should tribal cultural-related resources be discovered, monitor logs shall identify and describe such resources, including but not limited to, Native American cultural and historical artifacts, as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs shall be provided to the City of Costa Mesa and maintained as confidential. In the event resources are discovered during any phase of ground disturbing activities, and it is determined by the Monitor, in consultation with the City, to be Native American in origin, then all construction activity within fifty (50) feet (15 meters) of the find shall cease until the Monitor can assess the find. Work shall be allowed to continue outside of the buffer zone. The Monitor shall determine the appropriate treatment of the discovered resource that is consistent with the tribe’s cultural practices, including reinternment on site in an appropriate area determined by the tribe in consultation with the City and the Applicant, or retention of the discovered resource for educational purposes. Construction work within the buffer area surrounding a TCR discovery shall resume only after the Monitor has (1) appropriately inventoried and documented the resource and any surrounding material of significance to the Kizh Nation, and (2) completed the appropriate treatment of the resource.

Monitoring for tribal cultural resources (“TCR”) shall conclude upon the City’s receipt of written confirmation from the Monitor that ground disturbing activities with potential impacts to discovered and/or undiscovered TCRs are complete.

***Level of Significance After Mitigation:*** Less Than Significant Impact With Mitigation Incorporated.



## 5. Environmental Analysis TRIBAL CULTURAL RESOURCES

### 5.16.4 Cumulative Impacts

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**Impact 5.16-2** Development of the proposed project and related projects could result in cumulatively considerable impacts to unknown tribal cultural resources. [Threshold TCR-1(ii)]

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*Level of Significance Before Mitigation:* Potentially Significant Impact.

*Impact Analysis:* Table 4-2, *Related Projects*, identifies the related projects and other possible development in the area determined as having the potential to interact with the project to the extent that a significant cumulative effect may occur. Future cumulative projects would be evaluated on a project-by-project basis to determine the extent of potential impacts to site-specific tribal cultural resources. Related projects would be required to adhere to State and Federal regulations (e.g., SB 18 and/or AB 52), as well as project-specific mitigation measures.

Project-related impacts to tribal cultural resources have been determined to be less than significant with compliance with Section 5097.98 of the California Public Resources Code (PPP TCR-1) and implementation of Mitigation Measure TCR-1. As discussed under Impact Statement 5.16-1, following compliance with existing State regulations (PPP TCR-1) and implementation of Mitigation Measures TCR-1 and CUL-1, impacts concerning tribal cultural resources would be less than significant. Thus, the project's less than significant impacts would not be cumulatively considerable.

*Plans, Programs, Policies:* Refer to PPP TCR-1.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* Refer to Mitigation Measures TCR-1 and CUL-1.

*Level of Significance After Mitigation:* Less Than Significant Impact With Mitigation Incorporated.

### 5.16.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to tribal cultural resources have been identified.



## 5. Environmental Analysis

### TRIBAL CULTURAL RESOURCES

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## Chapter 5.17 Utilities and Service Systems



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## 5. Environmental Analysis

### 5.17 UTILITIES AND SERVICE SYSTEMS

This section of the Draft EIR discusses the current conditions of utility providers, including water, wastewater, stormwater, solid waste, electricity, and natural gas services, and the project's potential effects on these utilities. The analysis in this section is based in part on the following information:

- *The Hive Live Preliminary Water Quality Management Plan* (Preliminary WQMP), FUSCOE Engineering Incorporated (FUSCOE), April 4, 2024 (refer to [Appendix H, Hydrology and Water Quality Studies](#));
- *Hive Live 3333 Susan Street, Costa Mesa, CA 92626, Preliminary Drainage Analysis* (Preliminary Hydrology Report), FUSCOE, April 2024 (refer to Attachment G of the Preliminary WQMP provided in [Appendix H](#));
- *Costa Mesa Hive Live Wastewater Services Questionnaire*, Costa Mesa Sanitary District, Robert Morris, Engineering Technician, August 2024 (refer to [Appendix L, Public Services and Utilities Correspondence](#));
- *Hive Live 3333 Susan Street, Costa Mesa, CA 92626, Sewer Capacity Analysis* (Sewer Capacity Study), prepared by FUSCOE, April 2024 (refer to [Appendix L](#));
- *Proposed Hive Live Development at 3333 Susan Street: CMSD Will Serve Sewer Letter*, Costa Mesa Sanitary District, Mark Esquer, P.E., District Engineer, May 15, 2024 (refer to [Appendix L](#));
- *C0510-24-01: 3333 Susan Street (Costa Mesa Hive Live) Water Services Questionnaire*, MesaWater District, John Robinson, Plan Check Consultant, August 13, 2024 (refer to [Appendix L](#));
- *Will Serve Letter Only, Community Development/1,050 Units/W. Sunflower St., Costa Mesa CA* (Electricity Will Serve Letter), Southern California Edison, RJ Popovits, Project Manager, October 9, 2024 (refer to [Appendix L](#));
- *Maps and Will Serve – Will Serve and Map Request for the area between Sunflower St and S Coast Dr just West of Susan St; Costa Mesa* (Natural Gas Will Serve Letter), SoCalGas, Jason Sum, Pipeline Planning Associate, April 19, 2024;
- *May Serve Letter by Charter Communications or an affiliate authorized to provide service* (Charter Communication Will Serve Letter), Charter Communications, Lilly Lawrence, Construction Manager, April 22, 2024;
- *Will Serve Letter; W. Sunflower Avenue and Susan Street, Costa Mesa, CA* (AT&T Will Serve Letter), AT&T, Ernest Estacio, Manager Planning and Engineering, April 23, 2024; and
- *MesaWater District Water Supply Assessment Hive Live Development (WSA)*, West and Associates Engineering, Inc., July 2024 (refer to [Appendix K, Water Supply Assessment](#)).



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### 5.17.1 Environmental Setting

#### 5.17.1.1 REGULATORY BACKGROUND

##### Wastewater Treatment and Collection

###### *Federal*

###### ***Clean Water Act and National Pollution Elimination Discharge System***

The Federal Clean Water Act (CWA) establishes regulations to control the discharge of pollutants into the Waters of the United States and regulates water quality standards for surface waters (United States Code, Title 33, Section 1251 et seq.). Under the CWA, the U.S. Environmental Protection Agency (EPA) is authorized to set wastewater standards and administers the National Pollutant Discharge Elimination System (NPDES) program. Under the NPDES program, permits are required for all new developments that discharge directly into waters of the United States. The CWA requires wastewater treatment of all effluent before it is discharged into surface waters. NPDES permits for such discharges in the project region are issued by the Santa Ana Regional Water Quality Control Board (RWQCB).

###### *State*

###### ***State Water Resources Control Board Statewide General Waste Discharge Requirements***

The State Water Resources Control Board's (SWRCB) General Waste Discharge Requirements specify that all Federal and State agencies, municipalities, counties, districts, and other public entities that own or operate sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State need to develop a Sewer Master Plan. The Sewer Master Plan is required to evaluate existing sewer collection systems and provide a framework for undertaking the construction of new and replacement facilities in order to maintain proper levels of service. The Sewer Master Plan also includes:

- Inflow and infiltration studies to analyze flow monitoring and water use data;
- A capacity assurance plan to analyze the existing system with existing land use and unit flow factors;
- A condition assessment and sewer system rehabilitation plan; and
- A financial plan with recommended capital improvements and financial models.

###### *Regional*

###### ***Santa Ana Regional Water Quality Control Board General Waste Discharge Requirements***

The project is regulated under the NPDES Phase I Municipal Stormwater Permits issued by the Santa Ana RWQCB for Orange County (Order No. R8-2009-0030 [NPDES Permit No. CAS618030]). The Order requires dischargers to adopt a Sewer System Management Plan and a grease (e.g., fats, oils and grease) control ordinance





## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

to require commercial food establishments to install and maintain sewer interceptors. The Order also requires dischargers establish other legal authority to preserve the integrity of the sewer system and prevent sewer system spills.

### *Orange County Sanitation District NPDES Permit*

Wastewater discharge requirements for the Orange County Sanitation District (OCSD) Reclamation Plant No. 1 and Treatment Plant No. 2 are detailed in Order No. R8-2021-0010 (NPDES Permit No. CA0110604).<sup>1</sup> The permit includes the conditions needed to meet applicable technology-based requirements. The permit includes limitations more stringent than applicable Federal technology-based requirements, where necessary, to achieve applicable water quality standards.

### *Orange County Sanitation District Capital Facilities Charges*

The OCSD Capital Facilities Charge (Ordinance No. 40) is imposed when a property newly connects to the OCSD system or a previously connected property expands its use. Revenue generated from the charge is used for the acquisition, construction, and reconstruction of OCSD's wastewater collection, treatment, and disposal facilities; repayment of principal and interest on debt instruments; and repayment of Federal and State loans for the construction and reconstruction of sewage facilities, together with costs of administration and provisions for necessary reserves.

### *Orange County Sanitation District Ordinance No. 48*

OCSD Ordinance No. 48 sets limits on wastewater that is discharged to sewers and conveyed to OCSD wastewater treatment plants. Ordinance No. 48 also limits concentrations of certain substances, including metals and hazardous materials, such as pesticides and petroleum-derived oil and grease.

### *Local*

### *Costa Mesa Sanitary District Operations Code*

The Costa Mesa Sanitary District (CMSD) is responsible for providing wastewater collection and transmission to OCSD facilities for treatment and disposal. The CMSD Operations Code codifies all existing CMSD regulations that pertain to ongoing CMSD operations to provide staff and the public with useful references to CMSD regulations. The Operations Code ensures wastewater facilities are complete, correctly operating, and in compliance with government codes and wastewater industry practices. The Operations Code also provides interested parties with procedures, policies, and requirements for the design and construction of new CMSD wastewater infrastructure.

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<sup>1</sup> California Regional Water Quality Control Board Santa Ana Region, Water Discharge Requirements and National Pollutant Discharge Elimination System Permit for Orange County Sanitation District Public Owned Treatment Works (Reclamation plant No. 1, Treatment Plant No.2, Collection System, and Outfalls), <https://www.epa.gov/system/files/documents/2021-07/r8-2021-0010-ca0110604-oc-sanitation-district-2021-06-23.pdf>, accessed August 28, 2024.



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

### *General Plan*

The Conservation Element of the General Plan includes the following goals, objectives, and policies related to wastewater within the City:

- **Policy CON-3.A.9:** Continue to consult with the Costa Mesa Sanitation District and the Orange County Sanitation District to modernize wastewater treatment facilities to avoid overflows of untreated sewage.

### *Municipal Code*

Municipal Code Section 15-6, *Placing Oil On Streets or in Sewers Prohibited*, states it is unlawful to place, cause, or permit to be placed or discharged any oil or petroleum products into or upon any sewers, streets, or sidewalks in the City. Municipal Code Section 15-67, *Required Construction*, establishes in-lieu fees to support the operation, maintenance, expansion, and upgrade of the City's wastewater collection and treatment system. Additionally, Municipal Code Section 13-180, *Application Requirements*, establishes limits and prohibitions on discharges into the City's sewer system and establishes a permitting process for connection to the sewer system. Municipal Code Section 13-71, *Utility Requirements*, regulates connections to the City's water and sewer system.

## Water Supply and Distribution Systems

### *State*

#### *Water Conservation Act of 2009*

Water Code Sections 10800, et seq., creates a framework for future planning and actions by urban (and agricultural) water suppliers to reduce California's water use. The law requires urban water suppliers to reduce Statewide per capita water consumption by 20 percent by 2020. Additionally, the State was required to make incremental progress towards this goal by reducing per capita water use by at least ten percent by 2015. Each urban retail water supplier was required to develop water use targets and an interim water use target by July 1, 2011. Each urban retail water supplier was required, by July 2011, to include in a water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

As of 2018, the 2018 Water Conservation Legislation was signed into law to build upon the Water Conservation Act of 2009. This new framework is far-reaching for both urban and agricultural sectors of California in reducing water conservation and promoting drought tolerance. The State Water Board works closely with stakeholders to develop standards for indoor and outdoor residential use, commercial, industrial, and institutional water use for landscaping, and water loss. Urban water supplies will be required to stay within annual water budgets, based on standards, for their service areas.

#### *Urban Water Management Planning Act*

The Urban Water Management Planning Act of 1983 (Water Code Sections 10610 et seq.), requires water suppliers to:



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

- Plan for water supply and assess reliability of each source of water over a 20-year period in 5-year increments;
- Identify and quantify adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years; and
- Implement conservation and the efficient use of urban water supplies.

Significant new requirements for quantified demand reductions were added by the Water Conservation Act of 2009, which amends the Urban Water Management Planning Act and adds new water conservation provisions to the Water Code.

### ***Senate Bill 221***

Senate Bill (SB) 221 prohibits approval of a tentative map, a parcel map for which a tentative map was not required, or a development agreement for subdivisions of more than 500 dwelling units unless the legislative body of a city or county provides written verification from the applicable public water system that a sufficient water supply is available or will be available prior to completion of the project. Sufficient water supply is defined as “the total water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including, but not limited to, agricultural and industrial uses”(CLI 2016).

In determining sufficient water supply, all of the following factors must be considered:

- Availability of water supplies over a historical record of at least 20 years;
- Applicability of an urban water shortage contingency analysis prepared pursuant to Water Code Section 10632 that includes actions to be undertaken by the public water system in response to water supply shortages;
- Reduction in water supply allocated to a specific water use sector pursuant to a resolution or ordinance adopted or a contract entered into by the public water system; and
- Amount of water from other water supply projects such as conjunctive use, reclaimed water, water conservation, and water transfer.

In addition, the written verification of the public water system’s ability or inability to provide a sufficient water supply to meet the projected demands from the proposed subdivision must be supported by substantial evidence. If the written verification relies on projected water supplies that are not currently available, the availability of said supplies must be based on written contracts or other proof of valid rights to the identified water supply; copies of a capital outlay program for financing the delivery of a sufficient water supply; securing of applicable Federal, State, and local permits for construction of necessary infrastructure; and any necessary regulatory approvals.



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### *Senate Bill 610*

SB 610 amended the Urban Water Management Planning Act to mandate that a city or county approving certain projects subject to CEQA: 1) identify any public water system that may supply water for the project and 2) request those public water systems to prepare a specified Water Supply Assessment (WSA).<sup>2</sup> The WSA must include:

A discussion of whether the public water system's total projected water supplies available during normal, single-dry, and multiple-dry water years during a 20-year projection would meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses;

The identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and water received in prior years pursuant to those entitlements, rights, and contracts;

A description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights, or water service contracts;

- A demonstration of water supply entitlements, water rights, or water service contracts;
- The identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts with the same source of water as the public water system; and
- Additional information related to groundwater if it is included in the supply for the proposed project.

If SB 610 applies to a project, the WSA must be included in the environmental document prepared for the project and may include an evaluation of information in that environmental document. The WSA must determine if the projected water supplies will be sufficient to satisfy the demands of the project as well as existing and planned future uses.

Additionally, SB 610 requires new information to be included as part of an urban water management plan (UWMP) if groundwater is identified as a source of water available to the supplier. Information must include a description of all water supply projects and programs that may be undertaken to meet total projected water use. SB 610 prohibits eligibility for funds from specified bond acts until the UWMP is submitted to the State.

### *Water Conservation in Landscaping Act of 2006 (Assembly Bill 1881)*

The Water Conservation in Landscaping Act of 2006, Assembly Bill (AB) 1881 required the California Department of Water Resources (DWR) to update the State Model Water Efficient Landscape Ordinance (MWELO) by 2009. The State's model ordinance was issued on October 8, 2009. Under AB 1881, cities and counties were required to adopt a State-updated model landscape water conservation ordinance by January 31,

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<sup>2</sup> Under Water Code Section 10912(a)(1), SB 610 applies to a CEQA project defined as "a proposed residential development of more than 500 dwelling units." Thus, a water supply assessment was prepared for the proposed project.



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

2010, or adopt a different ordinance that is at least as effective in conserving water as the State's updated MWEL. It also requires reporting on the implementation and enforcement of local ordinances.

### *Executive Order B-29-15 Updated State Model Water Efficient Landscape Ordinance*

To improve water savings in the landscaping sector, the MWEL was updated in accordance with Executive Order B-29-15. The updated MWEL promotes efficient landscapes in new developments and retrofitted landscapes through more efficient irrigation systems, greywater usage, and on-site stormwater capture, and by limiting the portion of landscapes that can be covered in turf.

New development projects that include landscaped areas of 500 square feet or more are subject to the MWEL. This applies to residential, commercial, industrial, and institutional projects that require a permit, plan check, or design review.

### *Local*

#### *Mesa Water District 2020 Urban Water Management Plan*

The Urban Water Management Planning Act requires all urban water suppliers to prepare, adopt, and file a UWMP with the DWR every five years. The Mesa Water District's (MWD's) *2020 Urban Water Management Plan* (2020 UWMP) outlines current water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes. The plan also provides demand management measures to increase water use efficiency for various land use types, and it details a water supply contingency plan in case of shortage emergencies.

#### *Mesa Water District Standard Specification and Standard Drawings for the Construction of Water Facilities*

The purpose of MWD's *Standard Specification and Standard Drawings for the Construction of Water Facilities* procedural guide is to provide developers and their agents with the general steps for procuring water service from MWD, as well as provide the general design requirements for the preparation and processing of water improvement plans for new or expanded water service from MWD.

### *General Plan*

The Conservation and Safety Elements of the General Plan include the following goals, objectives, and policies related to water supply and conservation within the City:

- **Policy S-2.6:** Require that water supply systems for development are adequate to combat structural fires in terms of location and minimum required fire-flow pressures.
- **Objective CON-3.A:** Work towards the protection and conservation of existing and future water resources by recognizing water as a limited resource that requires conservation.
  - **Policy CON-3.A.1:** Continue to consult with local water districts and the Orange County Water District to ensure reliable, adequate, and high-quality sources of water supply at a reasonable cost.



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### UTILITIES AND SERVICE SYSTEMS

- **Policy CON-3.A.2:** Encourage residents, public facilities, businesses, and industry to minimize water consumption, especially during drought years.
- **Policy CON-3.A.3:** Restrict use of turf in new construction and landscape reinstallation that requires high irrigation demands, except for area parks and schools, and encourage the use of drought-tolerant landscaping.

#### *Municipal Code*

Municipal Code Section 13-107, *Irrigation Requirements*, describes water-efficient irrigation requirements in the City. This section establishes water-efficient landscape regulations, pursuant to AB 1881 and implements the MWEL. Municipal Code Section 13-107 requires irrigation systems be designed so that overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences are minimized. Automatic systems for watering cycles should be scheduled to maximize ground infiltration rates and further minimize runoff.

Municipal Code Section 13-71, *Utility Requirements*, regulates connections to the City's water and sewer system.

#### **Stormwater Infrastructure**

##### *Regional*

##### *Orange County Municipal Separate Storm Sewer System Permit*

Municipal storm sewer system (MS4) permits are issued by local RWQCBs to provide the means to address stormwater quality issues specific to the local watershed or region. MS4 permits require permittees to develop and implement a stormwater management program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). The stormwater management program or drainage area management plan, as it is referred to in the Orange County MS4 Permit (Order No. R8-2009-0030, as amended by Order No. R8-2010-0062 [NPDES Permit No. CAS618030]), must specify best management practices (BMPs) approved by the Santa Ana RWQCB.

The proposed project and its facilities would discharge into the MS4 within the jurisdiction of Costa Mesa. Pursuant to the Orange County MS4 Permit, the City is responsible for controlling or limiting urban pollutants generated by post-construction activities from reaching their MS4s. The proposed project is, therefore, subject to the requirements of the Orange County MS4 Permit (Santa Ana Region) as it is applied by the permittee and its co-permittees.

##### *Orange County Drainage Area Management Plan*

The County's 2003 *Drainage Area Management Plan* (DAMP) describes the agreements, structures, and programs that:

- Provide the legal authority for prohibiting unpermitted discharges into the storm drain system and for requiring BMPs in new development and significant redevelopment;



## 5. Environmental Analysis UTILITIES AND SERVICE SYSTEMS

- Improve existing municipal pollution prevention and removal BMPs to further reduce the amount of pollutants entering the storm drain system;
- Educate the public about the issue of urban stormwater and non-stormwater pollution and obtain their support in implementing pollution prevention BMPs;
- Ensure all new development and significant redevelopment incorporates appropriate site design, source control and treatment control BMPs to address specific water quality issues;
- Ensure construction sites implement control practices that address control of construction-related pollutant discharges, including erosion and sediment control and on-site hazardous materials and waste management;
- Ensure that existing development address discharges from industrial facilities, selected commercial businesses, residential development, and common interest areas/homeowner associations;
- Detect and eliminate illegal discharges/illicit connections to the municipal storm drain system;
- Identify impacted receiving waters and produce environmental quality information to direct management activities, including prioritization of pollutants to support the development of specific controls to address these problems; and
- Assess watersheds and manage urban runoff on a watershed basis.

### *Local*

#### ***General Plan***

The Land Use and Conservation Elements of the General Plan include the following goals, objectives, and policies related to storm drains within the City:

- **Policy LU-4.1:** Ensure that appropriate watershed protection activities are applied to all new development and significant redevelopment projects that are subject to the NPDES Stormwater Permit during the planning, project review, and permitting processes.
- **Policy LU-4.5:** Promote integration of stormwater quality protection into construction and post-construction activities, as required by the NPDES Stormwater Permit and the City's Local Implementation Plan.
- **Policy CON-3.A.5:** Work with public and private property owners to reduce stormwater runoff in urban areas to protect water quality in storm drainage channels, the Santa Ana River, and other local water courses that lead to the Pacific Ocean.



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### UTILITIES AND SERVICE SYSTEMS

- **Policy CON-3.A.6:** Continue to develop strategies to promote stormwater management techniques and storm drain diversion programs that collectively and naturally filter urban runoff.
- **Policy CON-3.A.7:** Continue to comply with the NPDES Program by participating in the Countywide DAMP, which stipulates water quality requirements for minimizing urban runoff and discharge from new development and requires the provisions of applicable BMPs.
- **Policy CON-3.A.8:** Require that all applicable development projects be reviewed with regards to requirements of both the on-site Water Quality Management Plan and State requirements for runoff and obtaining a Storm Water Pollution Prevention Plan (SWPPP) permit.

#### *Municipal Code*

Municipal Code Section 13-107, *Irrigation Requirements*, requires irrigation systems be designed to reduce overspray, runoff, and low-head drainage onto streets, sidewalks, windows, walls, and fences. Automatic systems for watering cycles are required to maximize ground infiltration rates and further minimize runoff. Additionally, Municipal Code Section 8-35, *Permits*, regulates permitted and illicit connections to the City's storm drain system.

#### **Solid Waste**

##### *Federal*

##### *Resource Conservation and Recovery Act of 1976*

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258 contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria. The Federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

##### *State*

##### *Assembly Bill 939*

AB 939 (Integrated Solid Waste Management Act of 1989; California Public Resources Code Section 40050 et seq.) established an integrated waste management system that focuses on source reduction, recycling, composting, and land disposal of waste. AB 939 requires every city and county in California to divert 50 percent of its waste from landfills whether through waste reduction, recycling, or other means. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.





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### *Assembly Bill 341*

AB 341 (Chapter 476, Statutes of 2011) increased the Statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multi-family residential land uses as well as school districts.

### *Assembly Bill 1826*

AB 1826 (California Public Resources Code Sections 42649.8 et seq.) requires recycling of organic matter by businesses generating such wastes in amounts over certain thresholds. AB 1826 also requires that local jurisdictions implement an organic waste recycling program to divert organic waste generated by businesses and multi-family developments that consist of five or more units (CalRecycle 2019a).

