



Mission Grove Apartments Project

Draft Environmental Impact Report
SCH#2022100610

prepared for
City of Riverside
Community & Economic Development Department, Planning Division
3900 Main Street, 3rd Floor
Riverside, California 92522
Contact: Veronica Hernandez, Senior Planner

prepared by
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3602 Inland Empire Blvd., Suite C310
Ontario, CA 91764

May 2024





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Acronyms, Units of Measurement, Chemical Symbols

Acronyms, units of measurement and chemical symbols used throughout the Draft EIR are identified in this section.

Acronyms

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ADA	Americans with Disabilities Act
AF	Acre-feet
AFY	Acre-feet per Year
AGR	Agricultural Supply
ALUC	Riverside County Airport Land Use Commission



Mission Grove Apartments Project DEIR

Acronyms

AMSL	Above Mean Sea Level
APA	Administrative Procedure Act
AQMP	Air Quality Management Plan
ASTM	American Society for Testing and Materials
AT Plan	Active Transportation Plan
AUSD	Alvord Unified School District