### *California Solid Waste Reuse and Recycling Access Act of 1991*

The California Solid Waste Reuse and Recycling Access Act of 1991 instructs the California Department of Resources Recycling and Recovery (CalRecycle) to draft a “model ordinance” for the disposal of construction waste associated with development projects. This act also requires local agencies to ensure development projects have adequate areas for the collection and loading of recyclable materials.

### *California Green Building Standards Code*

Section 5.408, *Construction Waste Reduction, Disposal, and Recycling*, of the California Green Building Standards Code (CALGreen) (Title 24, California Code of Regulations, Part 11) requires at least 65 percent of nonhazardous construction and demolition waste from non-residential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2022 CALGreen took effect on January 1, 2023.

### *Local*

### *Costa Mesa Sanitary District Operations Code*

The intent of the CMSD Operations Code codifies all existing CMSD regulations that pertain to ongoing CMSD operations to provide staff and the public with useful references to CMSD regulations. The Operations Code ensures solid waste facilities are complete, correctly operating, and in compliance with government codes and solid waste industry practices.

### *General Plan*

The Conservation Element of the General Plan includes the following goals, objectives, and policies related to solid waste within the City:

- **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.



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### UTILITIES AND SERVICE SYSTEMS

- **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.

#### Other Utilities

##### *State*

##### *California Energy Commission*

The California Energy Commission (CEC) was created in 1974 as the State's principal energy planning organization. The CEC is charged with six basic responsibilities when designing State energy policies:

- Forecast Statewide electricity needs;
- License power plants to meet those needs;
- Promote energy conservation and efficiency measures;
- Develop renewable energy resources and alternative energy technologies;
- Promote research, development, and demonstration; and
- Plan for and direct the State's response to energy emergencies.

##### *California Energy Benchmarking and Disclosure*

AB 1103 (2007) requires electric and gas utility service providers maintain records of energy consumption data for all nonresidential buildings to which they provide service. It also required by January 1, 2009, upon authorization of a non-residential building owner or operator, an electric or gas utility provider shall upload all available energy consumption data for the specified building to the California Environmental Protection Agency Energy Star Portfolio Manager in a manner that preserves the confidentiality of the customer. This statute further requires a non-residential building owner or operator disclose Energy Star Portfolio Manager benchmarking data and ratings for the most recent 12-month period to a prospective buyer, lessee, or lender. Enforcement of the latter requirement began on January 1, 2014.

On October 8, 2015, AB 802 was signed into law. AB 802 directs the CEC to establish a Statewide energy benchmarking and disclosure program and enhances the CEC's existing authority to collect data from utility providers and other entities for the purposes of energy forecasting, planning, and program design. Among the specific provisions, AB 802 would require utility providers to maintain records of energy usage data of all buildings to which they provide service for at least the most recent 12 complete months. Beginning January 1, 2017, AB 802 required each utility provider, upon the request and the written authorization or secure electronic



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authorization of the owner, owner's agent, or operator of a covered building, to deliver or provide aggregated energy usage data for a covered building to the owner, owner's agent, operator, or to the owner's account in the Energy Star Portfolio Manager, subject to specified requirements.

### *Local*

#### ***General Plan***

The Conservation Element of the General Plan includes the following goals, objectives, and policies related to energy within the City:

- **Objective CON-2.A:** Work to conserve energy resources in existing and new buildings, utilities, and infrastructure.
  - **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.
  - **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.
  - **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.
  - **Policy CON-4.A.7:** Encourage installation of renewable energy devices for businesses and facilities and strive to reduce communitywide energy consumption.



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### 5.17.1.2 EXISTING CONDITIONS

#### Wastewater Treatment and Collection

##### *Existing Wastewater Generation*

The project site is currently developed with the Hive Creative Office Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot. The existing generation rate for industrial zoned property is 3,500 gallons per acre per day (gpad), is based on Costa Mesa Sanitary District 2022 Wastewater Rate Study. Therefore, the existing 14.25-acre industrial park development generates approximately 49,875 gpd of wastewater.

##### *Wastewater Conveyance*

The project site is currently served by an existing CMSD and OCSD wastewater system, including the following sewer lines:

- Existing 15-inch sanitary sewer line along Susan Street;
- Two existing sanitary sewer laterals; and
- A 12-inch sanitary sewer main running through the west side of the property.

#### Water Supply and Distribution Systems

MWD provides water service to the City of Costa Mesa. Residential uses encompass the majority (approximately 60.9 percent) of MWD's water demand while commercial, industrial, and institutional uses encompass approximately 39.1 percent.

##### *Water Supplies*

MWD currently relies on a combination of clear and amber-tinted groundwater from the OC Basin for 94 percent of its demands and recycled water for six percent of its demand. MWD works together with three primary agencies, Metropolitan Water District of Southern California (Metropolitan), Municipal Water District of Orange County (MWDOC), and Orange County Water District (OCWD) to ensure a safe and reliable water supply to serve the community in periods of drought and shortage.

MWD also has the ability to supplement its local groundwater with imported water purchased from Metropolitan through MWDOC. Metropolitan's principal sources of water are the Colorado River via the Colorado River Aqueduct and the Lake Oroville watershed in Northern California through the State Water Project. The water obtained from these sources is treated at the Robert B. Diemer Filtration Plant located north of Yorba Linda. Although MWD has historically relied on imported water to supplement its demands, MWD is projected to meet its future demands using local groundwater through 2045.



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Historically, local groundwater has been the cheapest and most reliable source of supply for MWD. In fiscal year 2020, MWD relied on approximately 16,118 acre-feet (AF) of groundwater from the OC Basin and 959 AF of recycled water from the Orange County Water District. These water supply source meets MWD’s total annual demand. Actual and projected water supply sources and volumes for the year 2025 through 2045 are provided in Table 5.17-1, *MWD Actual Water Supplies* and Table 5.17-2, *MWD Projected Water Supplies*.

**Table 5.17-1 MWD Actual Water Supplies (AF)**

	Actual Volumes
	2020
Groundwater – OC Basin	16,118
Recycled Water – Orange County Water District (OCWD)	959
<b>Total</b>	<b>17,077</b>

Source: MesaWater District, 2020 *Urban Water Management Plan Final*,  
<https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.  
Notes: AF = acre-feet

**Table 5.17-2 MWD Projected Water Supplies (AF)**

Water Supply	2025	2030	2035	2040	2045
Groundwater – OC Basin	16,354	18,009	19,001	19,376	19,751
Recycled Water – OCWD	1,100	1,100	1,100	1,100	1,100
<b>Total</b>	<b>17,454</b>	<b>19,109</b>	<b>20,101</b>	<b>20,476</b>	<b>20,851</b>

Source: MesaWater District, 2020 *Urban Water Management Plan Final*,  
<https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.  
Notes: AF = acre-feet

### Water Demands

Potable water demands in MWD’s service area are forecast to increase from 17,454 AF in 2025 to 20,851 AF in 2045; refer to Table 5.17-3, *Normal Year Supply and Demand Comparison*. MWD’s available water supply is anticipated to meet projected demand.

**Table 5.17-3 Normal Year Supply and Demand Comparison (AF)**

	2025	2030	2035	2040	2045
Supply Total	17,454	19,109	20,101	20,476	20,851
Demand Total	17,454	19,109	20,101	20,476	20,851
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: MesaWater District, 2020 *Urban Water Management Plan Final*,  
<https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.  
Notes: AF = acre-feet

MWD also anticipates having sufficient water supplies to meet demands in single dry years and multiple dry years over the 2025 to 2045 period, as shown in Table 5.17-4, *Single Dry Year Supply and Demand Comparison*, and Table 5.17-5, *Multiple Dry Years Supply and Demand Comparison*.

**Table 5.17-4 Single Dry Year Supply and Demand Comparison (AF)**

	2025	2030	2035	2040	2045
Supply Total	18,501	20,256	21,307	21,705	22,102
Demand Total	18,501	20,256	21,307	21,705	22,102
<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: MesaWater District, 2020 *Urban Water Management Plan Final*,  
<https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.  
Notes: AF = acre-feet



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**Table 5.17-5 Multiple Dry Years Supply and Demand Comparison (AF)**

		2025	2030	2035	2040	2045
First Year	Total Supply	18,182	18,852	20,466	21,387	21,784
	Total Demand	18,182	18,852	20,466	21,387	21,784
	<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Second Year	Total Supply	18,261	19,203	20,676	21,466	21,864
	Total Demand	18,261	19,203	20,676	21,466	21,864
	<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Third Year	Total Supply	18,341	19,544	20,886	21,546	21,943
	Total Demand	18,341	19,544	20,886	21,546	21,943
	<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Fourth Year	Total Supply	18,421	19,905	21,097	21,625	22,023
	Total Demand	18,421	19,905	21,097	21,625	22,023
	<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Fifth Year	Total Supply	18,501	20,256	21,307	21,705	22,102
	Total Demand	18,501	20,256	21,307	21,705	22,102
	<b>Difference</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Source: MesaWater District, 2020 Urban Water Management Plan Final, <https://www.mesawater.org/sites/default/files/Save%20Water/Documents/Mesa%20Water%202020%20UWMP%20FINAL-2021.06.30.pdf>, June 2021.  
Notes: AF = acre-feet

### *Water Conveyance*

The project site is served by an existing 8-inch MWD domestic water line along Susan Street. These MWD lines currently provide domestic water service as well as fire flow to the project site.

### **Stormwater Infrastructure**

#### *Regional Drainage*

The City is located within the Santa Ana River Hydrologic Unit. This unit covers an area of approximately 2,700 square miles, which is within most of the Santa Ana RWQCB jurisdiction and includes portions of Orange, Los Angeles, Riverside, and San Bernardino counties. Within the Santa Ana River Hydrologic Unit, the City encompasses both the Santa Ana River Watershed (northern portion) and the Newport Bay Watershed (southern portion). The project site is in the Santa Ana River Watershed, which covers approximately 210 square miles within Orange County and is the largest watershed in the County. This watershed contains the Santa Ana River and Santiago Creek (OCPW 2011). The Santa Ana River passes about one mile west of the project site.

The City provides storm drain services to most of Costa Mesa and has approximately 42 miles of storm drains and 1,165 catch basins. The City is responsible for inspection, maintenance, and repair of the storm drain system. Maintenance activities include clearing blocked drains, removing debris from storm drain/catch basins structures, and cleaning and repairing damaged drain pipes. Regular maintenance and inspections assist in



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reducing debris and pollution from reaching the Pacific Ocean in compliance with NPDES program requirements.<sup>3</sup>

### Solid Waste

#### *Solid Waste Collection, Recycling, and Disposal*

CMSD contracts curbside trash and recycling collection services with CR&R Environmental Services.<sup>4</sup> In 2019, the latest year where data is available, about 98 percent of solid waste landfilled from Costa Mesa was disposed of at four facilities: the El Sobrante Landfill, the Frank R. Bowerman Sanitary Landfill, the Olinda Alpha Landfill, and the Prima Deshecha Landfill.<sup>5</sup> Table 5.17-6, *Landfill Capacity*, details existing capacity information for the four landfills.

**Table 5.17-6 Landfill Capacity**

Landfill Facility	Current Remaining Capacity (cubic yards)	Maximum Daily Disposal Capacity	Estimated Close Date
El Sobrante Landfill 10910 Dawson Canyon Road Corona, CA 91719 <sup>1</sup>	143,977,170 cubic yards	16,054 tons	2051
Frank R. Bowerman Sanitary Landfill 11002 Bee Canyon Access Road Irvine, CA 92618	205,000,000 cubic yards	11,500 tons	2053
Olinda Alpha Landfill 1942 North Valencia Avenue Brea, CA 92823	17,500,000 cubic yards	8,000 tons	2036
Prima Deshecha Landfill 32250 Avenida La Pata San Juan Capistrano, CA 92675	128,300,000 cubic yards	4,000 tons	2102
<b>Total</b>	<b>494,777,170 cubic yards</b>	<b>39,554 tons</b>	

Sources:

CalRecycle, *El Sobrante Landfill*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402>, accessed August 19, 2024.

CalRecycle, *Frank R. Bowerman Sanitary Landfill*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2767?siteID=2103>, accessed August 19, 2024.

CalRecycle, *Olinda Alpha Landfill*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2757?siteID=2093>, accessed August 19, 2024.

CalRecycle, *Prima Deshecha Landfill*, <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2750?siteID=2085>, accessed August 19, 2024.

#### *Solid Waste Diversion*

Compliance with AB 939 is measured in part by actual solid waste disposal amounts compared to targets; disposal amounts equal to or lower than targets are consistent with AB 939. In 2023, solid waste disposal targets for the City were 8.5 pounds per day (ppd) for residents and 11.3 ppd for employees; actual disposal amounts

<sup>3</sup> City of Costa Mesa, *Street and Storm Drain Maintenance*, <https://www.costamesaca.gov/government/departments-and-divisions/public-works/maintenance-services/street-and-storm-drain-maintenance#:~:text=Costa%20Mesa%20has%20approximately%2042,the%20City's%20storm%20drain%20system>, accessed August 19, 2024.

<sup>4</sup> Costa Mesa Sanitary District, *Weekly Curbside Collection*, [https://www.cmsdca.gov/trash\\_\\_\\_recycling/curbside\\_collection/index.php](https://www.cmsdca.gov/trash___recycling/curbside_collection/index.php), accessed August 19, 2024.

<sup>5</sup> CalRecycle, *Jurisdiction Disposal and Alternative Daily Cover Tons by Facility*, <https://www2.calrecycle.ca.gov/LGCentral/DisposalReporting/Destination/DisposalByFacility>, accessed August 19, 2024.



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were 7.4 ppd for residents and 9.5 ppd for employees.<sup>6</sup> As such, the City is currently meeting its solid waste disposal targets pursuant to AB 939.

### *Existing Solid Waste Generation*

It should be noted that while the site's land use is designated as an Industrial Park, the Hive Creative Office Campus comprises of three existing two-story office buildings. Based on a solid waste generation factor of six pounds per 1,000 square feet per day for office uses, 50 percent occupancy of the existing office buildings (91,260 square feet of the total existing 182,520 square feet) would generate approximately 548 ppd of solid waste.<sup>7</sup>

### **Other Utilities**

The project site is served by Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) for electricity and natural gas services, respectively.

#### *Electricity*

The service area of SCE spans much of southern California from Orange and Riverside counties to the south to Santa Barbara County on the west and Mono County to the north. Total mid-electricity consumption in SCE's service area was 107,876 gigawatt-hour (GWh) in 2022, the latest year data is provided.<sup>8</sup>

#### *Natural Gas*

The SoCalGas service area spans much of southern California, from San Luis Obispo in the north to the Mexico border in the south. Total natural gas consumption in SoCalGas's service area in the year 2022 is estimated at 6,566 millions of therms.<sup>9</sup>

### **5.17.2 Thresholds of Significance**

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

- U-1            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.

<sup>6</sup> CalRecycle, *Disposal Rate Calculator*, <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator>, accessed August 19, 2024.

<sup>7</sup> CalRecycle, *Estimated Solid Waste Generation Rates*, <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>, accessed August 19, 2024.

<sup>8</sup> California Energy Commission, *Electricity Consumption by Planning Area*, <http://www.ecdms.energy.ca.gov/elecbyplan.aspx>, accessed August 13, 2024.

<sup>9</sup> California Energy Commission, *Gas Consumption by Planning Area*, <http://www.ecdms.energy.ca.gov/gasbyplan.aspx>, accessed August 13, 2024.





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- U-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.
- U-3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- U-4 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.
- U-5 Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste.

### 5.17.3 Environmental Impacts

The following impact analysis addresses thresholds of significance for which there may be potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

#### Wastewater Treatment and Collection

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**Impact 5.17-1: Require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would not cause significant environmental impacts. [Thresholds U-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:*

*Wastewater Conveyance*

As part of the project, a new on-site sewer system comprised of public and private sewer components would be constructed. The on-site sewage would be collected and would flow into two proposed on-site 8-inch sewer laterals (located within on-site main driveway areas). The connection at the southern-most driveway would connect the proposed 8-inch sewer laterals to the existing 8-inch VCP sewer lateral in Susan Street and ultimately the existing 15-inch sewer main in Susan Street. The connection at the northern-most driveway would connect the proposed 8-inch sewer laterals to the existing 15-inch sewer main in Susan Street.

Based on input from the CMSD through the questionnaire, the proposed project would utilize an average of 31 percent of the available capacity in surrounding sewer lines; refer to [Appendix L](#). The usage would vary from segment to segment of sewer laterals with a minimum of 24 percent of the available capacity to 50 percent of the available capacity; refer to [Appendix L, Table 5.17-7, \*Sever Capacity\*](#) displays the existing capacity and future capacity of sewer segments with the implementation of the proposed project.



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**Table 5.17-7 Sewer Capacity**

Sewer Segment	Existing Flows (cubic feet per second)	Existing Capacity (cubic feet per second)	Proposed Flows (cubic feet per second)	Proposed Capacity (cubic feet per second)
MH #119775 to MH #103713	0.0	0.0/15.0	0.075	1.8/15
MH #103713 to MH #103755	0.0	0.0/15.0	0.075	1.8/15
MH #103755 to MH #103781	0.0	0.0/15.0	0.380	3.8/15
MH #103781 to MH #119801	0.212	2.9/15.0	0.715	5.2/15
MH #119801 to MH #103774	0.379	3.8/15.0	0.882	5.8/15
MH #103774 to MH #103773 and MH #103773 to MH#103869	0.591	4.8/15.0	1.258	7.1/15

Source: Costa Mesa Sanitary District, Robert Morris, *Costa Mesa Hive Live Wastewater Services Questionnaire*, August 2024; refer to [Appendix L](#)

Additionally, based on the Sewer Capacity Analysis, prepared by FUSCOE, the project site utilized the advised 5,000 gpd per acre generation rate per the Los Angeles County sewer generation peak factor. The Sewer Capacity Analysis utilized this generation rate to calculate the peak flows which were calculated into the existing sewer capacities (d/D). Existing flows rates at two manhole locations were collected during a 14-day field flow monitoring. [Table 5.17-8, Calculation Summary](#) displays the estimated flows from the proposed project based on the generation rate.

**Table 5.17-8 Calculation Summary**

Segment	Existing Flows d/D	Proposed Flows d/D
Eight inch On-site to MH #103755	0.000	0.313
Eight inch On-site to MH #103781	0.263	0.325
Eight inch On-site to MH #103774	0.263	0.338
MH #119775 to MH #103713	0.000	0.120
MH #103713 to MH #103755	0.000	0.120
MH #103755 to MH #103781	0.000	0.253
MH #103781 to MH #119801	0.193	0.347
MH #119801 to MH #103774	0.253	0.389
MH #103774 to MH #103773	0.320	0.473
MH #103773 to MH#103869	0.320	0.473

Source: Costa Mesa Sanitary District, Robert Morris, *Costa Mesa Hive Live Wastewater Services Questionnaire*, August 2024; refer to [Appendix L](#)

Based on [Table 5.17-7](#), the proposed flows to existing sewer segments from the proposed project would convey less flows than the design capacity per the CMSD design requirements. As such, the existing CMSD sewer infrastructure downstream of the proposed project (including the existing 84-inch trunk sewer line) would have the capacity to accommodate the project's sewer generation.

However, it should be noted that about 640 linear feet of the 15-inch CMSD pipe from MH #103774 to MH #103869 are close to capacity ( $0.473 < 0.5$ ). These sewer segment in close to capacity could potentially be subjected to upsizing as deemed by CMSD.

Pursuant to PPP USS-1 and PPP USS-2, the project's sewer infrastructure improvements would be designed, constructed, and operated in accordance with the CMSD Operations Code and OCSD Ordinance Nos. 40 and 48. The project would also be required to comply with PPP USS-3, which details construction requirements related to new wastewater infrastructure development in the City pursuant to Municipal Code Sections 15-6, 15-67, 13-180, and 13-71. As such, the project would not require the relocation or construction of new or



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expanded wastewater treatment facilities, the construction or relocation of which would cause significant environmental impacts.

### *Plans, Programs, Policies:*

- PPP USS-1 The project's sewer infrastructure improvements are required to be designed, constructed, and operated in accordance with the Costa Mesa Sanitary District (CMSD) Operations Code.
- PPP USS-2 The project's sewer infrastructure is required to be designed, constructed, and operated in accordance with the Orange County Sanitation District (OCSD) Ordinance Nos. 40 and 48, and all wastewater discharges into OCSD facilities shall be required to comply with the discharge standards set forth to protect the public sewage system/and Waters of the United States.
- PPP USS-3 The project's sewer infrastructure is required to be designed, constructed, and operated in accordance with Municipal Code Sections 15-6, *Placing Oil On Streets or in Sewers Prohibited*, 15-67, *Required Construction*, 13-180, *Application Requirements*, and 13-71, *Utility Requirements*.

***Standard Conditions of Approval:*** No SCAs are applicable to this threshold of significance.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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### **Impact 5.17-2: Wastewater provider has adequate capacity to serve the project's projected demands and the provider's current commitments. [Thresholds U-3]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

### ***Impact Analysis:***

#### ***Project Wastewater Generation***

The proposed project would allow development of up to 1,050 dwelling units in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space. According to the *Proposed Hive Live Development at 3333 Susan Street: CMSD Will Serve Sewer Letter* (CMSD Will Serve Letter) prepared by the CMSD, the project would accept flows from the proposed project if they do not exceed a wastewater generation of 656,250 gallons per day, if the proposed project does not exceed the three buildings comprising of 1,050 units, and if the project Applicant applies for a permit, submit required building designs, grading plans, and sewer plans for review by the CMSD. The CMSD determined that with compliance with these requirements would ensure implementation of the proposed project would be adequately accommodated by existing wastewater facilities.

As discussed above, the existing site currently produces 49,875 gallons per day of wastewater. This is based on the CMSD 2022 *Wastewater Rate Study* industrial generation rate of approximately 3,500 gallons per day.<sup>10</sup>

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<sup>10</sup> Costa Mesa Sanitary District, 2022 *Wastewater Rate Study*, January 3, 2022.



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Additionally, it should be noted that this is a conservative analysis as the current 14.25-acre site comprised of land uses that would not generate wastewater (i.e., parking lots, practice field). Per the *2022 Wastewater Rate Study*, CMSD and the Orange County Sanitary District utilizes a wastewater generation rate of approximately 71.5 gallons per day per capita.<sup>11</sup> As discussed in [Section 5.12, \*Population and Housing\*](#), the proposed project would have the potential to support up to 2,646 residents based on the City's average household size of 2.52 residents per dwelling unit. Thus, the proposed project would generate approximately 189,189 gallons of wastewater per day. As such, the proposed project would generate wastewater below the CMSD's threshold of 656,250 gallons per day. As such, impacts would be less than significant in this regard.

**Plans, Programs, Policies:** Refer to PPP USS-1, PPP USS-2, and PPP USS-3

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Water Supply and Distribution Systems

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**Impact 5.17-3: Require the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental impacts. [Thresholds U-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

#### **Impact Analysis:**

##### *Water Conveyance*

Domestic water and fire flow on-site would connect to an existing Mesa Water District domestic line in Sunflower, Avenue, Susan Street, and South Coast Drive. Any proposed public water systems within the project site would be located within an easement dedicated to MWD and would be subject to MWD's *Standard Specification and Standard Drawings for the Construction of Water Facilities* per PPP USS-4. Compliance with SCA FIRE-24 would also ensure water mains and hydrants are installed to the standards of MWD and dedicated along with repair easements to MWD. Additionally, in accordance with PPP USS-5, the project is required to be planned, designed, installed, and maintained in accordance with Municipal Code Section 13-107, *Irrigation Requirements*, and Section 13-71, *Utility Requirements*. All on-site private water systems would be owned and maintained by the property owner and/or maintenance association. Based on the WSA and *C0510-24-01: 3333 Susan Street (Costa Mesa Hive Live) Water Services Questionnaire*, the Mesa Water District would be expected to meet future demands of the proposed project through 2045. No planned additions or upgrades to existing off-site facilities would be required to meet the demands of the proposed project.

Pursuant of PPP USS-4 though USS-5, the project's water infrastructure (water lines and irrigation lines) would be regulated by the MWD's *Standard Specification and Standard Drawings for the Construction of Water Facilities* and

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<sup>11</sup> Costa Mesa Sanitary District, *2022 Wastewater Rate Study*, January 3, 2022.



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the City's Municipal Code. As documented through the WSA, no off-site water conveyance facilities are required to support the project. As such, project's impact on existing water supply and delivery systems would be less than significant.

### ***Plans, Programs, Policies:***

- PPP USS-4 The project's water infrastructure improvements are required to be designed, constructed, and operated in accordance with the Mesa Water District's (MWD's) *Standard Specification and Standard Drawings for the Construction of Water Facilities*.
- PPP USS-5 The proposed project is required to be planned, designed, installed, and maintained in accordance with Municipal Code Section 13-107, *Irrigation Requirements*, and Section 13-71, *Utility Requirements*.

### ***Standard Conditions of Approval:***

- SCA FIRE-24 Water mains and hydrants shall be installed to the standards of Mesa Water District's (MWD) and dedicated along with repair easements to MWD.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.17-4: Sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. [Thresholds U-2]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

### ***Impact Analysis:***

#### ***Water Demands***

#### ***Construction***

Short-term demand for water may occur during demolition, excavation, grading, and construction activities. Water demand for soil watering (fugitive dust control), cleanup, masonry, painting, and other activities would be temporary and would cease upon construction completion. Overall, short-term demolition and construction activities would require minimal water and are not expected to adversely impact existing MWD water supply sources. Impacts in this regard would be less than significant.

#### ***Operation***

The project site is currently developed with the Hive Creative Office Campus (in the northern portion) and the Los Angeles Chargers practice field (in the southern portion). The Hive Creative Office Campus consists of three existing two-story office buildings supported by a surface parking lot. According to the WSA, the existing development on the project site lacks existing water demand data. The existing development had a maximum



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water demand of approximately 64,100 gallons per day based on standard generation criteria which may be overly conservative given that the practice field has no water demand; refer to [Table 5.17-9](#), *Existing Water Demands*.

**Table 5.17-9 Existing Water Demands**

Land Use	Site Acreage	Demand Factor	Average Day Demand		Maximum Day Demand		Peak Hour Demand
			gpd	AFY	gpd	AFY	gpm
Industrial	14.3	3,000 gpd	42,800	48	64,100	72	66.8

Source: *MesaWater District Water Supply Assessment Hive Live Development (WSA)*, West and Associates Engineering, Inc., July 2024 (refer to [Appendix N](#)).

Notes: AFY= acre foot per year, gpd = gallons per day; gpm = gallons per minute

The proposed land use changes would result in increased water demands. The proposed water demands were estimated in the WSA, based upon demand factors and peaking factors established in the MWD’s *2014 Water Master Plan* (2014 WMP). Specifically, the water demand factors are as followed:

- 2,400 gallons per day per acre (gpd/acre) for the open space sector;
- 2,500 gpd/acre for the general commercial sector; and
- 180 gallons per day per dwelling unit (gpd/DU)for high-density residential sector.

[Table 5.17-10](#), *Project Water Demands*, details anticipated project water demands based on the proposed residential, commercial, and irrigation demands.

**Table 5.17-10 Project Water Demands**

Land Use	Demand Factor (gpd/acre or gpd/DU)	Dwelling Units	Acres	Average Day Demand		Maximum Day Demand		Peak Hour Demand
				gpd	AFY	gpd	AFY	gpm
<b>Proposed Project</b>								
Open Space Irrigation	2,400	--	6.5	15,700	18	39,150	44	72.6
General Commercial	2,500	--	0.9	2,400	3	3,500	4	3.7
High-Density Residential	180	1,050	0	189,000	212	283,500	318	295.3
<b>Project Total</b>				<b>207,000</b>	<b>233</b>	<b>326,200</b>	<b>366</b>	<b>371.6</b>

Source: *MesaWater District Water Supply Assessment Hive Live Development (WSA)*, West and Associates Engineering, Inc., July 2024 (refer to [Appendix N](#)).

Notes: gpd = gallons per day; gpm = gallons per minute, DU = dwelling units, AFY = acre feet year

As a conservative analysis, the WSA did not compare the existing water consumption (an average of 42,800 gallons per day) to the projected water use demands. As shown in [Table 5.17-10](#), the proposed project would have a maximum day water demand of approximately 326,200 gallons per day or 366 AFY. This value would be compared to the MWD’s water supply capacity for normal, single-, and multiple-dry water years to determine the project’s impact on water supply.

As previously stated, the WSA prepared by the MWD did not take into consideration the existing maximum water demand from the Hive Creative Office Campus and the Los Angeles Chargers practice field. Nevertheless, for informative purposes only, the proposed project would result in a net maximum demand



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increase of approximately 262,100 gallons per day or 294 AFY, which is less than that considered by MWD in the WSA.

As shown in [Table 5.17-2](#), MWD anticipates water demand in year 2045 to be approximately 20,851 AFY. As discussed in the *C0510-24-01: 3333 Susan Street (Costa Mesa Hive Live) Water Services Questionnaire*, the MWD would have adequate supplies to meet the water demands of the proposed project. It should be noted that the MWD utilized the more conservative maximum water demand of 366 AFY (without taking into account the net change from existing conditions which would result in 294 AFY) to determine if the water district has adequate water supplies to service the project site. According to the MWD Will Serve Letter, there is sufficient water supply and pressure to serve the project. However, the developer of the project would be required to improve existing water infrastructure serving the project site and would be responsible for all associated cost identified during the plan check review and approval process. The implementation of the proposed project would not have significant impacts on the MWD's current and future services and capacities. Therefore, water demands associated with the proposed project and existing and future MWD customers through year 2045 would be adequately met with MWD's existing and future groundwater and recycled water supply. The project would also be required to comply with California Energy Code and Green Building Code provisions related to water and energy conservation (refer to PPP USS-6). Impacts in this regard would be less than significant.

### *Plans, Programs, Policies:*

PPP USS-6 The project is required to comply with California Energy Code and Green Building Code provisions related to water and energy conservation.

*Standard Conditions of Approval:* No mitigation measures are required.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### **Stormwater Infrastructure**

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**Impact 5.17-5: Require the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which would not cause significant environmental impacts. [Threshold U-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The project site is currently developed with the 182,520-square foot Hive Creative Office Campus (in the northern portion) and the former Los Angeles Chargers practice field (in the southern portion). Approximately 62,327 square feet of the existing site (ten percent) is pervious, and the remaining 560,947 square feet (90 percent) is impervious. The proposed project would be separated into five drainage management areas that would have their runoff flow into one of the seven proposed modular wetlands systems. These systems would treat the stormwater runoff before allowing the treated water to be discharged to either the existing 51-inch storm drain main along Susan Street, an existing 48-inch storm drain at the right of way, or an 51-inch storm drain main along Sunflower Avenue. The stormwater ultimately flows to the Greenville banning



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channel. Prior to discharge into the existing storm drain system, the collected stormwater would flow through 7 modular wetland unit systems for water quality treatment via biofiltration prior to discharge. The Hydrology Report, prepared to evaluate existing and proposed drainage conditions on-site, is in [Appendix I](#). The peak flow rates for the 2-, 25-, and 100-year storms under existing and proposed conditions were modeled and are shown in [Table 5.9-2, Existing and Proposed Drainage Conditions](#), in [Section 5.9](#) of this Draft EIR.

As discussed under Impact 5.9-4, peak flows to the storm drain system would decrease in DMA A and DMA B with the installation of the biotreatment areas throughout the site that are designed to temporarily retain stormwater runoff prior to discharge to the storm drain system. However, DMA C and DMA F would have an increase in peak flow rates. DMA E would not be disturbed and as such, would have flow rates similar to existing conditions. Similarly, DMA D would not have any changes in flow. Nevertheless, the implementation of the proposed project would result in an overall peak flow reduction for downstream pipes, compared to existing conditions. As a result, existing storm drains have sufficient capacity to support the proposed project.

Additionally, development of the proposed project's SWPPP and WQMP and implementation of the requirements of the NPDES General Construction Permit and the MS4 Permit would ensure compliance with the objectives and standards of the Basin Plan (refer to PPP HYD-1 and PPP HYD-2). Compliance with PPP USS-7 would ensure all proposed storm drain improvements are planned, designed, installed, and maintained in accordance with Municipal Code Section 8-35, *Permits*. Implementation of SCA WQMP-66 would also require the project to prepare and implement a SWPPP, WQMP, and associated BMPs. Further, SCAs ENG-18, -19, and -21 require the project to construct storm drain facilities pursuant to the *City of Costa Mesa Master Drainage Plan*, pay drainage ordinance fees, and maintain on-site drainage facilities.

Project compliance with PPP HYD-2, PPP HYD-4, PPP USS-7, SCA WQMP-66, and SCAs ENG-18, -19, and -21 would ensure impacts are less than significant in this regard.

***Plans, Programs, Policies:*** Refer to [Section 5.9, Hydrology and Water Quality](#), for a discussion of PPP HYD-1 and -2. Also, the following would apply:

PPP USS-7      The project's stormwater infrastructure shall be planned, designed, installed, and maintained in accordance with Municipal Code Section 8-35, *Permits*, which regulates permitted and illicit connections to the City's storm drain system in accordance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.

### ***Standard Conditions of Approval:***

SCA WQMP-66 Prior to or concurrent with submittal of plans for grading, building plan check, and/or submittal of the final subdivision map for engineering plan check, the applicant shall prepare and submit documentation for compliance with the State Water Resources Control Board (SWRCB) Water Quality Order 99-08-DWQ; National Pollutant Discharge Elimination System (NPDES) Permit No. WQ 2022-0057-DWQ, CAS000002 for Storm Water Discharges Associated with Construction Activity (General Permit); the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB) Order No. R8-2009-0030, as amended by Order No. R8-2010-0062 (NPDES Permit No. CAS618030); and the City's Ordinance No. 97-20 for





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compliance with the NPDES permit. Such documentation shall include a Storm Water Pollution Prevention Plan (SWPPP) if over one acre and a Water Quality Management Plan (WQMP) identifying and detailing the implementation of applicable best management practices (BMPs).

- SCA ENG-18 Proposed storm drain facilities shall be constructed pursuant to the *City of Costa Mesa Master Drainage Plan*.
- SCA ENG-19 The project shall fulfill drainage ordinance fee requirements prior to approval of final maps and plans.
- SCA ENG-21 Private on-site drainage facilities and parkway culverts or drains will not be maintained by the City and shall be maintained by the owner or developer of the property. Private lateral connections to City storm drains shall require a hold harmless agreement prior to issuance of grading or building permits.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Solid Waste

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**Impact 5.17-6: Existing solid waste facilities would be able to accommodate project-generated solid waste and the project would comply with existing solid waste regulations. [Thresholds U-4 and U-5]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

#### **Impact Analysis:**

##### **Construction**

According to the Appendix C, Air Quality/ Greenhouse Gas Emissions/ Energy Data, the construction of the proposed project would require the demolition of 228,801 building square footage. Based on the average building demolition yielding 155 pounds of demolition debris per square foot, the demolition of the existing 228,801 square feet is estimated to generate about 35,464,155 pounds or approximately 17,732 tons of demolition debris.<sup>12</sup> Since at least 65 percent of demolition debris and construction waste would be recycled and/or reused in accordance with CALGreen requirements, the proposed project would generate a maximum of approximately 6,206 tons of demolition waste that would be disposed of in local landfills. Table 5.17-6 identifies the four landfills that accept the majority of the City's solid waste and also accept construction and demolition debris. The approximate 6,206 tons of demolition waste (or 56.9 tons per day over the proposed 109-day period [22-day for Phase 1, 45-day for Phase 2, and 42-day for Phase 3 of construction]) that would be disposed of in landfills would be one-time in nature and would represent a nominal increase in the overall

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<sup>12</sup> Elzarka, Hazen, *Making the Case for Construction Waste Management*, <http://ascpro0.ascweb.org/archives/2007/CPGT136002007.pdf>, accessed August 19, 2024.



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daily disposal at the landfills (approximately 39,544 tons per day). As such, project construction activities would not adversely impact existing solid waste facilities and impacts would be less than significant.

### Operation

Project operation is estimated to generate approximately 5,012.73 net ppd of solid waste (or 2.5 tons per day), as detailed in Table 5.17-11, *Project-generated Solid Waste*. The 2.5 tons of waste generated from the project would represent a 0.006 percent of the total daily disposal rate at the four landfills (approximately 39,544 tons per day). As shown in Table 5.17-6, there is adequate landfill capacity at the four landfills to accommodate project-generated solid waste during project operations. Thus, impacts would be less than significant in this regard.

**Table 5.17-11 Project-generated Solid Waste**

Land Uses		Proposed Buildout	Solid Waste Generation Rate	Project-generated Solid Waste (ppd)
Proposed Project	Open Space	338,600 square feet	0 ppd	0
	Multi-Family Residential	1,050 units	5.31 lb/dwelling unit	5,575.5
	Commercial Retail	3,692 square feet	2.5 lb/1000 square feet	9.23
<b>Total – Proposed Project</b>				<b>5,584.73</b>
<i>Existing Solid Waste Generation – Existing Industrial Building</i>				<i>-287</i>
<b>Net Solid Waste Generation</b>				<b>5,298.73</b>

Source: CalRecycle 2019b.  
Note: ppd = pounds per day

### Compliance with Solid Waste Regulations

Project construction and operations would be required to comply with regulations governing solid waste disposal. Operation of the project would include recycling of green waste in accordance with AB 1826 and PPP USS-9. Furthermore, at least 50 percent of construction and demolition debris would be recycled and/or salvaged for reuse in compliance with CALGreen Section 5.408 and PPP USS-10. Pursuant to PPP USS-8, the proposed project’s solid waste infrastructure would be designed, constructed, and operated in accordance with the regulations of the CMSD Operations Code. Overall, implementation of PPP USS-8 through -10 would ensure the proposed project complies with existing solid waste regulations and impacts in this regard would be less than significant.

### Plans, Programs, Policies:

- PPP USS-8 The proposed project’s solid waste infrastructure improvements are required to be designed, constructed, and operated in accordance with the applicable regulations in the Costa Mesa Sanitary District (CMSD) Operations Code.
- PPP USS-9 The proposed project is required to store and collect recyclable materials in compliance with AB 341 and handle green waste in accordance with AB 1826.
- PPP USS-10 The proposed project is required to recycle construction waste in accordance with the California Green Building Standards Code (CALGreen) requirements.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.



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**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Other Utilities

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**Impact 5.17-7: Require the relocation or construction of new or expanded electric, natural gas, and telecommunication facilities, the construction or relocation of which would not cause significant environmental impacts. [Threshold U-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

#### **Impact Analysis:**

##### **Electricity**

Project operation is anticipated to generate a net increase in electricity demand of approximately 2,675 megawatt hours per year at full buildout; refer to Table 5.5-3, Project and County Energy Consumption, in Section 5.5, Energy. Total electricity consumption in Orange County in the year 2022, the latest year in which data is available, was approximately 20,243,722 megawatt hours. The project's net increase in electricity demand represents a 0.01 percent increase in the County's electricity consumption.

Additionally, according to the Electricity Will Serve Letter from SCE, the electricity provider for the project site, SCE will serve the project's electrical requirements provided that the Applicant enter into the applicable contractual agreements with SCE that identify scope of electrical utility work required and supply project specific design information and applicable fees; refer to Appendix L. It is acknowledged that the proposed project would continue to utilize the existing electrical facilities that currently serve the project site. All on-site electrical connections would be located underground. As such, the proposed project would not require the expansion of existing electrical infrastructure and impacts in this regard is less than significant.

##### **Natural Gas**

Project operations are estimated to generate a net increase in natural gas demand of approximately 73,202 British Thermal Units (therms) per year; refer to Table 5.5-3. Total natural gas consumption in Orange County in the year 2022, the latest year in which data is available, was approximately 572,454,744 therms. The project's net increase in natural gas demand represents a 0.01 percent increase in the County's natural gas consumption.

Additionally, according to the Natural Gas Will Serve Letter from SoCalGas, the natural gas provider for the project site, states that has facilities in the area that would serve the project; refer to Appendix L, Public Services and Utilities Correspondence. The availability of natural gas service is based on natural gas supply conditions and is subject to changes in law and/or regulations. The project does not propose any improvements to existing SoCalGas infrastructure off-site, and the project would be adequately served by existing facilities. Impacts would be less than significant in this regard. Thus, project development would not require SoCalGas to obtain new or expanded natural gas supplies, and impacts would be less than significant.



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#### *Telecommunications*

According to the Charter Communication Will Serve Letter and AT&T Will Serve Letter prepared by Charter Communication and AT&T respectively, the telecommunication provider for the project site, project site would be serviced by existing facilities in the area; refer to [Appendix L](#). However, the provided Will Serve Letters for both telecommunication providers only states that the project site is within their service area and service arrangement would be subject to later agreements. As such, the project would not propose any improvements to existing telecommunication facilities and would be adequately serviced by existing infrastructure. Thus, project development would not require telecommunication providers to obtain new or expanded existing telecommunication facilities, and impacts would be less than significant.

**Plans, Programs, Policies:** No PPPs are applicable to this threshold of significance.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### 5.17.4 Cumulative Impacts

#### Wastewater Treatment and Collection

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**Impact 5.17-8: Development of the project, in combination with related projects, would not require the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which would cause significant environmental impacts. [Thresholds U-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative development would result in increased wastewater generation within the project vicinity, which would require wastewater conveyance by CMSD and OCSD facilities. Cumulative development would be subject to payment of sewer connection fees and ongoing user fees, on a project-by-project basis, which would be used in part to defray the costs of any necessary wastewater infrastructure upgrades. Payment of these fees, along with compliance with Santa Ana RWQCB-issued permits, would ensure cumulative impacts to wastewater treatment facilities are less than significant. Additionally, future related projects would also be required to comply with PPP USS-1 through PPP USS-3 to ensure future sewer infrastructure improvements are designed, constructed, and operated in accordance with the CMSD Operations Code, OCSD Ordinance No. 48, and Municipal Code Sections 15-6, 15-67, 13-180, and 13-71.

Based on input from the CMSD, the proposed project would utilize an average of 31 percent of the available capacity in the sewer lines serving the project site. Specifically, the usage would vary from segment to segment of sewer laterals with a minimum of usage of 24 percent of the available capacity to 50 percent of the available capacity. As the project does not exceed the capacity threshold of 50 percent, impact on wastewater facilities would not be cumulatively considerable.



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**Plans, Programs, Policies:** Refer to PPP USS-1 through -3.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

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**Impact 5.17-9: Development of the project, in combination with related projects, would not significantly impact the wastewater provider's ability to meet projected and current demands. [Thresholds U-3]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative development would result in increased wastewater generation within the project vicinity, which would require wastewater treatment by OCSD. Cumulative development would be subject to payment of sewer connection fees and ongoing user fees, on a project-by-project basis, which would be used in part to defray the costs of any necessary wastewater infrastructure upgrades. Payment of these fees, along with compliance with Santa Ana RWQCB-issued permits, would ensure cumulative impacts to wastewater treatment facilities are less than significant. Additionally, future related projects would also be required to comply with PPP USS-1 through PPP USS-3 to ensure future sewer infrastructure improvements are designed, constructed, and operated in accordance with the CMSD Operations Code, OCSD Ordinance No. 48, and Municipal Code Sections 15-6, 15-67, 13-180, and 13-71.

According to the CMSD, as long as the project does not exceed a wastewater generation of 656,250 gallons per day, impacts would be less than significant. As discussed above, the proposed project would generate approximately 189,189 gallons of wastewater per day. As such, the proposed project would not exceed the CMSD's threshold of 656,250 gallons per day. Additionally, existing CMSD and OCSD sewer mains in Sunflower Avenue would be able to accommodate project-generated wastewater. The project would also be required to pay relevant CMSD and OCSD connection fees and ongoing user fees. Therefore, the project's impacts to wastewater treatment would not be significantly cumulatively considerable.

**Plans, Programs, Policies:** Refer to PPP USS-1 through -3.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Water Supply and Distribution Systems

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**Impact 5.17-10: Development of the project, in combination with related projects, would require the relocation or construction of new or expanded water facilities. [Thresholds U-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.



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#### *Impact Analysis:*

##### *Water Conveyance*

Cumulative development would likely require the construction of water facilities. Cumulative projects would be evaluated on a case-by-case basis at the project level, as they are implemented, for their potential to result in construction-related impacts. All projects would be subject to the review and approval of the City and applicable water purveyors and would be subject to compliance with PPP USS-4 through USS-6.

Project implementation would include new water infrastructure improvements to connect to existing MWD water lines in the project vicinity. As discussed, construction activities related to the project's water connection lines would be subject to MWD's *Standard Specification and Standard Drawings for the Construction of Water Facilities* per PPP USS-4. Compliance with SCA FIRE-24 would also ensure water mains and hydrants are installed to the standards of MWD and dedicated along with repair easements to MWD. Additionally, in accordance with PPP USS-5, the proposed utility improvements are required to be planned, designed, installed, and maintained in accordance with Municipal Code Section 13-107, *Irrigation Requirements*, and Section 13-71, *Utility Requirements*. Compliance with these existing regulations would ensure the project's incremental effects related to the construction of water facilities are not cumulatively considerable.

***Plans, Programs, Policies:*** Refer to PPP USS-4 through USS-6.

***Standard Conditions of Approval:*** Refer to SCA FIRE-24.

***Mitigation Measures:*** No mitigation measures are required.

***Level of Significance After Mitigation:*** Less Than Significant Impact.

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**Impact 5.17-11: Sufficient water supplies are available to serve the project and related projects during normal, dry, and multiple dry years. [Thresholds U-2]**

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***Level of Significance Before Mitigation:*** Less Than Significant Impact.

#### *Impact Analysis:*

##### *Water Supply and Demand*

For purposes of water supply impacts, cumulative impacts are considered for projects also located within the MWD service area. Cumulative development would generate increased demands for water services. Similar to the proposed project, cumulative development that satisfies one or more of the criteria for a "water demand project," as defined by Water Code Section 10912(a), would be required to prepare a Water Supply Assessment in conformance with SB 221 and SB 610. Future cumulative projects would be required to evaluate potential impacts on existing and planned MWD water supplies to determine whether sufficient water supply is available to serve anticipated demands in normal, single dry, and multiple dry year conditions.



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As discussed above, the project would result in a maximum water demand of 326,200 gpd (or 366 AFY), which would be adequately met by MWD's existing groundwater and recycled water supplies through year 2045. It should be noted that the WSA utilized the maximum water demand of 326,200 gpd or 366 AFY from the proposed project without taking into existing water demand consumption from the Hive Creative Office Campus and the Los Angeles Chargers practice field. As such, this presents a more conservative analysis. Nevertheless, the MWD determine that there would be adequate supply to meet this more conservative water demand projections. The project would also be required to comply with California Energy Code and Green Building Code provisions related to water and energy conservation (refer to PPP USS-6). Thus, as the project would result in less than significant impacts in regard to water supply and demand, the project's incremental impact on MWD's water supply would not be cumulatively considerable.

**Plans, Programs, Policies:** Refer to PPP USS-6.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Stormwater Infrastructure

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**Impact 5.17-12: Development of the project, in combination with related projects, would require the relocation or construction of new or expanded stormwater facilities. [Threshold U-1]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** The cumulative projects identified in Table 4-2, Related Projects, in addition to the project, could result in the construction of new stormwater drainage facilities or the expansion of existing facilities. Similar to the proposed project, all cumulative development would be subject to the County's MS4 Permit pursuant to PPP HYD-2, and on-site irrigation systems would be designed to reduce runoff onto streets, sidewalks, windows, walls, and fences pursuant to PPP HYD-4. Further, PPP USS-7 would ensure storm drain improvements associated with cumulative projects are designed, installed, and maintained in accordance with Municipal Code Section 8-35, *Permits*. Preparation of project-specific Water Quality Management Plans and Storm Water Pollution Prevention Plans would also be required pursuant to SCA WQMP-66. Further, SCAs ENG-18, -19, and -21 would require future cumulative projects construct storm drain facilities pursuant to the *City of Costa Mesa Master Drainage Plan*, pay drainage ordinance fees, and maintain on-site drainage facilities.

As discussed under Impact 5.9-4, peak flows to the storm drain system would decrease in DMA A and DMA B with the installation of the biotreatment areas throughout the site that are designed to temporarily retain stormwater runoff prior to discharge to the storm drain system. However, DMA C and DMA F would have an increase in peak flow rates. DMA E would not be disturbed and as such, would have flow rates similar to existing conditions. Similarly, DMA D would not have any changes in flow. Nevertheless, the implementation of the proposed project would result in an overall peak flow reduction for downstream pipes, compared to



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existing conditions. As a result, the project would not result in cumulatively considerable impacts concerning storm drain capacity.

**Plans, Programs, Policies:** Refer to PPP USS-7. Additionally, refer to Section 5.9, Hydrology and Water Quality, for a discussion of PPP HYD-2 and -4.

**Standard Conditions of Approval:** Refer to SCA WQMP-66, and SCA ENG-18, -19, and -21.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.

### Solid Waste

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**Impact 5.17-13: The proposed project, in combination with related projects, would not adversely impact the capacity of existing solid waste facilities and would comply with existing solid waste regulations. [Thresholds U-4 and U-5]**

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**Level of Significance Before Mitigation:** Less Than Significant Impact.

**Impact Analysis:** Cumulative development within the project area would increase demands for solid waste disposal services. Related projects would be subject to conformance with relevant laws, ordinances, and regulations in place for solid waste disposal. This includes implementation of PPP USS-8 and -9, which include compliance with AB 341 and 1826 as well as CALGreen Section 5.408. Further, the landfills identified in Table 5.17-6 have a maximum disposal rate of 39,544 tons per day.

As discussed above, project-generated solid waste would be adequately accommodated at the El Sobrante Landfill, the Frank R. Bowerman Sanitary Landfill, the Olinda Alpha Landfill, and the Prima Deshecha Landfill and would be required to comply with PPP USS-8 and -9. Further, solid waste generated by project operations would represent less than 0.01 percent of the residual daily disposal capacity of the four landfills. Therefore, project's less than significant impacts would not be cumulatively considerable.

**Plans, Programs, Policies:** Refer to PPP USS-8 and -9.

**Standard Conditions of Approval:** No SCAs are applicable to this threshold of significance.

**Mitigation Measures:** No mitigation measures are required.

**Level of Significance After Mitigation:** Less Than Significant Impact.





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### Other Utilities

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**Impact 5.17-14: Development of the project, in combination with related projects, would require the relocation or construction of new or expanded electrical, natural gas, or telecommunication facilities, the construction or relocation of which would not cause significant environmental impacts. [Threshold U-1]**

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*Level of Significance Before Mitigation:* Less Than Significant Impact.

*Impact Analysis:* The cumulative projects identified in [Table 4-2](#), in addition to the project, could result in the construction of new dry utilities or the expansion of existing dry utilities. Cumulative development would be evaluated on a case-by-case basis at the project level, as they are implemented, for their potential to result in environmental impacts. All projects would be subject to the review and approval of the City and applicable dry utility providers and would be subject to compliance with the relevant laws, ordinances, and regulations in place. Thus, cumulative impacts concerning the construction of dry utilities would be less than significant.

The proposed project would not require the expansion of existing dry utilities infrastructures (i.e., SCE, SoCalGas, Charter Communication, and AT&T infrastructure) nor would the project require new or expanded natural gas, electricity, and communications. Project implementation would not result in increased demands that require or result in the relocation or construction of new or expanded dry utilities, the construction or relocation of which could cause significant environmental effects. The project's less than significant impacts in this regard would not be cumulatively considerable.

*Plans, Programs, Policies:* No PPPs are applicable to this threshold of significance.

*Standard Conditions of Approval:* No SCAs are applicable to this threshold of significance.

*Mitigation Measures:* No mitigation measures are required.

*Level of Significance After Mitigation:* Less Than Significant Impact.

### 5.17.5 Significant Unavoidable Impacts

No significant unavoidable impacts related to utilities and service systems have been identified.



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## **Chapter 6.0 Significant and Unavoidable Adverse Impacts**



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## 6. Significant and Unavoidable Adverse Impacts

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Table 1-1, *Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation*, summarizes the project impacts, mitigation measures, and levels of significance before and after mitigation. Upon implementation of mitigation measures proposed throughout this Draft EIR, no significant and unavoidable impacts have been identified.



## 6. Significant and Unavoidable Adverse Impacts

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## Chapter 7.0 Alternatives to the Proposed Project



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# 7. Alternatives to the Proposed Project

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## 7.1 INTRODUCTION

### 7.1.1 Purpose and Scope

CEQA requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would “feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines Section 15126.6[a]). As required by CEQA, this section identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- “[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.” (15126.6[b])
- “The specific alternative of ‘no project’ shall also be evaluated along with its impact.” (15126.6[e][1])
- “The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the ‘no project’ alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.” (15126.6[e][2])
- “The range of alternatives required in an EIR is governed by a ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.” (15126.6[f])
- “Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries..., and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)” (15126.6[f][1]).
- “Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.” (15126.6[f][2][A])
- “An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.” (15126.6[f][3])



## 7. Alternatives to the Proposed Project

For each development alternative, the analysis herein:

- Describes the alternative;
- Analyzes the impact of the alternative as compared to the proposed project;
- Identifies the impacts of the project that would be avoided or lessened by the alternative;
- Assesses whether the alternative would meet most of the basic project objectives; and
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, “[i]f an alternative would cause...significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.”

### 7.1.2 Project Goals and Objectives

As described in Section 3.3, *Statement of Project Goals Objectives*, the following objectives have been established for the proposed project and aid decision makers in their review of the project, the project alternatives, and associated environmental impacts.

1. Redevelop the project site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting and in a manner that is fiscally neutral or fiscally positive for the City.
2. Increase the City’s housing stock, including affordable housing opportunities, by providing multi-family residential housing in areas with adequate public utilities and public services (i.e., fire protection and emergency services, police protection services, school services, and library services) and in close proximity to major employment centers.
3. Provide enhanced recreation and open space opportunities and opportunities for specialty retail and entertainment uses to serve future residents.
4. Facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and by bringing residents in closer proximity to existing and proposed resident-serving retail and adjacent employment centers, as well as existing pedestrian-scale transit improvements such as the Rail Trail.
5. Improve jobs-housing ratio and reduce vehicle miles traveled by placing housing in proximity to a major employment center in support of Statewide housing and transportation regulations (Senate Bill 375 and Senate Bill 743).
6. Incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards.
7. Enhance the visual attributes of the project site and surrounding area through implementation of a high quality design, creative facades, consistent development standards, and design guidelines for streetscape, landscape, site design, and signage.

### 7.1.3 Project Summary of Potentially Significant Environmental Impacts, And Levels of Significance After Mitigation

The Draft EIR identified the following potentially significant impacts before mitigation:



## 7. Alternatives to the Proposed Project

- Air Quality (construction impacts to sensitive receptors);
- Biological Resources (nesting migratory birds);
- Cultural Resources (archaeological resources);
- Geology and Soils (paleontological resources);
- Hazards and Hazardous Materials (emergency response/construction traffic);
- Public Services (police services);
- Transportation (vehicle miles traveled [VMT]); and
- Tribal Cultural Resources (tribal cultural resources).

Implementation of Mitigation Measures AQ-1, BIO-1, CUL-1, GEO-1 and GEO-2, HAZ-1, PS-1, TRA-1, and TCR-1 would reduce construction-related impacts as well as operational VMT impacts to less than significant levels. Project implementation would not result in any significant unavoidable impacts.

### 7.2 ALTERNATIVES CONSIDERED BUT REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

#### 7.2.1 Alternative Project Site Alternative

CEQA requires a discussion of alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is evaluating whether any of the significant effects of the project would be avoided or substantially lessened by developing the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines Section 15126[5][B][1]). In general, any development or redevelopment of the size and type proposed by the project at a different location would generally have similar less than significant operational impacts on air quality, greenhouse gas emissions, and transportation as these impacts are highly dependent on proposed buildout assumptions, particularly involving average daily trips associated with vehicles. Further, project impacts related to energy and population and housing would be similar regardless of location within Costa Mesa as the analyses on these topical areas are dependent on regional or local (e.g., City-wide) data that would be the same throughout the region. However, without a site-specific analysis, impacts on aesthetics, cultural resources, geology and soils, hazards and hazardous materials, hydrology/water quality, land use and planning, and noise cannot be evaluated as the analyses depend on site-specific information (such as existing topographic conditions, geology and soils, as well as distances to the nearest sensitive receptors, among other factors). The project site is already developed; redevelopment on the project site would result in fewer impacts than development on an alternate undeveloped vacant property. Furthermore, the site contains adequate infrastructure for future development to connect.



## 7. Alternatives to the Proposed Project

The project applicant does not own or control other comparably sized and centrally-located properties in close proximity to employment centers in the City of Costa Mesa. While the project requires approval of several land use entitlements, including a General Plan Amendment, Zoning Amendment, and Specific Plan Amendment, objectives for the project include providing housing in proximity to major employment centers. The current zoning in the project area does not allow for residential units and there are no similarly sized infill parcels designated for residential near the area that meet this requirement. Due to the lack of viable and comparable sites in the general area that would allow for development of the project in a manner that would avoid or substantially lessen the project's potentially significant impacts, development of the project on an alternative site has been eliminated from consideration.

### 7.2.2 Existing Zoning/Industrial Development Alternative

The project site has a zoning designation of Planned Development Industrial (PDI), which is intended for industrial and business commercial areas floor area ratio (FAR) of 0.40 and a maximum square footage of 252,648 square feet. The North Costa Mesa Specific Plan Sub-Area C (designated Industrial Park), which includes the project site, allows for development of a wide variety of industrial uses (compatible with MP, POI, and CL zoning) Industrial Park zoning is intended for large, concentrated industrial areas where the aim of development is to create a spacious environment in a park-like setting (e.g., warehousing, corporate offices, light manufacturing). Per the Specific Plan, this designation allows for a maximum square footage of 252,648 square feet (one to five stories or 45 to 60 feet in height) and a Floor Area Ratio (FAR) of 0.40.

As required under CEQA Guidelines Section 15126.6(e), the EIR must analyze a “no project” alternative. An analysis of a No Project/No Development Alternative is provided below, which assumes that the existing land uses would continue to operate, and the proposed project would not be developed. Further, an analysis of a No Project/Existing Zoning Alternative is provided below, which assumes that the existing Hive Creative Office Campus two-story office buildings would remain on-site and the southern portion of the site (the practice field) would be redeveloped into another office building (two stories in height) consistent with the existing zoning and approved Development Agreement for the project site. However, it is acknowledged that under the existing zoning, the project site could be redeveloped into an industrial/warehousing project (the Existing Zoning/Industrial Development Alternative). This alternative would assume the continuation of the existing Planned Development Industrial (PDI) zoning designation which could include industrial park uses. This alternative would meet none of the project's basic goals and objectives. This alternative would not redevelop the project site with a mix of residential units and accessory/ancillary retail uses nor increase the City's housing stock. This alternative would not create opportunities for specialty retail and entertainment uses to serve future residents. This alternative would not improve jobs-housing ratio or reduce vehicle miles traveled. Further, an Existing Zoning/Industrial Development Alternative would not avoid or substantially lessen the project's potentially significant impacts. As such, the Existing Zoning/Industrial Development Alternative has been eliminated from consideration.

## 7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following four alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project, but



## 7. Alternatives to the Proposed Project

which may avoid or substantially lessen any of the significant and unavoidable effects of the project. These alternatives are analyzed in detail in the following sections:

- No Project/No Development Alternative;
- No Project/Existing Zoning Alternative;
- Commercial Building Alternative; and
- Reduced Density Alternative.

An EIR must identify an “environmentally superior” alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior alternative from among the others evaluated. Each alternative’s environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior. [Section 7.6, \*Environmentally Superior Alternative\*](#), identifies the Environmentally Superior Alternative.

### 7.4 NO PROJECT/NO DEVELOPMENT ALTERNATIVE

The No Project/No Development Alternative is required to discuss the existing conditions at the time the Notice of Preparation is published (June 2024) (CEQA Guidelines Section 15126.6[e]). Therefore, the No Project/No Development Alternative assumes the Specific Plan would not be amended and no new development would occur on-site. The existing Hive Creative Office Campus (in the northern portion) would continue to operate similar to existing conditions. This alternative assumes that the Los Angeles Chargers practice field could continue to be leased out and used in a similar manner as the existing condition.

#### 7.4.1 Aesthetics

Under the No Project/No Development Alternative, the proposed master-planned residential community with 1,050 dwelling units, 3,692 square feet of retail uses, and 335,958 square feet of open space would not be developed. The project’s building massing and associated shading impacts would not occur. The existing buildings, surface parking lot, and landscaping would remain, and the site’s existing visual character and lighting would not change. No construction activities would occur on-site. Compared to the proposed residential community, this alternative would not strengthen the image of the City from sidewalks and roadways (General Plan Goal CD-1) or contribute to the City’s beautification by enhancing vehicular and pedestrian paths and corridors (General Plan Objective CD-1A) as the pedestrian, bicycle, and trail connections along the Rail Trail would not be implemented. This alternative also would not reinforce a sense of arrival into the City by promoting architecturally significant development and significant landscape plantings at key nodes (General Plan Policy CD-3.2). Preserving the existing buildings also would not enhance opportunities for new development and redevelopment to contribute to a positive visual image for the City (General Plan Policy CD-6) or encourage the inclusion of public art and attractive functional architecture (General Plan Policy CD-6.1). Notwithstanding, this alternative would preserve the site’s existing visual character and eliminate the project’s less than significant building massing and shading impacts. As such, this alternative would be environmentally superior to the proposed project for aesthetics.



## 7. Alternatives to the Proposed Project

### 7.4.2 Air Quality

Under the No Project/No Development Alternative, no construction or demolition activities would occur. Therefore, the project's potentially significant construction-related air quality impacts from diesel particulate matters (DPMs) emissions generated during project construction due to a prolonged construction period (over eight years) would be eliminated under this alternative and the project's mitigation (Mitigation Measure AQ-1) would not be required under this alternative. Last, the project's less than significant impacts pertaining to operational emissions, criteria air pollutants to sensitive receptors, and objectionable odors would not occur. This alternative would be environmentally superior to the proposed project for aesthetics.

### 7.4.3 Biological Resources

Under the No Project/No Development Alternative, no development would occur and therefore, no impacts would occur to biological resources. As no tree removal would be required, the project's Mitigation Measure BIO-1 would not be required. Therefore, the No Project/No Development Alternative would be environmentally superior compared to the proposed project for biological resources.

### 7.4.4 Cultural Resources

Under the No Project/No Development Alternative, no construction activities would occur. Thus, this alternative would not have the potential to encounter historic or archaeological resources on-site and would not require mitigation. No impacts would occur in this regard and this alternative would be environmentally superior to the proposed project for cultural resources.

### 7.4.5 Energy

As detailed in [Table 5.5-3, \*Project and County Electricity Consumption\*](#), the proposed project would result in a net increase of approximately 2,675 MWH of electricity, 73,202 therms of natural gas, and 395,096 gallons of operational automotive fuel compared to existing conditions.

Under this alternative, demolition of the existing buildings and construction and operations of new buildings would not occur, and energy demands for electricity, natural gas, and fuel consumption would remain as is. Thus, the project's less than significant impacts on energy would be further reduced under this alternative. This alternative would be environmentally superior to the proposed project for energy.

### 7.4.6 Geology and Soils

No construction activities, including demolition or grading, would occur under the No Project/No Development Alternative. Therefore, there would be no increase in the potential for new workers, buildings, or structures to experience seismic ground shaking or other geologic hazard. Although seismic risks to the older existing buildings would not meet the latest California Building Code requirements related to seismic hazards, it also would not involve any major grading or excavation that could exacerbate existing subsurface geologic conditions or erosion impacts. Additionally, no impacts to potentially undiscovered paleontological resources on-site would occur under this alternative and no mitigation would be required. Whereas the proposed project



## 7. Alternatives to the Proposed Project

would be required to comply with Mitigation Measure GEO-1. This alternative would be environmentally superior to the proposed project for geology and soils.

### 7.4.7 Greenhouse Gas Emissions

As detailed in [Table 5.7-3, \*Long-term Operational Greenhouse Gas Emissions\*](#), at full buildout, the total project-related GHG emissions from direct and indirect sources combined would result in a net increase of 5,098.91 MTCO<sub>2</sub> per year over the existing conditions.

The No Project/No Development Alternative assumes that no new on- or off-site improvements would occur. Therefore, this alternative would generate fewer emissions than the proposed project. As this alternative avoids the project's less than significant greenhouse gas emissions impacts, this alternative would be environmentally superior for GHG emissions.

### 7.4.8 Hazards and Hazardous Materials

Under this alternative, no new development would occur and the existing buildings would remain operational. Therefore, existing office building operations and practice field would continue. The existing on-site buildings would not be demolished and the potential for release of asbestos-containing materials and lead-based paint from the building would not occur. Furthermore, as no construction activities would occur on Susan Street, no impacts to emergency access or evacuation routes would occur and no mitigation would be required in this regard, whereas the proposed project would be required to comply with Mitigation Measure HAZ-1 pertaining to partial street closures. Therefore, this alternative would be environmentally superior to the proposed project for hazards and hazardous materials.

### 7.4.9 Hydrology and Water Quality

Existing water quality conditions, best management practices (BMPs) including low impact development (LID) for water quality maintenance, groundwater supplies, drainage patterns, and runoff amounts would remain as is under this alternative, since no new development would occur. This alternative would not replace existing sources of water pollutants with new pollutants associated with residential uses to the project area. Additionally, as detailed under [Impact 5.9-3](#), the project's 10 percent decrease in impervious surfaces would not occur with this alternative (which currently includes 90 percent impervious surfaces). As such, the project's benefits associated with reduced runoff flows would not occur. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for hydrology and water quality.

### 7.4.10 Land Use and Planning

Given that the proposed project would not be developed, this alternative would not require a General Plan Amendment, Zone Change, Specific Plan Amendment, Tentative Tract Map approval, Master Plan adoption, Development Agreement approval, and Density Bonus Agreement approval. The existing land use designation and zoning for the project site would remain Industrial Park and Industrial Park (MP), respectively. However, this alternative would not allow new development to redevelop and enhance the site, establish a sense of place, provide community amenities, or place housing within close proximity to a major employment center. The



## 7. Alternatives to the Proposed Project

proposed project also meets several General Plan policies more so than the existing development. For example, the project provides for the development of a mix and balance of housing opportunities, commercial services, and employment opportunities in Costa Mesa (General Plan Policy LU-1.1); develops compatible residential, commercial, and public uses within a single project (General Plan Policy LU-3.5); provides employment opportunities associated with future tenants of the retail spaces and provides new housing in close proximity to employment centers in a job-rich area of the City (General Plan Policy LU-6.10); and develops a mix of residential and retail uses within a site that is located adjacent to major corridors (e.g., I-405 and Sunflower Avenue) (General Plan Policy LU-6.19). Overall, since the No Project/No Development Alternative would not require any discretionary actions, this alternative would be environmentally superior to the proposed project for land use and planning.

### 7.4.11 Noise

Existing on-site noise associated with mechanical equipment (such as Heating, Ventilation, and Air Conditioning [HVAC] units), parking areas, and mobile noise generated by the existing commercial and practice field uses would continue under this alternative. As no new construction or operational activities would occur, no new construction or operational noise would be generated on-site, compared to existing conditions. The potential to impact nearby sensitive receptors from construction noise and vibration and operational noise (both mobile and stationary sources) would be avoided compared to the proposed project. Therefore, no impacts would occur under this alternative and this alternative would be environmentally superior to the proposed project for noise.

### 7.4.12 Population and Housing

Population and employment growth would not occur under the No Project/No Development Alternative, since no new residential units, businesses, or other infrastructure would be constructed. Existing tenants and associated employees would remain, resulting in no impacts to population and housing. The proposed project's anticipated population and housing growth would result in less than significant impacts pertaining to unplanned population growth. However, the project would also introduce new housing near employment opportunities in Costa Mesa, including a minimum of 45 units as affordable housing (i.e., very low income units) to assist the City in meeting its Regional Housing Needs Assessment (RHNA) requirements. As this alternative would not provide new housing as well as affordable housing, an improve jobs/housing ratio, nor assist the City in meeting its State mandated housing goals, it would be neither environmentally superior nor inferior to the proposed project for population and housing.

### 7.4.13 Public Services

The proposed master-planned residential community with 1,050 dwelling units and 3,692 square feet of retail uses, would not be developed under this alternative. Therefore, the project's potentially significant impact to police services and mitigation (Mitigation Measures PS-1) would not be required under this alternative. Additionally, as no residents would be constructed as part of this alternative, there would be no new demand for school, library, or recreational services. As no increase in demand for public services would occur, this alternative would be environmentally superior to the proposed project for public services.





## 7. Alternatives to the Proposed Project

### 7.4.14 Recreation

Population and employment growth would not occur under the No Project/No Development Alternative, since no new residential units, businesses, or other infrastructure would be constructed. As such, no increased use of existing recreation facilities or construction of new recreational facilities would occur. As such, this alternative would be environmentally superior to the proposed project for recreation.

### 7.4.15 Transportation

Under the No Project/No Development Alternative, no transportation impacts related to a potential conflict with a program plan, ordinance or policy addressing the circulation system, VMT, hazard due to a geometric design feature or incompatible use, or inadequate emergency access would occur. In comparison, the proposed project meets the City's VMT screening criteria, supports alternative modes of transportation, and reduces auto dependency by strengthening pedestrian, transit, and bicycle connectivity. Various mobility hub improvements are proposed to accommodate transit users, pedestrians, and bicyclists, including enhanced transit waiting areas and passenger loading, pedestrian walkways and crossings, bikeways, bicycle parking and bike share facilities, dedicated transit ways, flexible curb space, and wayfinding signage. Therefore, while the No Project/No Development Alternative would result in no new transportation impacts, it would not develop a master-planned residential community with 1,050 dwelling units, 3,692 square feet of retail uses, and 335,958 square feet of open space. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for transportation.

### 7.4.16 Tribal Cultural Resources

Under this alternative, no ground disturbances would occur. Therefore, the potential to adversely impact previously undiscovered tribal cultural resources on-site would not occur, and no mitigation would be required; unlike the project, which would require compliance with mitigation. No impacts would result, and this alternative would be environmentally superior to the proposed project for tribal cultural resources.

### 7.4.17 Utilities and Service Systems

The project site is currently served by existing utilities and service systems, which would continue to operate similar to existing conditions. The project's proposed residential units would result in increased wastewater generation, water demand, solid waste generation, and electricity and natural gas demand, which would require utility improvements and connections to the existing system. Under this alternative, no new development would occur and the project's increase in demand for utilities and necessity for infrastructure improvements would be avoided. This alternative would be environmentally superior to the proposed project for utilities and service systems.



## 7. Alternatives to the Proposed Project

### 7.4.18 Conclusion

#### Ability to Reduce Environmental Impacts

The No Project/No Development Alternative would eliminate the proposed project's less than significant with mitigation incorporated impacts related to air quality (construction), biological resources, cultural resources, geology and soils, hazards and hazardous materials, public services, recreation, and tribal cultural resources. This alternative would lessen environmental impacts in the areas of air quality, biological resources, cultural resources, energy, geology and soils, GHG, land use and planning, noise, public services, tribal cultural resources, and utilities and services systems. In regard to aesthetics, hazards and hazardous materials, population and housing, and transportation, this alternative would result in similar impacts. Impacts related to hydrology and water quality would be greater.

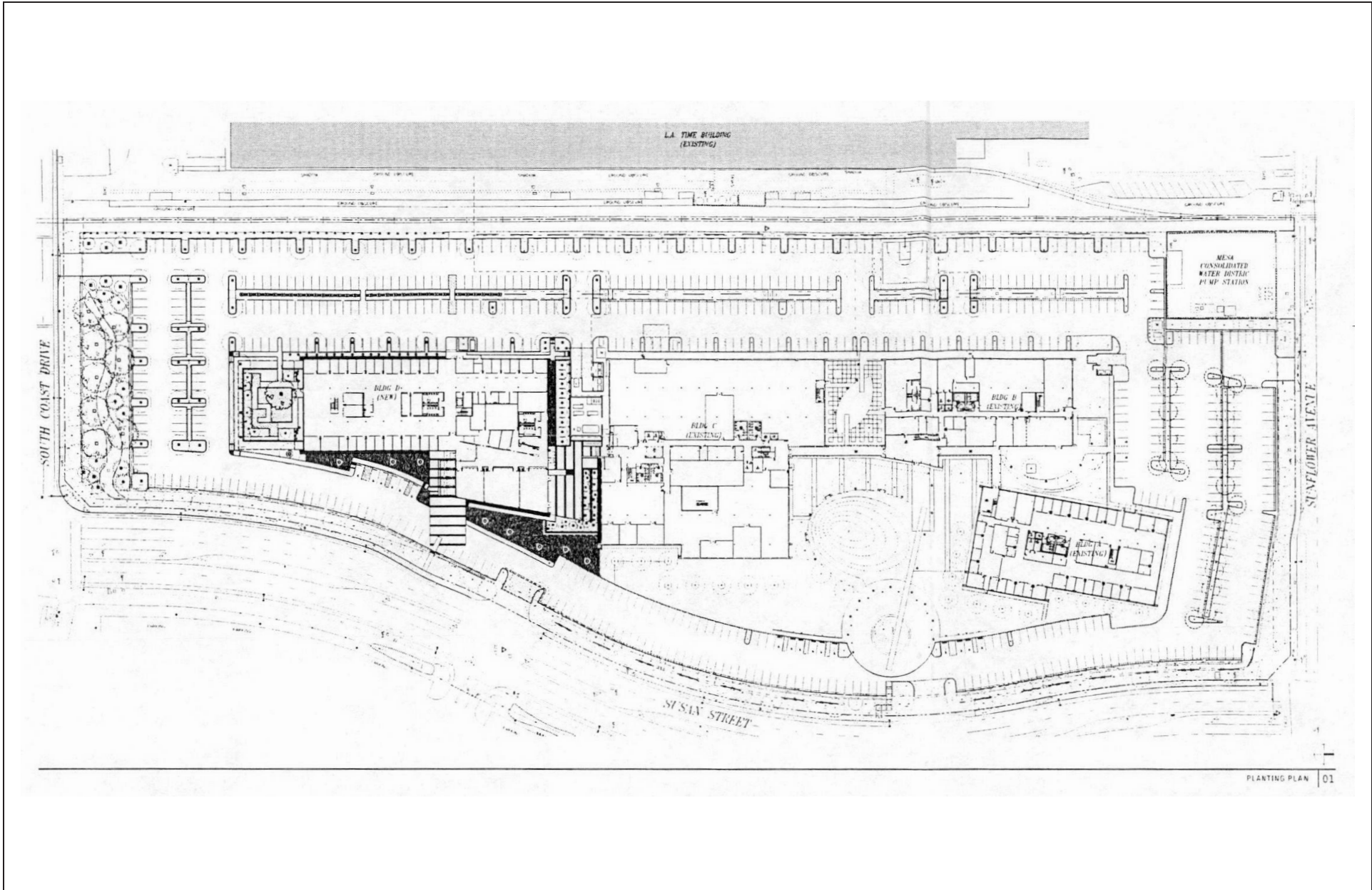
#### Ability to Achieve Project Objectives

No development would occur on-site under the No Project/No Development Alternative. The existing commercial uses would continue to operate on-site and none of the project objectives would be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City's housing stock, including affordable housing (Objective No. 2); provide enhanced recreation and open space opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5); implement sustainable development practices (Objective No. 6); or enhance the visual attributes of the project site and surrounding area (Objective No. 7).

## 7.5 NO PROJECT/EXISTING ZONING ALTERNATIVE

The Costa Mesa City Council adopted the North Costa Mesa Specific Plan (Specific Plan) in July 1994, which included the project site and surrounding area as Segerstrom Home Ranch (Area 1). In 2001, a Development Agreement (DA-00-01) was approved and authorized a maximum 0.40 FAR for the project site. In 2002, the current development was approved through Master Plan PA-02-34. In 2008, Final Master Plan PA-08-09 was approved to allow for a new office building in the southern portion of the lot. The building was never constructed and Final Master Plan PA-08-09 approval has since expired. In 2003, the project site was graded and the existing 182,520-Hive Creative Office Campus was built in the north and central portions of the project site. In 2017, the southern portion of the site was converted into the Los Angeles Chargers practice field. On November 1, 2023, the Los Angeles Chargers announced their intention to relocate their operations from the project site to the City of El Segundo. The existing Development Agreement expires on August 27, 2030. As such, the No Project/Existing Zoning Alternative assumes reapproval and development of the Final Master Plan PA-08-09 and the existing Development Agreement.

The No Project/Existing Zoning Alternative assumes that the existing three two-story office buildings would continue to operate and that the practice field would be redeveloped into another office building per the Final Master Plan PA 08-09 and the existing Development Agreement; refer to Exhibit 7-1, No Project/ Existing Zoning Alternative.



Source: LPA, December 2024



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Under this alternative, the existing Hive Creative Office Campus two-story office buildings would remain on-site and the southern portion of the site (the practice field) would be redeveloped into another office building. Under this alternative, 245 surface parking spaces would be installed in the southern portion of the project site to support the new office building, rather than the project’s 538 parking spaces proposed in a wrap around parking structure at Building A. This office building (Building D) would be approximately 65,435 square feet and two stories in height and would result in 72 new employees on-site. Proposed uses would be general office space and related ancillary support areas for corporate training. The northeast section of the first floor would be used for conference facilities and video conferencing. Various other meeting spaces would serve as group training areas for 20 to 30 employees from other locations that would arrive on-site via vanpool or small bus. This fourth building represents the remaining development on this property, as allowed pursuant to the Segerstrom Home Ranch Development Agreement ( DA 00-01).

Overall, this alternative would result in the reduction in residential development (1,050 fewer residential units, and elimination of the associated bicycle and pedestrian connections) and an increase in 65,435 square feet of office space. These modifications would decrease associated vehicle trips, compared to the proposed project, by 2,373 daily trips; refer to Table 7-1, No Project/Existing Zoning Alternative Trip Generation.

**Table 7-1 No Project/Existing Zoning Alternative Trip Generation**

Land Use	Units	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<i>Existing Uses</i>								
General Office Building								
Existing Office Buildings	172.176 TSF	231	31	262	42	206	248	1,866
<i>Alternative New Uses</i>								
General Office Building								
Entitled Office Building	65.435 TSF	87	12	99	16	78	94	709
<i>Proposed Project</i>								
Multi-Family Housing (Mid-Rise) Not Close to Rail Transit								
Hive Live Apartments	1,050 units	89	300	389	250	160	410	4,767
Strip Retail Plaza Less than 40,000 square feet								
Hive Retail	3.692 TSF	5	4	9	12	12	24	201
<i>Proposed Project Trip Generation</i>	--	93	304	397	261	171	432	4,948
Net Project Trip Generation (Project Minus Existing)		-138	273	135	219	-35	185	3,082
<b><i>Difference in Trip Generation (Net Alternative Minus Net Project)</i></b>		<b>225</b>	<b>-261</b>	<b>-36</b>	<b>-203</b>	<b>113</b>	<b>-90</b>	<b>-2,373</b>

Source: Linscott, Law & Greenspan Engineers, Keil Maberry, P.E., *Email Correspondence*, January 13, 2025.  
Notes: TSF = Thousand Square Feet; DU = Dwelling Units

Discretionary actions required under this alternative would include re-approval of the Master Plan. Unlike the proposed project, this alternative would not require a General Plan Amendment, Zone Change, Specific Plan Amendment, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement.



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### 7.5.1 Aesthetics

Under the No Project/Existing Zoning Alternative, the proposed master-planned residential community with 1,050 dwelling units, 3,692 square feet of retail uses, and 335,958 square feet of open space would not be developed. Additionally, the project's building massing and associated shading impacts would not occur. The proposed redevelopment of the Los Angeles Chargers practice field into a two-story commercial building would be of similar character as the existing on-site buildings and would result in minimal impacts in regard to building massing and shading due to reduced building height. This alternative would be of similar visual character as the existing buildings, surface parking lot, and landscaping on-site. Lighting conditions would also be similar to the existing on-site conditions.

Similar to the proposed project, this alternative would also be consistent with the General Plan goals and policies, and Municipal Code regulations that govern scenic quality. However, it is acknowledged that, compared to the proposed residential community, this alternative would not contribute to the City's beautification by enhancing bicycle and pedestrian paths and corridors, particularly along the Rail Trail (General Plan Objective CD-1A). Although this alternative would reinforce a sense of arrival into the City by providing additional landscaping along South Coast Drive, this alternative would not do so to the extent of the project, nor promote architecturally significant development (General Plan Policy CD-3.2). Nonetheless, this alternative would reinforce district scale, identity, and urban form at the project site (Objective CD-2A).

Thus, while this alternative would preserve the site's existing visual character and reduce the project's less than significant aesthetics/light and glare impacts, it would not enhance the scenic quality of the project area, including the Rail Trail, to the extent of the proposed project. As such, this alternative would neither be environmentally superior nor inferior to the proposed project for aesthetics.

### 7.5.2 Air Quality

Under the No Project/Existing Zoning Alternative, construction duration and scale would be significantly reduced, as this alternative would only construct one new two-story building. Redevelopment of the Los Angeles Chargers practice field would not require demolition, and grading associated with the new commercial office would be minimal as compared to the project. Further, due to the reduction in construction duration, the project's significant construction-related air quality impacts from DPM emissions generated during project construction due to a prolonged construction period (over eight years) would be significantly reduced under this alternative and the project's required mitigation (Mitigation Measure AQ-1) would not be required under this alternative. Last, the project's less than significant impacts pertaining to operational emissions, criteria air pollutants to sensitive receptors, and objectionable odors would be significantly reduced as well. This alternative would be environmentally superior to the proposed project for air quality.

### 7.5.3 Biological Resources

Under the No Project/Existing Zoning Alternative, development density would be reduced compared the proposed project. While no sensitive plants or wildlife species, sensitive habitats, or jurisdictional resources have been identified on-site, proposed project construction activities could still impact nesting birds and generate



## 7. Alternatives to the Proposed Project

fugitive dust that could affect wildlife. The potential construction-related impacts to nesting and migratory birds would be avoided under this alternative (as no trees would be removed) and the project's required mitigation (Mitigation Measure BIO-1) would no longer be required. Therefore, the No Project/ Existing Zoning Alternative would be environmentally superior to the proposed project for biological resources.

### 7.5.4 Cultural Resources

Under the No Project/Existing Zoning Alternative, buried resources may remain in areas where only minimal ground disturbance previously occurred. As such, construction of the new two-story commercial building could encounter native soil, which have the potential to support unknown buried archaeological resources, and mitigation would be required to minimize potential impacts in the event a non-tribal cultural resources is discovered. However, as this alternative would only disturb the southern portion of the project site. As the central and northern portions would not be disturbed, this alternative would reduce the potential to encounter unknown resources during grading activities. Therefore, the No Project/Existing Zoning Alternative would be environmentally superior to the proposed project for cultural resources.

### 7.5.5 Energy

As detailed in [Table 5.5-3, \*Project and County Electricity Consumption\*](#), the proposed project would result in a net increase of approximately 2,675 MWH of electricity, 73,202 therms of natural gas, and 395,096 gallons of operational automotive fuel compared to existing conditions.

Under the No Project/Existing Zoning Alternative, construction and operations of new a new two-story commercial office building would result in increased energy demand, but not to the extent of the project. Thus, the project's less than significant impacts on energy would be further reduced under this alternative. This alternative would be environmentally superior to the proposed project for energy.

### 7.5.6 Geology and Soils

Under the No Project/Existing Zoning Alternative, proposed grading activities would be limited to the southern portion of the project site and the proposed office building would be of a much smaller scale than that proposed by the project. Although the new office building would also experience seismic ground shaking or other geologic hazard, such risk office employees would be lower than that of the proposed project (given the project's increased development intensity). Nonetheless, the new commercial building would be meet the latest California Building Code requirements related to seismic or other geologic hazards, similar to the proposed project.

For paleontological resources, sediments at the project site are considered to have paleontological sensitivity increasing with depth or low-to-high sensitivity. Construction under this alternative could have the potential to support unknown buried paleontological resources, and mitigation (Mitigation Measure GEO-1) would be required to minimize potential impacts in the event paleontological resources are discovered. As the central and northern portions would not be disturbed, this alternative would reduce the potential to encounter unknown resources during grading activities. Therefore, the No Project/Existing Zoning Alternative would be environmentally superior to the proposed project for geology and soils.



## 7. Alternatives to the Proposed Project

### 7.5.7 Greenhouse Gas Emissions

As detailed in [Table 5.7-3, \*Long-term Operational Greenhouse Gas Emissions\*](#), at full buildout, the total project-related GHG emissions from direct and indirect sources combined would result in a net increase of 5,098.91 MTCO<sub>2</sub> per year over the existing conditions.

Under the No Project/Existing Zoning Alternative, development density and construction duration would be reduced, therefore reducing construction-related GHG emissions. It is noted that the greatest single source of project-related GHG emissions is mobile trips which is highly dependent on proposed land use(s). As shown in [Table 7-1](#), this alternative would generate fewer trips than the proposed project. As such, this alternative would generate proportionately less GHG emissions, and would not conflict with applicable GHG reduction plans, including the Connect SoCal 2024 and 2022 Scoping Plan. Thus, the project's less than significant impacts on GHG would be further reduced under this alternative. This alternative would be environmentally superior to the proposed project for GHG emissions.

### 7.5.8 Hazards and Hazardous Materials

Under the No Project/Existing Zoning Alternative, no structures would be demolished and the proposed areas of disturbance at the project site would be reduced. The potential for the release of asbestos-containing materials and lead-based paint from the building demolition would not occur with this alternative. Further, this alternative is not anticipated to require temporary lane closure during construction. As such the project's potential impacts to emergency access during construction would not occur and the project's mitigation (Mitigation Measure HAZ-1) would not be required. The No Project/Existing Zoning Alternative would be environmentally superior to the proposed project for hazards and hazardous materials.

### 7.5.9 Hydrology and Water Quality

Under the No Project/Existing Zoning Alternative, construction of the new two-story building could result in short-term water quality impacts associated with the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities. Due to the size of the site, this alternative would not be subject to the National Pollutant Discharge Elimination System (NPDES) permit requirements, but would still be required to comply with the City's Municipal Code requirements to meet the City's Municipal Separate Storm Sewer System (MS4) permit requirements. Similar to the proposed project, this alternative would be required to implement BMPs and LID for water quality maintenance. Last, this alternative would result in buildout of the Master Plan storm drain improvements for the project site. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for hydrology and water quality.

### 7.5.10 Land Use and Planning

The No Project/Existing Zoning Alternative would only require re-approval of the Master Plan. Unlike the proposed project, this alternative would not require a General Plan Amendment, Zone Change, Specific Plan Amendment, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement



## 7. Alternatives to the Proposed Project

approval. The existing land use designation and zoning for the project site would remain Industrial Park and Industrial Park (MP), respectively. However, this alternative would not allow new development to redevelop and enhance the site, establish a sense of place, provide community amenities, or place housing within close proximity to a major employment center. The proposed project also meets several General Plan policies more so than the existing development. For example, the project provides for the development of a mix and balance of housing opportunities, commercial services, and employment opportunities in Costa Mesa (General Plan Policy LU-1.1); develops compatible residential, commercial, and public uses within a single project (General Plan Policy LU-3.5); provides employment opportunities associated with future tenants of the retail spaces and provides new housing in close proximity to employment centers in a job-rich area of the City (General Plan Policy LU-6.10); and develops a mix of residential and retail uses within a site that is located adjacent to major corridors (e.g., I-405 and Sunflower Avenue) (General Plan Policy LU-6.19). Overall, since the No Project/Existing Zoning Alternative would not require any discretionary actions, other than reapproval of the Master Plan, this alternative would be environmentally superior to the proposed project for land use and planning.

### 7.5.11 Noise

Under the No Project/Existing Zoning Alternative, construction duration and scale would be significantly reduced, thereby reducing construction-related noise. Existing on-site operational noise associated with mechanical equipment (such as Heating, Ventilation, and Air Conditioning [HVAC] units), parking areas, and mobile noise generated by the new office building would be similar in character to the existing commercial office buildings on-site. Further, no outdoor activity noise that would be generated by the project would result from this alternative. Last, mobile noise would be reduced compared to that of the proposed project due to the reduced trips generated from this alternative; refer to [Table 7-1](#). Overall, the potential to impact nearby sensitive receptors from construction noise and vibration and operational noise (both mobile and stationary sources) would be reduced compared to the proposed project. Therefore, this alternative would be environmentally superior to the proposed project for noise.

### 7.5.12 Population and Housing

Under the No Project/Existing Zoning Alternative, population and employment growth would be minimal from a new commercial building in an existing planned development per Master Plan PA-08-09. Additionally, existing tenants and associated employees would remain in the existing offices. Buildout of this alternative is originally previously planned and would therefore be accounted for in existing population projections in planning documents such as General Plan and SCAG's *Regional Transportation Plan/Sustainable Communities Strategies* (RTP/SCS). However, the project would also introduce substantial housing near employment opportunities in Costa Mesa, including a minimum of 45 units as affordable housing (i.e., very low income units) to assist the City in meeting its RHNA requirements. As this alternative would not provide affordable housing, improve jobs/housing ratio, or assist the City in meeting its State mandated housing goals. As such, this alternative would be neither environmentally superior nor inferior to the proposed project for population and housing.





## 7. Alternatives to the Proposed Project

### 7.5.13 Public Services

Under the No Project/Existing Zoning Alternative, the proposed residential community would not be developed. Development of the new office building was considered as part of Master Plan PA-08-09 and, as such, potential increases in demand for public services, such as fire and police services, were accounted for in the existing development. Additionally, this alternative would not increase residents at the project site. There would be no increased demands for school, library, or recreational services. Further, the project's mitigation (Mitigation Measures PS-1 pertaining to the City's Automated License Plate Reader program) would not be necessary as part of this alternative. As no substantial increase in demand for public services would occur, this alternative would be environmentally superior to the proposed project for public services.

### 7.5.14 Recreation

Under the No Project/Existing Zoning Alternative, the new office building would not directly increase the population in the City, nor would this alternative substantially increase employment. No increased use of existing recreation facilities or construction of new recreational facilities is anticipated as a result of this alternative. However, the project's proposed trail enhancements and connections to the Rail Trail would not be developed. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for recreation.

### 7.5.15 Transportation

The No Project/Existing Zoning Alternative would develop one commercial office building and would result in less daily traffic than that considered for the proposed project. This alternative would not conflict with General Plan goals and policies pertaining to the City's transportation system. However, this alternative would not provide the bicycle and pedestrian connections to the Rail Trail (which are proposed by the project). As this alternative would result in net (an increase from existing condition as a result of implementation) 709 daily trips, this alternative would likely require similar mitigation as the proposed project in order to reduce such impacts. Similar to the proposed project, all proposed improvements would comply with City and Specific Plan design standards. Overall, this alternative may also result in significant VMT impacts due to additional trips, and mitigation (similar to the project's Mitigation Measure TRA-1) may be required. This alternative would be neither environmentally superior nor inferior to the proposed project for transportation.

### 7.5.16 Tribal Cultural Resources

Under the No Project/Existing Zoning Alternative, construction of the new two-story commercial building could encounter native soil, which have the potential to support unknown buried tribal cultural resources, and mitigation would be required. However, as this alternative would only disturb the southern portion of the project site. As the central and northern portions would not be disturbed, this alternative would reduce the potential to encounter unknown resources during grading activities. Therefore, the No Project/Existing Zoning Alternative would be environmentally superior to the proposed project for tribal cultural resources.



## 7. Alternatives to the Proposed Project

### 7.5.17 Utilities and Service Systems

The project site is currently served by existing utilities and service systems, which would continue to operate similar to existing conditions. The new office building was considered as part of the Master Plan PA-08-09, and as such, existing utilities at the project site were constructed to support this additional building. No additional utilities and service systems infrastructure would be required. As such, this alternative would be environmentally superior to the proposed project for utilities and service systems.

### 7.5.18 Conclusion

#### Ability to Reduce Environmental Impacts

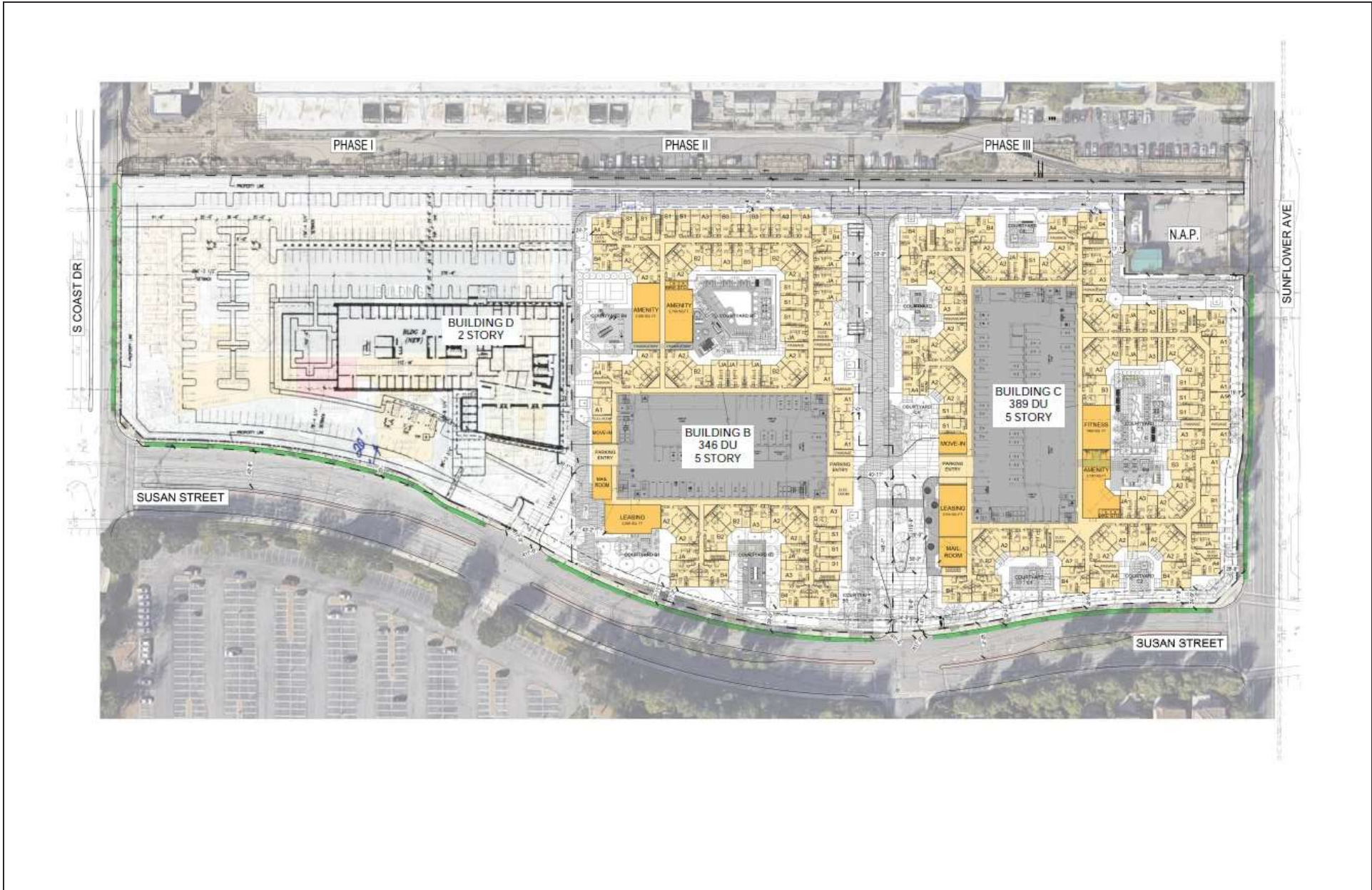
The No Project/Existing Zoning Alternative would significantly reduce or eliminate the proposed project's potentially significant impacts related to air quality, biological resources, geology and soils, hazards and hazardous materials, and public services to levels where mitigation measures are not required. In general, this alternative would lessen environmental impacts in the areas of energy, GHG, land use and planning, noise, and utilities and service systems. This alternative would result in similar impacts and still require mitigation in some topical areas to reduce impacts to less than significant levels for areas pertaining to aesthetics, biological resources, cultural resources, hydrology and water quality, population and housing, recreation, transportation, and tribal cultural resources.

#### Ability to Achieve Project Objectives

Under the No Project/Existing Zoning Alternative, a new commercial office building would be constructed and the existing commercial uses would continue to operate on-site; majority of the project objectives would not be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City's housing stock, including affordable housing (Objective No. 2); or improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5). Although the following would be implemented through enhanced landscaping along South Coast Drive, the following objectives would not be achieved to the extent of the project: provide enhanced recreation and open space opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); or enhance the visual attributes of the project site and surrounding area (Objective No. 7). This alternative may implement sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6) through construction of a new commercial use that comply with the latest building standards.

## 7.6 COMMERCIAL BUILDING ALTERNATIVE

The Commercial Building Alternative considers residential development of the proposed project at the northern and central portions of the project site, as well as development of a commercial office building (consistent with Final Master Plan PA-08-09 and Development Agreement DA-00-01), instead of Building A in the southern portion of the project site; refer to [Exhibit 7-2, \*Commercial Building Alternative\*](#). This alternative



Source: LPA, December 2024



## 7. Alternatives to the Proposed Project

would construct two new residential buildings (Buildings B and C) and a new 65,435-square foot commercial building (replacing the existing practice field) up to two stories in height. Under this alternative, 245 surface parking spaces would be installed in the southern portion of the project site to support the new office building, rather than the project’s 538 parking spaces proposed in a wrap around parking structure at Building A. The project’s proposed co-work/flex space would not be constructed. Also, the project’s retail space and the public plaza space would not be constructed. No public art would be installed. Overall, this alternative would result in the reduction in residential development (315 fewer residential units, 3,692 fewer square feet of retail space) and an increase in 65,435 square feet of office space (72 new employees). This alternative would still provide affordable units, but the number of units would be proportionally lower than the proposed project. These modifications would reduce associated vehicle trips. Refer to Table 7-2, Commercial Building Alternative Trip Generation.

**Table 7-2 Commercial Building Alternative Trip Generation**

Land Use	Units	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<i>Existing Uses</i>								
General Office Building								
Existing Office Buildings	172.176 TSF	231	31	262	42	206	248	1,866
<i>Alternative Uses</i>								
General Office Building								
Entitled Office Building	65.435 TSF	87	12	99	16	78	94	709
Multi-Family Housing (Mid-Rise) Not Close to Rail Transit								
Hive Live Apartments	735 units	63	209	272	175	112	287	3,337
Commercial Building Alternative Trip Generation	--	150	221	371	191	190	381	4,046
<b>Net Trip Generation (Commercial Building Alternative)</b>		<b>-81</b>	<b>190</b>	<b>109</b>	<b>149</b>	<b>-16</b>	<b>133</b>	<b>2,180</b>
<i>Proposed Project</i>								
Multi-Family Housing (Mid-Rise) Not Close to Rail Transit								
Hive Live Apartments	1,050 units	89	300	389	250	160	410	4,767
Strip Retail Plaza Less than 40,000 square feet								
Hive Retail	3.692 TSF	5	4	9	12	12	24	201
Proposed Project Trip Generation	--	93	304	397	261	171	432	4,948
<b>Net Trip Generation (Proposed Project)</b>		<b>-138</b>	<b>273</b>	<b>135</b>	<b>219</b>	<b>-35</b>	<b>185</b>	<b>3,082</b>
<b>Difference in Trip Generation (Commercial Building Alternative Compared to Proposed Project)</b>		<b>57</b>	<b>-83</b>	<b>-26</b>	<b>-70</b>	<b>19</b>	<b>-51</b>	<b>-902</b>

Source: Linscott, Law & Greenspan Engineers, Keil Maberry, P.E., *Email Correspondence*, January 13, 2025.  
Notes: TSF = Thousand Square Feet; DU = Dwelling Units

Discretionary actions required under this alternative would include a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement.



## 7. Alternatives to the Proposed Project

### 7.6.1 Aesthetics

Under the Commercial Building Alternative, the co-work/flex space, retail uses, public plazas, and public art would not be developed. Overall building massing would be similar to the proposed project, except the southern-most building, which would be reduced to a two-story office building. This alternative would be of similar visual character as the existing buildings, surface parking lot, and landscaping on-site at the southern portion of the project site, whereas the central and northern portions would be the same as the proposed project. Lighting conditions would also be similar to the proposed project, other than a reduction in visible lighting in the southern portion of the project site.

Similar to the proposed project, this alternative would also be consistent with the General Plan goals and policies, and Municipal Code regulations that govern scenic quality. Similar to the proposed project, this alternative would contribute to the City's beautification by enhancing bicycle and pedestrian paths and corridors, particularly along the Rail Trail (General Plan Objective CD-1A). This Alternative would also reinforce a sense of arrival into the City by providing additional landscaping along South Coast Drive; however, not to the extent of the project, since this alternative would not construct public plaza and retail space along Susan Street (General Plan Policy CD-3.2). Nonetheless, this alternative would reinforce district scale, identity, and urban form at the project site (Objective CD-2A).

Thus, while this alternative would reduce the project's less than significant aesthetics/light and glare impacts, it would not enhance the scenic quality of the project area to the extent of the proposed project. As such, this alternative would neither be environmentally superior nor inferior to the proposed project for aesthetics.

### 7.6.2 Air Quality

Under the Commercial Building Alternative, construction duration and scale would be slightly reduced, compared to the proposed project, due to the reduced development intensity in the southern portion of the site. As such, the project's potentially significant construction-related air quality impacts from DPM emissions generated during project construction due to a prolonged construction period (over eight years) would be slightly reduced under this alternative. Associated mitigation (Mitigation Measure AQ-1) may still be required to reduce DPM impact to a less than significant level. Last, the project's less than significant impacts pertaining to operational emissions, criteria air pollutants to sensitive receptors, and objectionable odors would only be slightly reduced. Since mobile source emissions is reduced (902 fewer trips; refer to [Table 7-2](#)), operational mobile emissions would be proportionately reduced. This alternative would be environmentally superior to the proposed project for air quality.

### 7.6.3 Biological Resources

Under the Commercial Building Alternative, the overall area of disturbance at the project site would be similar to the proposed project. While no sensitive plants or wildlife species, sensitive habitats, or jurisdictional resources have been identified on-site, proposed project construction activities could still impact nesting birds and generate fugitive dust that could affect wildlife. The potential construction-related impacts to nesting and migratory birds would be similar as the proposed project as on-site parking lot and parkway trees (nesting



## 7. Alternatives to the Proposed Project

habitat for many year-round and seasonal avian residents) would be impacted under this alternative, similar to the proposed project. The project's mitigation measure (Mitigation Measure BIO-1) to protect nesting birds during construction would still be required under this alternative. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for biological resources.

### 7.6.4 Cultural Resources

Similar to the proposed project, implementation of the Commercial Building Alternative would cover the same development area and would not have the potential to encounter historic resources on-site. Additionally, development under this alternative could encounter native soil and uncover unknown buried archaeological resources during earth-moving activities, and mitigation would still be required to minimize potential impacts in the event a resource is discovered. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for cultural resources.

### 7.6.5 Energy

Under the Commercial Building Alternative, proposed development intensity would be slightly reduced and, thus, associated electricity and natural gas demand would also proportionally be reduced. The 902 fewer daily trips associated with this alternative would reduce transportation-related fuel consumption. Thus, development under this alternative would result in reduced energy impacts, compared to the project's less than significant impacts. This alternative would be environmentally superior to the proposed project for energy.

### 7.6.6 Geology and Soils

Similar to the proposed project, implementation of the Commercial Building Alternative would cover the same development area, but development intensity at the southern portion of the site would be reduced. Future users of the proposed residential and commercial buildings may experience seismic ground shaking or other geologic hazard. Nonetheless, the new development would be meet the latest California Building Code requirements related to seismic or other geologic hazards. Further, as sediments in the project site are considered to have paleontological sensitivity increasing with depth or low-to-high sensitivity, construction under this alternative could have the potential to support unknown buried paleontological resources, and mitigation (Mitigation Measure GEO-1) would be required to minimize potential impacts in the event paleontological resources are discovered. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for geology and soils.

### 7.6.7 Greenhouse Gas Emissions

As detailed in [Table 5.7-3](#), at full buildout, the total project-related GHG emissions from direct and indirect sources combined would result in a net increase of 5,098.91 MTCO<sub>2</sub> per year over the existing conditions.

Under the Commercial Building Alternative, development intensity and construction duration would be slightly reduced; therefore, reducing construction-related GHG emissions. Further, as shown in [Table 7-2](#), this alternative would generate fewer (902) trips than the proposed project. It is noted that the greatest single source of project-related GHG emissions is mobile trips which is highly dependent on proposed land use(s). As such,



## 7. Alternatives to the Proposed Project

this alternative would generate slightly less GHG emissions compared to the proposed project, and would not conflict with applicable GHG reduction plans, including the Connect SoCal 2024 and 2022 Scoping Plan. Thus, development under this alternative would result in reduced GHG emissions impacts, compared to the project's less than significant impacts. This alternative would be environmentally superior to the proposed project for GHG emissions.

### 7.6.8 Hazards and Hazardous Materials

Implementation of the Commercial Building Alternative would cover the same development area as the proposed project. Similar impacts pertaining to the release of asbestos-containing materials and lead-based paint and impairment of emergency access or evacuation routes compared to the proposed project would result. As temporary lane closures may be required, mitigation (Mitigation Measure HAZ-1) would be required to minimize potential impacts to emergency access or evacuation routes. Operations of the residential and commercial office uses under this alternative could involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, the proposed land uses are not associated with uses that utilize, generate, store, or transport large quantities of hazardous materials, and these hazardous materials would be governed by existing local, State, and Federal regulations. Overall, construction and operational impacts would be similar to the proposed project. This alternative would be neither environmentally inferior nor superior to the proposed project for hazards and hazardous materials.

### 7.6.9 Hydrology and Water Quality

Under the Commercial Building Alternative, construction could result in short-term water quality impacts associated with the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities, similar to the proposed project. This alternative would similarly be subject to the NPDES permit requirements and would be required to obtain and Construction General Permit and implement a Stormwater Pollution Prevention Plan (SWPPP). A Water Quality Management Plan would still be required, which would include a variety of BMPs associated with water quality and stormwater treatment to reduce stormwater runoff and improve water quality treatment on-site during operations. Last, this alternative would result in similar storm drain improvements necessary to support development at the project site. Therefore, similar hydrology and water quality impacts for this alternative would result compared to the project's less than significant impacts. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for hydrology and water quality.

### 7.6.10 Land Use and Planning

The Commercial Building Alternative would require a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement. Given the reduction in residential development (315 fewer residential units, 3,692 fewer square feet of retail space) and an increase in 65,435 square feet of office space (compared to the proposed project), this alternative would still provide a broad range of business uses that generate employment to various income levels (General Plan Policy LU-6.10) to a greater extent than the proposed project.



## 7. Alternatives to the Proposed Project

Additionally, this alternative would also provide public space along South Coast Drive per General Plan Policy OSR-1.5, but not to the extent of the proposed project. Additionally, while this alternative would still provide affordable units, the number would be proportionally lower than the proposed project and therefore, slightly fewer affordable housing units would be provided under this alternative. This could lead to the City meeting the housing goals to a slightly lesser extent than the project. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for land use and planning.

### 7.6.11 Noise

Under the Commercial Building Alternative, construction duration and scale would be slightly reduced due to the reduction in development intensity at the southern portion of the project site, thereby reducing construction-related noise. On-site noise associated with mechanical equipment (such as HVAC units), parking areas, outdoor activities, and mobile noise would also be slightly reduced, compared to the proposed project. It should be noted that reduced vehicle trips (902 less trips) would proportionally reduce operational mobile noise impacts as well. Overall, the potential to impact nearby sensitive receptors from construction noise and vibration and operational noise (stationary sources) would be fairly similar to the proposed project, with mobile noise sources lessened. Therefore, this alternative would be environmentally superior to the proposed project for noise.

### 7.6.12 Population and Housing

Under the Commercial Building Alternative, buildout would result in 315 fewer residential units, compared to the proposed project. Utilizing the City's average household size of 2.52, this alternative would result in approximately 794 fewer residents from the reduced residential units, without accounting for the minimal indirect population increase associated with the proposed two-store commercial office building.<sup>1</sup>

The reduced population and housing associated with this alternative would be consistent with the City's growth projections identified in the SCAG's RTP/SCS. However, this alternative would provide fewer residential opportunities, including affordable housing, near major employment centers which thereby improve the City's jobs-housing ratio and contributing towards the City's State-mandated RHNA housing goals to a lesser extent than the proposed project. Overall, weighing the benefits of less unplanned population growth in the project area with the drawbacks of meeting the City's RHNA requirements and improving the City's jobs-housing ratio to a lesser extent, this alternative would be neither environmentally superior nor inferior to the proposed project for population and housing.

### 7.6.13 Public Services

Under the Commercial Building Alternative, buildout would result in 315 fewer residential units, 3,692 fewer square feet of retail space, and an increase in 65,435 square feet of office space (compared to the proposed project). As such, potential increases in demand for public services, such as fire and police services could still occur, although to a lesser extent. The project's potentially significant impact to police services and mitigation (Mitigation Measures PS-1) would still be required under this alternative. Additionally, future residents would

<sup>1</sup> California Department of Finance, *E5 City/County Population and Housing Estimates*, January 1, 2024.





## 7. Alternatives to the Proposed Project

increase demand for school, library, or recreational services, but to a lesser extent as the proposed project. Overall, under this alternative, significant impact may occur to public services (i.e., police service) and mitigation measure (Mitigation Measure PS-1) would still be required, similar to the proposed project. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for public services.

### 7.6.14 Recreation

Under the Commercial Building, buildout would result in 315 fewer residential units, 3,692 fewer square feet of retail space, and an increase in 65,435 square feet of office space (compared to the proposed project). As such, increased use of existing recreation facilities or construction of new recreational facilities is anticipated due to the population increase as a result of this alternative; however, to a lesser extent than the project. However, the proposed public plaza would not be constructed under this alternative. Similar to the proposed project, this alternative would result in less than significant impacts to recreation. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for recreation.

### 7.6.15 Transportation

The Commercial Building Alternative would result in reduced development intensity compared to the proposed project. This alternative would not conflict with General Plan goals and policies pertaining to the City's transportation system. This alternative would provide similar bicycle and pedestrian connections to the Rail Trail as the proposed project. Although this alternative would result in 902 fewer daily trips, this alternative would likely require similar mitigation as the proposed project regarding vehicle miles traveled (given this alternative would still exceed the City's screening threshold of 110 daily trips). Similar to the proposed project, all proposed improvements would comply with City and Specific Plan design standards. Overall, this alternative may also result in significant VMT impacts due to additional trips, and mitigation (similar to the project's Mitigation Measure TRA-1) may be required. This alternative would be neither environmentally superior nor inferior to the proposed project for transportation.

### 7.6.16 Tribal Cultural Resources

Similar to the proposed project, implementation of the Commercial Building Alternative would cover the same development area as the proposed project. As such, development under this alternative could encounter native soil and uncover unknown tribal cultural resources during earth-moving activities, and mitigation would be required to minimize potential impacts in the event a tribal cultural resource is discovered. Therefore, this alternative would neither be environmentally superior nor inferior to the proposed project for tribal cultural resources.

### 7.6.17 Utilities and Service Systems

Under the Commercial Building Alternative, buildout would result in 315 fewer residential units, 3,692 fewer square feet of retail space, and an increase in 65,435 square feet of office space (compared to the proposed project). Therefore, this alternative would potentially generate proportionately less wastewater, water demand, solid waste, and electricity and gas demands. This alternative would similarly install appropriate utility



## 7. Alternatives to the Proposed Project

connections, as well as stormwater BMPs. As such, the project's less than significant impacts would be similar under this alternative. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for utilities and service systems.

### 7.6.18 Conclusion

#### Ability to Reduce Environmental Impacts

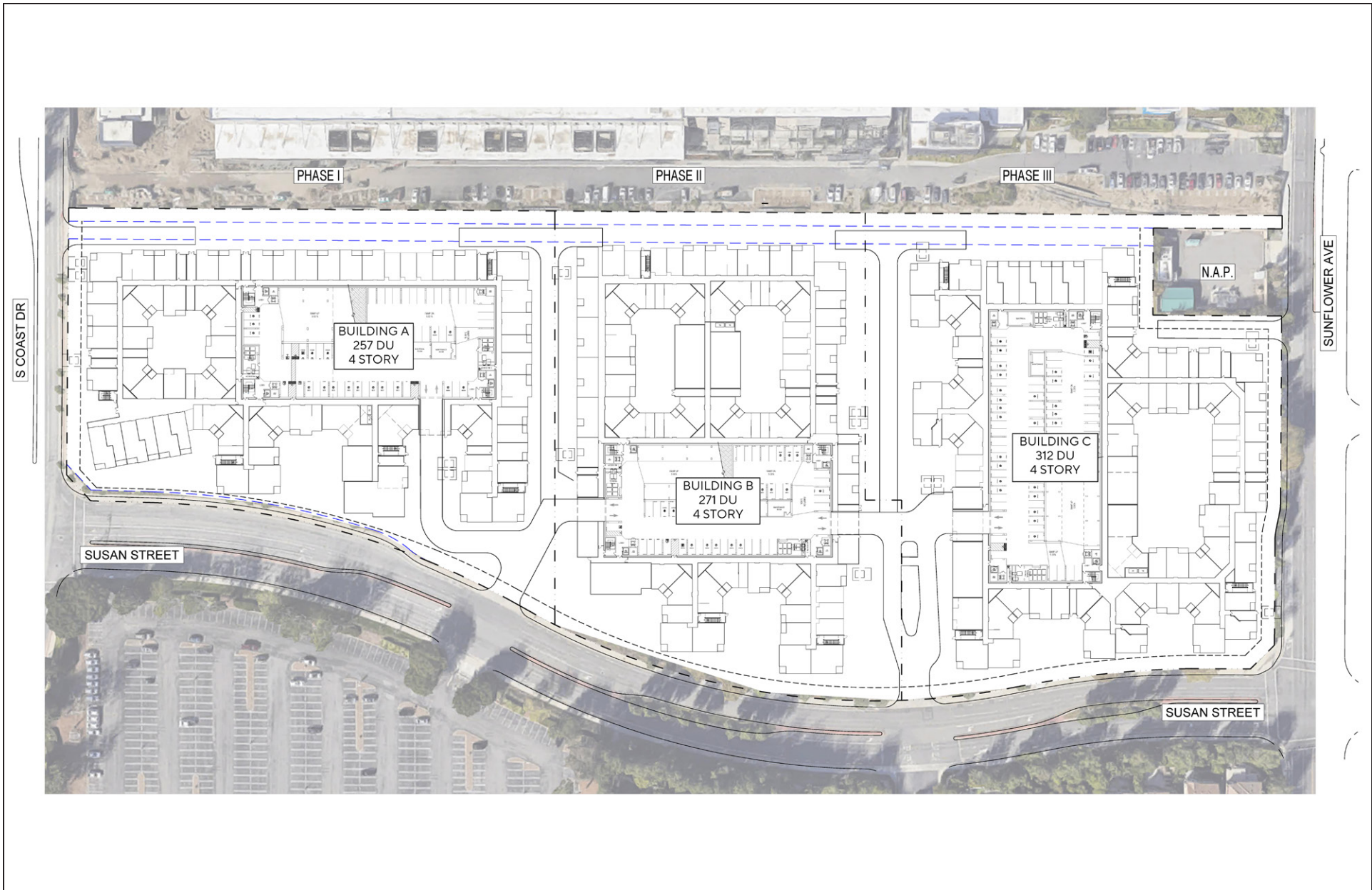
The Commercial Building Alternative would not significantly reduce or eliminate any of the proposed project's potentially significant impacts to levels where mitigation measures are not required. This alternative would result in similar impacts and still require mitigation in some topical areas to reduce impacts to less than significant levels, aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems. The project's less than significant impacts pertaining to energy, greenhouse gas emissions, and noise would be slightly reduced, but would still occur.

#### Ability to Achieve Project Objectives

Under the Commercial Building Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would provide a mix of residential and commercial/office units in a master-planned setting (Objective No. 1), enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3) and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).

## 7.7 REDUCED DEVELOPMENT INTENSITY ALTERNATIVE

The Reduced Development Intensity Alternative was selected to avoid or substantially lessen the proposed project's impacts related to air quality, greenhouse gas emissions, and energy. This alternative assumes a 20 percent reduction in residential units and elimination of the 3,692-square foot retail space and public plaza space. Similar to the proposed project, and as shown on [Exhibit 7-3, \*Reduced Development Intensity Alternative\*](#), a total of 840 residential units would be constructed in three four-story buildings. The footprint of the three buildings would be slightly reduced compared to the proposed project. This alternative would still provide affordable units, but the number of units would be proportionally lower than the proposed project. Given the reduction in residential units, parking on-site would also be reduced by a proportional amount while still meeting the Specific Plan parking requirements.



Source: A0, December 2024



## 7. Alternatives to the Proposed Project

Under this alternative, the project’s proposed co-work/flex space would not be constructed. Also, the project’s retail space and the public plaza space would not be constructed. No public art would be installed. Overall, this alternative would result in the reduction in residential development (210 fewer residential units, 3,692 fewer square feet of retail space). Overall, the reduction in residential and non-residential development would reduce associated vehicle trips as well. Refer to Table 7-3, *Reduced Development Intensity Alternative Trip Generation*.

**Table 7-3 Reduced Development Intensity Alternative Trip Generation**

Land Use	Units	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<i>Existing Uses</i>								
General Office Building								
Existing Office Buildings	172.176 TSF	231	31	262	42	206	248	1,866
<i>Alternative Uses</i>								
Multi-Family Housing (Mid-Rise) Not Close to Rail Transit								
Hive Live Apartments	840 units	72	239	311	200	128	328	3,814
<i>Reduced Density Alternative Trip Generation</i>	--	72	239	311	200	128	328	3,814
<b>Net Trip Generation (Reduced Density Alternative)</b>		<b>-159</b>	<b>208</b>	<b>49</b>	<b>158</b>	<b>-78</b>	<b>80</b>	<b>1,948</b>
<i>Proposed Project</i>								
Multi-Family Housing (Mid-Rise) Not Close to Rail Transit								
Hive Live Apartments	1,050 units	89	300	389	250	160	410	4,767
Strip Retail Plaza Less than 40,000 square feet								
Hive Retail	3,692 TSF	5	4	9	12	12	24	201
<i>Proposed Project Trip Generation</i>	--	93	304	397	261	171	432	4,948
<b>Net Trip Generation (Proposed Project)</b>		<b>-138</b>	<b>273</b>	<b>135</b>	<b>219</b>	<b>-35</b>	<b>185</b>	<b>3,082</b>
<b><i>Difference in Trip Generation (Reduced Density Alternative Compared to Proposed Project)</i></b>		<b>-21</b>	<b>-65</b>	<b>-86</b>	<b>-61</b>	<b>-43</b>	<b>-104</b>	<b>-1,134</b>

Source: Linscott, Law & Greenspan Engineers, Keil Maberry, P.E., *Email Correspondence*, November 25, 2024.  
Notes: TSF = Thousand Square Feet; DU = Dwelling Units

Discretionary actions required under this alternative would be similar to the proposed project, and would include a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement.

### 7.7.1 Aesthetics

Under the Reduced Development Intensity Alternative, the project’s building massing and associated shading impacts would be slightly reduced due to the lower building heights (i.e., four stories instead of the project’s five stories). This alternative would be of similar visual character as the proposed project. Lighting conditions would also be similar to the proposed project.



## 7. Alternatives to the Proposed Project

Similar to the proposed project, this alternative would be consistent with the General Plan goals and policies, and Municipal Code regulations that govern scenic quality. Similar to the proposed project, this alternative would contribute to the City's beautification by enhancing bicycle and pedestrian paths and corridors, particularly along the Rail Trail (General Plan Objective CD-1A). This Alternative would also reinforce a sense of arrival into the City by providing additional landscaping; however, not to the extent of the project, since this alternative would not construct public plaza and retail space along Susan Street (General Plan Policy CD-3.2). Nonetheless, this alternative would reinforce district scale, identity, and urban form at the project site (Objective CD-2A).

Thus, while this alternative would reduce the project's less than significant aesthetics/light and glare impacts, it would not enhance the scenic quality of the project area to the extent of the proposed project. As such, this alternative would neither be environmentally superior nor inferior to the proposed project for aesthetics.

### 7.7.2 Air Quality

Under the Reduced Development Intensity Alternative, construction duration and scale would be slightly reduced, compared to the proposed project, due to the reduced building heights. Since this alternative would still require a prolonged construction period of over eight years, this alternative's potentially significant construction-related air quality impacts from DPM emissions generated during project construction would be the same as the proposed project. Associated mitigation (Mitigation Measure AQ-1) would still be required to reduce DPM impact to a less than significant level. Last, the project's less than significant impacts pertaining to operational emissions, criteria air pollutants to sensitive receptors, and objectionable odors would overall remain the same as the proposed project. However, since mobile source emissions would be reduced (1,134 fewer trips; refer to [Table 7-2](#)), operational mobile emissions would be proportionately reduced. As such, this alternative would be environmentally superior to the proposed project for air quality.

### 7.7.3 Biological Resources

Under the Reduced Development Intensity Alternative, the overall area of disturbance at the project site would be similar to the proposed project. While no sensitive plants or wildlife species, sensitive habitats, or jurisdictional resources have been identified on-site, proposed project construction activities could still impact nesting birds and generate fugitive dust that could affect wildlife. The potential construction-related impacts to nesting and migratory birds would be similar as the proposed project as on-site parking lot and parkway trees (nesting habitat for many year-round and seasonal avian residents) would be impacted under this alternative, similar to the proposed project. The project's mitigation measure (Mitigation Measure BIO-1) to protect nesting birds during construction would still be required under this alternative. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for biological resources.

### 7.7.4 Cultural Resources

Similar to the proposed project, implementation of the Reduced Development Intensity Alternative would cover the same development area and would not have the potential to encounter historic resources on-site. Additionally, development under this alternative could encounter native soil and uncover unknown buried



## 7. Alternatives to the Proposed Project

archaeological resources during earth-moving activities, and mitigation would still be required to minimize potential impacts in the event a resource is discovered. Therefore, this alternative would neither be environmentally superior nor inferior to the proposed project for cultural resources.

### 7.7.5 Energy

Under the Reduced Development Intensity Alternative, proposed development intensity would be reduced proportionately (20 percent) and, thus, associated electricity and natural gas demand would also proportionally be reduced. The 1,134 fewer daily trips associated with this alternative would reduce transportation-related fuel consumption as well. Thus, development under this alternative would result in reduced energy impacts, compared to the project's less than significant impacts. This alternative would be environmentally superior to the proposed project for energy.

### 7.7.6 Geology and Soils

Similar to the proposed project, implementation of the Reduced Development Intensity Alternative would cover the same development are, but development intensity throughout the site would be reduced. Future users of the proposed residential buildings may experience seismic ground shaking or other geologic hazard. Nonetheless, the new development would be meet the latest California Building Code requirements related to seismic or other geologic hazards similar to the proposed project. Further, as sediments in the project site are considered to have paleontological sensitivity increasing with depth or low-to-high sensitivity, construction under this alternative could have the potential to support unknown buried paleontological resources, and mitigation (Mitigation Measure GEO-1) would be required to minimize potential impacts in the event that paleontological resources are discovered. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for geology and soils.

### 7.7.7 Greenhouse Gas Emissions

As detailed in [Table 5.7-3](#), at full buildout, the total project-related GHG emissions from direct and indirect sources combined would result in a net increase of 5,098.91 MTCO<sub>2</sub> per year over the existing conditions.

Under the Reduced Development Intensity Alternative, development intensity and construction duration would be proportionately reduced; therefore, reducing construction-related GHG emissions. Further, as shown in [Table 7-2](#), this alternative would generate fewer (1,134) trips than the proposed project. It is noted that the greatest single source of project-related GHG emissions is mobile trips which is highly dependent on proposed land use(s). As such, this alternative would generate less GHG emissions compared to the proposed project, and would not conflict with applicable GHG reduction plans, including the Connect SoCal 2024 and 2022 Scoping Plan. Thus, development under this alternative would result in reduced GHG emissions impacts, compared to the project's less than significant impacts. This alternative would be environmentally superior to the proposed project for GHG emissions.



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### 7.7.8 Hazards and Hazardous Materials

Implementation of the Reduced Development Intensity Alternative would cover the same development area as the proposed project. Similar impacts pertaining to the release of asbestos-containing materials and lead-based paint and impairment of emergency access or evacuation routes compared to the proposed project would result. As temporary lane closures may be required, mitigation (Mitigation Measure HAZ-1) would be required to minimize potential impacts to emergency access or evacuation routes. Operations of the residential uses under this alternative could involve the use of small amounts of hazardous materials, such as cleansers, paints, fertilizers, and pesticides for cleaning and maintenance purposes. However, the proposed land uses are not associated with uses that utilize, generate, store, or transport large quantities of hazardous materials, and these hazardous materials would be governed by existing local, State, and Federal regulations. Overall, construction and operational impacts would be similar to the proposed project. This alternative would be neither environmentally inferior nor superior to the proposed project for hazards and hazardous materials.

### 7.7.9 Hydrology and Water Quality

Under the Reduced Development Intensity Alternative, construction could result in short-term water quality impacts associated with the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities, similar to the proposed project. This alternative would similarly be subject to the NPDES permit requirements and would be required to obtain and Construction General Permit and implement a SWPPP. A Water Quality Management Plan would still be required, which would include a variety of BMPs associated with water quality and stormwater treatment to reduce stormwater runoff and improve water quality treatment on-site during operations. Last, this alternative would result in similar storm drain improvements necessary to support development at the project site. Therefore, similar hydrology and water quality impacts for this alternative would result compared to the project's less than significant impacts. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for hydrology and water quality.

### 7.7.10 Land Use and Planning

The Reduced Development Intensity Alternative would require a General Plan Amendment, Zone Change, Specific Plan Amendment, Master Plan approval, Tentative Tract Map approval, Development Agreement approval, and Density Bonus Agreement. Given the reduction in residential development (210 fewer residential units and 3,692 square feet less of retail space compared to the proposed project), this alternative would still provide affordable units, although the number would be proportionally lower than the proposed project and therefore, fewer affordable housing units would be provided under this alternative. This could lead to the City meeting the housing goals to a lesser extent than the project. However, this alternative would not provide a broad range of business uses that generate employment to various income levels (General Plan Policy LU-6.10). Additionally, this alternative would not provide public space per General Plan Policy OSR-1.5, but not to the extent of the proposed project. Overall, this alternative would be neither environmentally superior nor inferior to the proposed project for land use and planning.



## 7. Alternatives to the Proposed Project

### 7.7.11 Noise

Under the Reduced Development Intensity Alternative, construction duration and scale would be slightly reduced due to the reduction in building height, thereby slightly reducing construction-related noise. On-site noise associated with mechanical equipment (such as HVAC units), parking areas, and outdoor activities would be similar to the proposed project. However, the reduced vehicle trips (1,134 less trips) would proportionally reduce operational mobile noise impacts as well. Overall, the potential to impact nearby sensitive receptors from construction noise and vibration and operational noise (stationary sources) would be fairly similar to the proposed project, with mobile noise sources lessened. Therefore, this alternative would be environmentally superior to the proposed project for noise.

### 7.7.12 Population and Housing

Under the Reduced Development Intensity Alternative, buildout would result in 210 fewer residential units. Utilizing the City's average household size of 2.52, this alternative would result in approximately 530 fewer residents from the reduced residential units.<sup>2</sup> As the retail space has been eliminated, no jobs would be generated under this alternative.

The reduced population and housing associated with this alternative would be consistent with the City's growth projections identified in the SCAG's RTP/SCS. However, this alternative would provide fewer residential opportunities, including affordable housing, near major employment centers which thereby improve the City's jobs-housing ratio and contributing towards the City's State-mandated RHNA housing goals to a lesser extent than the proposed project. Overall, weighing the benefits of less unplanned population growth in the project area with the drawbacks of meeting the City's RHNA requirements and improving the City's jobs-housing ratio to a lesser extent, this alternative would be neither environmentally superior nor inferior to the proposed project for population and housing.

### 7.7.13 Public Services

Under the Reduced Development Intensity Alternative, buildout would result in 210 fewer residential units, 530 fewer residents, and no new employees on-site. As such, potential increases in demand for public services, such as fire and police services could still occur, although to a lesser extent than the project. The project's potentially significant impact to police services and mitigation (Mitigation Measures PS-1) would still be required under this alternative. Additionally, future residents would increase demand for school, library, or recreational services, but to a lesser extent as the proposed project. Overall, under this alternative, significant impact may occur to public services (i.e., police service) and mitigation measure (Mitigation Measure PS-1) would still be required, similar to the proposed project. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for public services.

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<sup>2</sup> California Department of Finance, *E5 City/County Population and Housing Estimates*, January 1, 2024.





## 7. Alternatives to the Proposed Project

### 7.7.14 Recreation

Under the Commercial Building, buildout would result in 210 fewer residential units, approximately 530 fewer residents, and no new residents. As such, increased use of existing recreation facilities or construction of new recreational facilities is anticipated due to the population increase as a result of this alternative; however, to a lesser extent than the project. However, the proposed public plaza would not be constructed under this alternative. Similar to the proposed project, this alternative would result in less than significant impacts to recreation. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for recreation.

### 7.7.15 Transportation

The Reduced Development Intensity Alternative would result in reduced development intensity compared to the proposed project. This alternative would not conflict with General Plan goals and policies pertaining to the City's transportation system. This alternative would provide similar bicycle and pedestrian connections to the Rail Trail as the proposed project. Although this alternative would result in 1,134 fewer daily trips, this alternative would likely require similar mitigation as the proposed project regarding vehicle miles traveled (given this alternative would still exceed the City's screening threshold of 110 daily trips). Similar to the proposed project, all proposed improvements would comply with City and Specific Plan design standards. Overall, this alternative may also result in significant VMT impacts due to additional trips, and mitigation (similar to the project's Mitigation Measure TRA-1) may be required. This alternative would be neither environmentally superior nor inferior to the proposed project for transportation.

### 7.7.16 Tribal Cultural Resources

Similar to the proposed project, implementation of the Reduced Development Intensity Alternative would cover the same development area as the proposed project. As such, development under this alternative could encounter native soil and uncover unknown tribal cultural resources during earth-moving activities, and mitigation would be required to minimize potential impacts in the event a tribal cultural resource is discovered. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for tribal cultural resources.

### 7.7.17 Utilities and Service Systems

Under the Reduced Development Intensity Alternative, buildout would result in 210 fewer residential units, with retail uses eliminated. Therefore, this alternative would potentially generate proportionately less wastewater, water demand, solid waste, and electricity and gas demands. This alternative would similarly install appropriate utility connections, as well as stormwater BMPs. As such, the project's less than significant impacts would be similar under this alternative. Therefore, this alternative would be neither environmentally superior nor inferior to the proposed project for utilities and service systems.



## 7. Alternatives to the Proposed Project

### 7.7.18 Conclusion

#### Ability to Reduce Environmental Impacts

The Reduced Development Intensity Alternative would not significantly reduce or eliminate any of the proposed project's potentially significant impacts to levels where mitigation measures are not required. This alternative would result in similar impacts and still require mitigation in some topical areas to reduce impacts to less than significant levels, aesthetics, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems. The project's less than significant impacts pertaining to air quality, energy, greenhouse gas emissions, and noise would be reduced, but would still occur.

#### Ability to Achieve Project Objectives

Under the Reduced Development Intensity Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3), and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).

## 7.8 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 7-4, *Comparison of Alternatives*, summarizes the comparative analysis presented above (i.e., the alternatives compared to the proposed project). Review of Table 7-4 indicates that both of the "no project" alternatives, the No Project/No Development Alternative and the "No Project/Existing Zoning" Alternative are the environmentally superior alternatives, as they would avoid or lessen most of the project's less than significant environmental impacts. According to CEQA Guidelines Section 15126.6(e), "if the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." Accordingly, both build alternatives considered, the Commercial Building Alternative and the "Reduced Development Intensity" Alternative are considered environmentally superior to the proposed project.



## 7. Alternatives to the Proposed Project

**Table 7-4 Comparison of Alternatives**

Environmental Topical Areas/Sections	Proposed Project	No Project/No Development Alternative	No Project/Existing Zoning Alternative	Commercial Building Alternative	Reduced Development Intensity Alternative
Aesthetics	LTS	✓	=	=	=
Air Quality	LTS/M	✓	✓	✓	✓
Biological Resources	LTS/M	✓	✓	=	=
Cultural Resources	LTS/M	✓	✓	=	=
Energy	LTS	✓	✓	✓	✓
Geology and Soils	LTS/M	✓	✓	=	=
Greenhouse Gas Emissions	LTS	✓	✓	✓	✓
Hazards and Hazardous Materials	LTS/M	✓	✓	=	=
Hydrology and Water Quality	LTS/M	=	=	=	=
Land Use and Planning	LTS	✓	✓	=	=
Noise	LTS	✓	✓	✓	✓
Population and Housing	LTS	=	=	=	=
Public Services	LTS/M	✓	✓	=	=
Recreation	LTS	✓	=	=	=
Transportation	LTS/M	=	=	=	=
Tribal Cultural Resources	LTS/M	✓	✓	=	=
Utilities and Service Systems	LTS	✓	✓	=	=

Notes: LTS = Less Than Significant; LTS/M = Less Than Significant With Mitigation; **S/U = Significant and Unavoidable**

▲ Indicates an impact that is greater than the project (environmentally inferior).

✓ Indicates an impact that is less than the project (environmentally superior).

= Indicates an impact that is equal to the project (neither environmentally superior nor inferior).

\* Indicates an impact that would eliminate one or more significant and unavoidable impacts associated with the project.

As summarized in [Section 7.4.18](#), no development would occur on-site under the No Project/No Development Alternative. The existing commercial uses would continue to operate on-site and none of the project objectives would be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City’s housing stock, including affordable housing (Objective No. 2); provide enhanced recreation and open space opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5); implement sustainable development practices (Objective No. 6); or enhance the visual attributes of the project site and surrounding area (Objective No. 7).

As summarized in [Section 7.5.18](#), under the No Project/Existing Zoning Alternative, a new commercial office building would be constructed, and the existing commercial uses would continue to operate on-site; majority of the project objectives would not be achieved under this alternative. Specifically, this alternative would not redevelop the site with a mix of residential units and accessory/ancillary retail uses in a master-planned setting (Objective No. 1); increase the City’s housing stock, including affordable housing (Objective No. 2); or improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5). Although the following would be implemented through enhanced landscaping along South Coast Drive, the following objectives would not be achieved to the extent of the project: provide enhanced recreation and open space opportunities (Objective No. 3); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); or enhance the visual attributes



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of the project site and surrounding area (Objective No. 7). This alternative may implement sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6) through construction of a new commercial use that comply with the latest building standards.

The Commercial Building Alternative considers residential development of the proposed project at the northern and central portions of the project site, as well as development of a new 65,435-square foot commercial office building (consistent with Final Master Plan PA-08-09 and Development Agreement DA-00-01), instead of Building A in the southern portion of the project site. As summarized in [Section 7.6.18](#), under the Commercial Building Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would provide a mix of residential and commercial/office units in a master-planned setting (Objective No. 1), enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3) and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).

The Reduced Development Intensity Alternative would construct a total of 840 residential units in three four-story buildings (a 20 percent reduction in residential units) and eliminate the 3,692-square foot retail space and public plaza space. The footprint of the three buildings would be slightly reduced compared to the proposed project. As summarized in [Section 7.7.18](#), under the Reduced Development Intensity Alternative, the proposed project's basic objectives would be achieved, but not to the extent of the proposed project. Specifically, this alternative would increase the City's housing stock, including affordable housing (Objective No. 2); facilitate alternative modes of travel through enhancing pedestrian and bicycle infrastructure and pedestrian-scale transit improvements such as the Rail Trail (Objective No. 4); and incorporate sustainable development practices that address energy efficiency, support active transportation, and comply with green building code standards (Objective No. 6). However, although this alternative would enhance the visual attributes of the project site and surrounding area (Objective No. 7), provide enhanced recreation and open space opportunities (Objective No. 3), and improve jobs-housing ratio and reduce vehicle miles traveled (Objective No. 5), this would be to a lesser extent than the proposed project. Also, this alternative would not provide any on-site accessory/ancillary retail uses to support the new residential community (Objective No. 1).



## Chapter 8.0 Effects Found Not to be Significant



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## 8. Effects Found Not to Be Significant

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CEQA provides that an EIR shall focus on the significant effects on the environment and discuss potential environmental effects with emphasis in proportion to their severity and probability of occurrence. During preparation of this EIR, the City conducted an analysis of the project's effect on specific environmental topic areas, included as part of the Environmental Checklist form presented in CEQA Guidelines Appendix G. Through the course of this evaluation, certain impacts were identified as "less than significant" or "no impact" due to the inability of a project of this scope and nature to yield such impacts or the absence of project characteristics producing effects of this type. These effects are not required to be included in the EIR's primary environmental analysis sections (Sections 5.1 through 5.17). In accordance with CEQA Guidelines Section 15128, the following discussion includes a brief description of impacts found to be less than significant. The lettered analyses under each topical area directly correspond to their order in CEQA Guidelines Appendix G.

### 8.1 AESTHETICS

#### **AE-1 Have a substantial adverse effect on a scenic vista?**

**No Impact.** The City's physical setting allows for views of scenic resources including the Pacific Ocean, Santa Ana River, Upper Newport Bay, and Santa Ana Mountains. Views of these resources are afforded at specific public locations within the City that provide uninterrupted, large expanse views of undeveloped land and these resources. According to the General Plan EIR, such locations include Fairview Park, Talbert Regional Park and its adjacent wildlife refuge, and the golf courses, parks, and ballfields in the City. These specific locations are not located within views of the project site.

The project site is located over 4.5 miles inland of the Pacific Ocean and over ten miles southwest of the Santa Ana Mountains. Views of the Pacific Ocean and Santa Ana Mountains are not afforded from the project site under existing conditions due to intervening topography, existing structures, and vegetation. Although the project site is located approximately one mile east of the Santa Ana River, there are no visual resources at this segment under existing conditions. No impact would occur in this regard.

#### **AE-2 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?**

**No impact.** The proposed project is not adjacent to or near a State designated scenic highway.<sup>1</sup> The closest officially designated State scenic highway is a portion of State Route 91 (SR-91), located over ten miles northeast

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<sup>1</sup> California Department of Transportation, *California State Scenic Highway System Map*, <https://www.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacc>, accessed July 11, 2024.



## 8. Effects Found Not to Be Significant

of the project site. Views of the project site are not afforded from SR-91 due to intervening topography, structures, and vegetation. No impact would occur in this regard.

### 8.2 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:

**AG-1 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**No Impact.** According to the California Department of Conservation, the project site is not identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland).<sup>2</sup> Although the closest identified farmland (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland), the Segerstrom Home Ranch property, is located approximately 193 feet southeast of the project site, project implementation would have no impacts on the property. As such, project implementation would not convert farmland to a non-agricultural use. No impact would occur in this regard.

**AG-2 Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The project site is zoned Planned Development Industrial (PDI) within a Special Area (North Costa Mesa Specific Plan) and is not covered under a Williamson Act contract.<sup>3</sup> Therefore, project implementation would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur in this regard.

**AG-3 Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**

**No Impact.** The project site is zoned PDI, and is not associated with a zone pertaining to forestland or timberland production. Thus, project implementation would not conflict with existing zone for, or cause

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<sup>2</sup> California Department of Conservation, *California Important Farmland Finder*, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed April 10, 2024.

<sup>3</sup> California Department of Conservation, *California Williamson Act Enrollment Finder*, *California Williamson Act Enrollment 2022*, <https://gis.conservation.ca.gov/portal/home/webmap/viewer.html?webmap=18f7488c0a9d4d299f5e9c33b312f312>, accessed April 10, 2024.





## 8. Effects Found Not to Be Significant

rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impact would occur in this regard.

### **AG-4 Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** Refer to Impact AG-3. No impacts would occur in this regard.

### **AG-5 Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact.** Refer to Impacts AG-1 through AG-4. No impacts would occur in this regard.

## 8.3 BIOLOGICAL RESOURCES

### **B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

**No Impact.** According to the *Results of a Biological Resources Assessment for the Hive Live Project – City of Costa Mesa, Orange County, California* (Biological Resources Assessment), prepared by Michael Baker International (Michael Baker), dated June 19, 2024, the project site does not contain any riparian habitat or other sensitive natural community; refer to [Appendix D, \*Biological Resources Assessment\*](#). Therefore, the project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impacts would occur in this regard.

### **B-3 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.** According to the Biological Resources Assessment, the project site is developed and does not contain any jurisdictional or potentially jurisdictional features, or State or Federally protected wetlands; refer to [Appendix D](#). Therefore, project implementation would not have a substantial adverse effect on State or Federally protected wetlands. No impacts would occur in this regard.

### **B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**Less Than Significant Impact.** Under Municipal Code Title 15, Chapter V, *Parkway Trees*, the City has adopted several ordinances that pertain to the planting and removal of trees within the public right-of-way. Implementation of the proposed project would require the removal and replacement of existing street trees within the Sunflower Avenue, Susan Street, and South Coast Drive public right-of-way. As such, the proposed project would be required to obtain a permit for tree installation as required by Municipal Code Section 15-127, *Permit procedure*. Additionally, the proposed trees within the public right-of-way would be required to adhere to the City's Street Tree Master Plan regarding streetscape design guidelines (Municipal Code Section 15-130, *Street*



## 8. Effects Found Not to Be Significant

*trees required*, and Municipal Code Section 15-134, *Street tree master plan*). Following compliance with Municipal Code Title 15, Chapter V, the proposed project would not conflict with any local policies or ordinances protecting biological resources and less than significant impacts would occur in this regard.

### **B-6 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.** According to the General Plan EIR, although the City is located within the boundaries of the *County of Orange Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP)*, the City is not a participant in the plan. The County's Talbert Nature Preserve and Talbert Regional Park (within the City boundary), however, is included as an area that could support future NCCP/HCP reserves. The project site is located over 3.5 miles to the northeast of Talbert Nature Preserve and Talbert Regional Park. No other approved local, regional, or State habitat conversation plans apply to the site. Therefore, the proposed project does not conflict with the NCCP/HCP, or any other approved local, regional, or State HCP. No impacts would occur in this regard.

## 8.4 CULTURAL RESOURCES

### **CUL-1 Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.?**

**No Impact.** Under CEQA, a project has a significant impact on a historical resource if it “would result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resources would be materially impaired” (CEQA Guidelines Section 15064.5(b)(1)). Material impairment would occur if the project would result in demolition or material alteration of those physical characteristics that convey the resource's historical significance (CEQA Guidelines Section 15064.5(b)(2)).

According to the *Cultural and Paleontological Resources Identification Memorandum for the Costa Mesa Hive Live Project, City Of Costa Mesa, Orange County, California*, prepared by Michael Baker, dated June 3, 2024, there are no known potential historical resources in the project area; refer to Appendix E, Cultural and Paleontological Resources Identification Memorandum. The existing buildings on the project site were constructed in 2004. As the existing buildings in the project area are not 50 years old, they are not old enough to be considered historical resources. Thus, the proposed project would have no direct or indirect impact to known historical resources.

## 8.5 GEOLOGY AND SOILS

### **G-5 Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact.** The project would not involve the use of septic tanks or alternative wastewater disposal systems, and no impacts would occur in this regard.



## 8. Effects Found Not to Be Significant

### 8.6 HAZARDS AND HAZARDOUS MATERIALS

#### **HAZ-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less Than Significant Impact.** Substantial risks associated with hazardous materials are not typically associated with residential, retail, or open space uses. Minor cleaning products along with the occasional use of pesticides and herbicides for landscape maintenance of the project site are generally the extent of hazardous materials that would be routinely utilized on-site. Thus, as the presence and on-site storage of these materials are common for residential uses and would not be stored in substantial quantities (quantities required to be reported to a regulatory agency), impacts in this regard are less than significant.

Limited amounts of some hazardous materials could be used in the short-term demolition and construction of the project, including demolition of building materials, standard construction materials (e.g., paints and solvents), and vehicle fuel, and other hazardous materials from neighborhood serving commercial uses. The routine transportation, use, and disposal of these materials would be required to adhere to State and local standards and regulations for handling, storage, and disposal of hazardous substances. With compliance with the existing State and local procedures that are intended to minimize potential health risks associated with their use, impacts associated with the handling, storage, and transport of these hazardous materials during construction would be less than significant.

#### **HAZ-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**Less Than Significant Impact.** The closest school is Calvary Chapel High School, located approximately 0.21-mile to the northeast of the project site at 3800 South Fairview Street. As noted in [Section 5.8, \*Hazards and Hazardous Materials\*](#), project implementation is not anticipated to result in substantial hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during construction or long-term operation (as discussed in HAZ-1 above) of the proposed project. All construction activities would be subject to compliance with existing laws and regulations (refer to PPP HAZ-1 and PPP HAZ-4 noted in [Section 5.8](#)) related to hazardous materials. Therefore, impacts in this regard would be less than significant.

#### **HAZ-4 Be located on a site which is included on a list of hazardous materials compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?**

**No Impact.** California Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) to compile and update a regulatory sites list (pursuant to the criteria of the Section). The California Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to California Health and Safety Code Section 116395. California Government Code Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, to compile, as



## 8. Effects Found Not to Be Significant

appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

Based on CalEPA's Cortese listing database, the project site is not listed pursuant to California Government Code Section 65962.5.<sup>4</sup> As such, no impacts would occur in this regard.

**HAZ-5 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 result in a safety hazard or excessive noise for people residing or working in the project area?**

**Less Than Significant Impact.** The closest airport to the project site is the John Wayne Airport, located approximately 2.76 miles to the southeast. As depicted in General Plan Safety Element Figure S-8, *John Wayne Airport Safety Zones*, the project site is not located within the airport's Safety Compatibility Zones. Additionally, the project site is located outside the 60 A-weighted decibel scale (dBA) Community Noise Equivalent Level (CNEL) noise contour for John Wayne Airport. However, the project site is located within the AELUP Notification Area for John Wayne Airport.<sup>5</sup> The ALUC has adopted FAR Part 77 as the criteria for determining height restrictions in Orange County. Any project that would be more than 200 feet in height above the ground level is required to notify the FAA, pursuant to FAR Part 77 Section 77.13. Although the project would involve construction of a residential development that would increase the maximum height established by the Specific Plan (i.e., currently allowed for five stories or approximately 75 feet in height), the increase would be nominal (i.e., an increase of two feet, six inches in height for a total of five stories or approximately 77 feet, six inches in height as part of the Specific Plan Amendment) and would not exceed FAA's notification requirement of 200 feet. Nonetheless, as the proposed project is located within the ALUC planning boundaries and anticipated discretionary approvals would include a General Plan Amendment and Specific Plan Amendment, the proposed project would be required to comply with California Public Utilities Code Section 21676(b). California Public Utilities Code Section 21676(b) requires local agencies to refer the proposed discretionary approval to the ALUC. Following compliance with the aforementioned State regulations, the proposed project would not introduce a safety hazard associated with airport operations. Less than significant impacts would occur in this regard.

**HAZ-7 Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**No Impact.** According to the California Department of Forestry and Fire Protection (CAL FIRE), *Orange County State Responsibility Area Fire Hazard Severity Zones* and *Orange County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE*, the project site is not located in a State responsibility area nor is the

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<sup>4</sup> California Environmental Protection Agency, *Cortese List Data Resources*, <https://calepa.ca.gov/SiteCleanup/CorteseList/>, accessed August 8, 2024.

<sup>5</sup> Airport Land Use Commission for Orange County, *AELUP Notification Area for JWA*, April 17, 2008, <https://files.ocair.com/media/2021-02/jwanotf2008.pdf?VersionId=7s4A26J9sMzn02SK2kO3c9kcnvAT8f9s>, accessed July 12, 2024.



## 8. Effects Found Not to Be Significant

project site designated as a very high fire severity zone.<sup>6,7</sup> Therefore, project implementation would not expose people or structures to a significant risk involving wildland fires, and no impacts would occur in this regard.

### 8.7 HYDROLOGY AND WATER QUALITY

#### HYD-4 In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

**Less Than Significant Impact.** The absence of any large bodies of water within Costa Mesa and the location of high bluffs adjacent to Newport Bay preclude the possibility of seiches at the project site. Furthermore, the project site is located over 4.5 miles inland of the Pacific Ocean and is not located within a tsunami hazard zone according to the California Department of Conservation (DOC 2015). As discussed in Section 5.8, *Hydrology and Water Quality*, the site is also not susceptible to flood hazard zone. Therefore, the proposed project would not release pollutants due to project inundation in flood hazard, tsunami, or seiche zones and impacts would be less than significant.

### 8.8 LAND USE AND PLANNING

#### LU-1 Physically divide an established community?

**No Impact.** Factors that could physically divide a community include, but are not limited to:

- Construction of major highways or roadways;
- Construction of storm channels;
- Closing bridges or roadways; and
- Construction of utility transmission lines.

The key factor with respect to this threshold is the potential to create physical barriers that change the connectivity between areas of a community to the extent that persons are separated from other areas of the community. The site is currently developed with three existing two-story office buildings and a practice football field, and commercial, residential, and public/institutional uses surround the site on all sides. The residential uses to the east are part of The Laurels at Providence Park, and are comprised of single-family dwellings and townhomes. The proposed land uses would provide a mix of residential units and accessory/ancillary retail uses in a master-planned setting within the project footprint. The project does not propose any new roadways or off-site improvements that would create a physical barrier for the adjacent residential community, or other

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<sup>6</sup> California Department of Forestry and Fire Protection, *Orange County State Responsibility Area Fire Hazard Severity Zones*, September 29, 2023, <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022>, accessed April 1, 2024.

<sup>7</sup> California Department of Forestry and Fire Protection, *Orange County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE*, November 2011, <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps>, accessed April 1, 2024.



## 8. Effects Found Not to Be Significant

adjacent uses. As a result, the proposed project would not divide an established community, and no impact would occur.

### 8.9 MINERAL RESOURCES

#### MIN-1 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 California Department of Conservation and General Plan EIR Figure 4.11-1, *Mineral Resources in Orange County*, the project site is mapped Mineral Resource Zone 3 (MRZ-3) indicating that the site is in an area containing mineral deposits of indeterminable significance.<sup>8,9</sup> According to the General Plan EIR, there are no active mining operations within the City. The project site is located within a built-out urban area that is largely developed with commercial, residential, and public/institutional uses and would be incompatible with mining use. No impacts would occur in this regard.

#### MIN-2 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.** Refer to Impact MIN-1.

### 8.10 POPULATION AND HOUSING

#### PH-2 Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**No Impact.** The project site is currently developed with the Hive Creative Office Campus, which consists of three existing two-story office buildings and surface parking, as well as the Los Angeles Chargers practice field. There are no residences on-site. As such, development of the proposed project would not displace existing people or housing. No impacts would occur in this regard.

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<sup>8</sup> California Department of Conservation, *Special Report 143: Part III, Mineral Land Classification of the Greater Los Angeles Area: Classification of Sand and Gravel Resources Areas, Orange County-Temescal Valley Production-Consumption Region*, 1981.

<sup>9</sup> California Department of Conservation, *Open File Report 94-15, Update of Mineral Land Classification of Portland Cement Concrete Aggregate in Ventura, Los Angeles, and Orange Counties, California, Part III – Orange County*, 1995.



## 8. Effects Found Not to Be Significant

### 8.11 TRIBAL CULTURAL RESOURCES

**TCR-1(i) 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?**

**No Impact.** There are no known potential historical resources in the project area. As such, development of the proposed project would not adversely impact any resources listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources per Public Resources Code Section 5020.1(k). No impacts to historic tribal cultural resources would occur in this regard.

### 8.12 WILDFIRE

**If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project.**

**W-1 Substantially impair an adopted emergency response plan or emergency evacuation plan?**

**No Impact.** According to CAL FIRE, *Orange County State Responsibility Area Fire Hazard Severity Zones* and *Orange County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE*, the project site is not located in a State responsibility area nor is the project site designated as a very high fire severity zone.<sup>10,11</sup> Therefore, no impact would occur in this regard.

**W-2 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.** Refer to Impact W-1.

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<sup>10</sup> California Department of Forestry and Fire Protection, *Orange County State Responsibility Area Fire Hazard Severity Zones*, September 29, 2023, [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz\\_county\\_sra\\_11x17\\_2022\\_orange\\_3.pdf?rev=8304779bfa204bea8c3eb4638734287e&hash=8FE491A0FEB121DA77261F19AA136C25](https://efaidnbmnnnibpcajpcglclefindmkaj/https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map-2022/fire-hazard-severity-zones-maps-2022-files/fhsz_county_sra_11x17_2022_orange_3.pdf?rev=8304779bfa204bea8c3eb4638734287e&hash=8FE491A0FEB121DA77261F19AA136C25), accessed April 1, 2024.

<sup>11</sup> California Department of Forestry and Fire Protection, *Orange County Very High Fire Hazard Severity Zones in LRA, As Recommended by CAL FIRE*, November 2011, [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-5/fhszl\\_map30.pdf](https://efaidnbmnnnibpcajpcglclefindmkaj/https://34c031f8-c9fd-4018-8c5a-4159cdf6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-map/upload-5/fhszl_map30.pdf), accessed April 1, 2024.



## 8. Effects Found Not to Be Significant

**W-3**        **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.** Refer to Impact W-1.

**W-4**        **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.** Refer to Impact W-1.





## **Chapter 9.0 Irreversible and Irretrievable Commitment of Resources**



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## 9. Irreversible and Irretrievable Commitment of Resources

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According to *CEQA Guidelines* Sections 15126(c) and 15126.2(c), an EIR is required to address any significant irreversible environmental changes that would occur should the proposed project be implemented. As stated in *CEQA Guidelines* Section 15126.2(d):

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The proposed project involves redevelopment of the project site to construct a new multi-phased master-planned residential community with up to 1,050 dwelling units (rental/apartment units) in three buildings, 3,692 square feet of retail uses, and 335,958 square feet of open space within Costa Mesa.

Construction of the proposed project would consume limited, slowly renewable, and non-renewable resources. This consumption would occur during the construction phase and would continue throughout its operational lifetime. The proposed development would require a commitment of resources including building materials; fuel and operational materials/resources; and transportation of goods and people to and from individual development sites. Construction would require the consumption of resources that are not renewable, or which may renew so slowly as to be considered non-renewable. These resources include, but are not limited to, lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed in the use of construction vehicles and equipment.

The proposed project would consume resources similar to those currently consumed within the City (e.g., energy resources such as electricity and natural gas as well as petroleum-based fuels required for vehicle trips, fossil fuels, and water). Fossil fuels would represent the primary energy source associated with both construction and ongoing operation, and the existing, finite supplies of these natural resources would be incrementally reduced. Future operations of the proposed residential development would occur in accordance with California Code of Regulations Title 24 Part 6, *Building Energy Efficiency Standards*, which sets forth conservation practices that would limit energy consumption. Nonetheless, the project's energy requirements represent a long-term commitment of essentially non-renewable resources.



## 9. Irreversible and Irretrievable Commitment of Resources

Future construction activities associated with implementation of the proposed project could release hazardous materials into the environment through reasonably foreseeable upset and accidental conditions; refer to Section 5.8, *Hazards and Hazardous Materials*. However, demolition, grading, and excavation activities would be subject to established regulatory standards (PPPs and SCAs) to ensure that hazardous materials releases are minimized.

In conclusion, development of the proposed project would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of individual developments. It is noted that the continued use of such resources would be on a relatively small scale in a regional context. Although irreversible environmental changes would result from project implementation, such changes would not be considered significant.



## **Chapter 10.0 Growth-Inducing Impacts of the Proposed Project**



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## 10. Growth-Inducing Impacts of the Proposed Project

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Section 15126 of the CEQA Guidelines requires that an EIR discuss the project's potential to foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. The CEQA Guidelines also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section analyzes such potential growth-inducing impacts, based on criteria suggested in the CEQA Guidelines.

In general terms, a project may foster spatial, economic, or population growth in a geographic area if it meets any one of the following criteria:

- Removal of an impediment to growth (e.g., construction or extension of major infrastructure or changes in existing land use regulations);
- Fostering economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning, and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an in-fill project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. Generally, growth-inducing projects are either located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure such as sewer and water facilities or roadways, or encourage premature or unplanned growth. Note that the CEQA Guidelines require an EIR to “discuss the ways” a project could be growth inducing and to “discuss the characteristics of some projects that may encourage...activities that could significantly affect the environment.” However, the CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages (refer to CEQA Guidelines Section 15145).

In accordance with the CEQA Guidelines and based on the above-listed criteria, the project's potential growth-inducing impacts are evaluated below.



## 10. Growth-Inducing Impacts of the Proposed Project

### Removal of an Impediment to Growth

#### *Construction or Extension of Major Infrastructure Facilities*

The project site is surrounded by urban development (commercial, residential, and public/institutional uses) on all sides and the existing on-site office buildings and athletic training field currently receive utility services (e.g., water, wastewater, storm drain, solid waste, natural gas, and electricity services) that the proposed project would similarly utilize. The project area is also easily accessible from adjacent local roadways which connect to the regional system; proposed public right-of-way improvements including sidewalks, landscaping, and driveway approaches would be constructed to comply with City standards. As detailed in [Section 3.0, \*Project Description\*](#), all proposed infrastructure improvements would be located on-site with some lateral connections to connect to existing water, sewer, storm drain, and dry utility facilities in Sunflower Avenue, Susan Street, and South Coast Drive. The infrastructure improvements are proposed to accommodate the residential development and would not accommodate other planned or future development in the project area in addition to the project. Further, these proposed infrastructure improvements would not remove obstacles to growth since the site is already served by existing utility providers.

#### *Changes in Existing Land Use Regulations*

As detailed in [Section 3.5.1, \*Description of the Project\*](#), the project requires several discretionary approvals related to land use regulations, including a General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement, and Public Art Plan. Based on the site's existing Industrial Park land use designation and Planned Development Industrial zoning, the site is currently intended be developed as an industrial use. Approval of the proposed discretionary actions would change the site's existing land use regulations and would remove obstacles to growth at the site (i.e., allow the project site to be developed as a multi-phased master-planned residential community with on-site amenities, open space, and connection to the existing Rail Trail, pursuant to the existing *North Costa Mesa Specific Plan* [Specific Plan] and proposed Master Plan).

### Foster Economic Expansion or Growth

During project construction, a number of design, engineering, and construction jobs would be created. This would last until project construction is completed. Construction employees would likely be absorbed from the regional labor force, and the project, itself, would not attract new workers to the region.

Project operations would introduce up to 2,646 residents and approximately 95 jobs; refer to [Section 5.12, \*Population and Housing\*](#). While proposed retail uses would generate employment opportunities, the project would result in a net decrease of 80 jobs as three existing office buildings would be demolished. The project is a mixed-use development in an urban area of Costa Mesa with the intent to bring people closer to existing jobs, entertainment, and employment centers. Residents and employees of the proposed project would seek shopping, entertainment, employment, home improvement, and other economic opportunities in the City and surrounding area. This would create an increased demand for such economic goods and services and would, therefore, encourage the creation of new businesses and/or the expansion of existing businesses that address these needs. More importantly, existing shopping, entertainment, and employment centers in the immediate





## 10. Growth-Inducing Impacts of the Proposed Project

project area would serve future residents. Economic growth could occur within the project area due to project implementation; however, given the built out nature of the site vicinity, future economic effects are not expected to significantly affect the environment.

### Foster Population Growth

A project could induce population growth in an area either directly or indirectly. More specifically, the development of new residences or businesses could induce population growth directly, whereas the extension of roads or other infrastructure could induce population growth indirectly. The site is located in a developed area of the City and does not involve the extension of roads or other infrastructure into undeveloped areas. Thus, the project would not indirectly induce population growth; refer to the “Removal of an Impediment to Growth” Section above.

As analyzed in Section 5.12, *Population and Housing*, the proposed 1,050 units have the potential to support up to 2,646 residents. While the project proposes 3,692 square feet of retail use, the project would be removing three existing two-story office buildings. As such, the project would result in a net decrease in jobs on-site after full buildout. Thus, the proposed project is not anticipated to indirectly increase residents in the City as a result of future employees.

As shown in Table 5.12-2, *SCAG Population, Housing, and Employment Projections*, SCAG projects the City’s population to increase from 112,300 to 134,300<sup>1</sup> people by 2050, an increase of approximately 22,000 people. Thus, the residents generated by the proposed project would account for approximately 12 percent of the population growth forecasted by SCAG in Costa Mesa between 2019 and 2050.

Given the proposed General Plan Amendment, Specific Plan Amendment, and Zone Change from industrial to residential and commercial uses, it is acknowledged that the project involves unplanned population growth that was not previously considered in the General Plan and SCAG projections. However, population and housing growths associated with the proposed project would still be within SCAG projections for the City and the environmental impacts of such unplanned population growth are evaluated, planned for, and mitigated as part of the project throughout this EIR. Additionally, the project would not result in land use changes that substantially increase employment opportunities, nor implement any new policies that could induce substantial unplanned population growth. The project’s population and employment growth would also be offset by the more substantial increase in housing units, a portion of which would include affordable housing to help meet the City’s 6th cycle RHNA allocations. Further, the project is in an urban area with existing infrastructure that can support the proposed infill development. All proposed infrastructure improvements (i.e., sewer, water, storm drains, and dry utilities) are located on-site to support anticipated growth generated by the project. The potential physical environmental impacts of such improvements are analyzed in Section 5.17, *Utilities and Service Systems*. No additional infrastructure improvements (e.g., roadways and utilities) would be implemented that

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<sup>1</sup> For the Southern California Association of Governments’ (SCAG’s) *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (2024-2050 RTP/SCS)*, population projections below the county-level are developed for required modeling purposes only; as such this value was provided in a written letter from SCAG, dated June 20, 2024, in response to the Notice of Preparation published for the proposed project; refer to Appendix B, *NOP Comments*.



## 10. Growth-Inducing Impacts of the Proposed Project

could indirectly induce population growth elsewhere in the City. Thus, growth inducing impacts related to population growth would be less than significant in this regard.

### **Establishment of A Precedent-Setting Action**

As stated above, the proposed project would require a General Plan Amendment, Zoning Amendment, Specific Plan Amendment, Tentative Parcel Map, Master Plan, Development Agreement, and Public Art Plan. The approval of these discretionary actions would not set a precedent that would make it more likely for other projects in the City to gain approval of similar applications. For example, a future project requesting to redesignate or rezone a site would need to undergo the same environmental review as the proposed project and mitigate potentially significant environmental impacts on a project-level. The proposed approvals would only regulate future land development within the Specific Plan area by limiting permitted uses and requiring future development on-site to comply with development standards and design guidelines in the Specific Plan and Master Plan. The site is also adjacent to other residential and commercial uses that would be compatible with the project's residential, retail, and open space uses. Further, future projects with similar required discretionary actions would also be subject to applicable environmental review on a project-by-project basis. Implementation of the proposed project would not establish a procedure that would make future re-designations and/or rezones easier and would be speculative to determine any such effect. As such, the proposed project would not involve a precedent-setting action that could significantly affect the environment.

### **Development or Encroachment of Open Space**

The project would redevelop the existing office buildings and athletic training field on-site into a mixed-use development with residential and commercial (retail) uses. The site is also located in an urbanized area of Costa Mesa. Although open space uses are present nearby (i.e., the Rail Trail), these uses are designated as such and the project would not result in the development or encroachment into any areas of existing open space. Therefore, the proposed project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of an existing open space.



## **Chapter 11.0 Organizations/Persons Consulted/Preparers of the Environmental Document**



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# 11. Organizations/Persons Consulted/Preparers of the Environmental Document

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## **LEAD AGENCY**

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Chris Yeager, Senior Planner  
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Jon Neal, Fire Marshal  
Nikki Johnson, Assistant Fire Marshall

#### **POLICE DEPARTMENT**

Bryan Wadkins, Captain

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## 11. Organizations/Persons Consulted/Preparers of the Environmental Document

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#### **AT&T COMMUNICATIONS**

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#### **CHARTER COMMUNICATIONS**

Lilly Lawrence, Construction Manager

#### **CITY OF SANTA ANA**

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#### **CITY OF FOUNTAIN VALLEY**

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Andrew D. Wiesner, P.E., District Engineer

#### **NEWPORT MESA UNIFIED SCHOOL DISTRICT**

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Erica DiCioccio, AIA, LEED AP BD+C, Facilities Planning Coordinator

#### **ORANGE COUNTY PUBLIC LIBRAIRES**

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#### **SOUTHERN CALIFORNIA EDISON**

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#### **SOUTHERN CALIFORNIA GAS COMPANY**

Patrick Young, Regional Pipeline Project Manager



## 11. Organizations/Persons Consulted/Preparers of the Environmental Document

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#### **Fusco Engineering (Civil)**

Shelby Shirlock, PE, Senior Project Manager

#### **MJS Landscape Architecture (Landscape Architecture)**

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#### **Linscott Law & Greenspan Engineers (VMT/Traffic)**

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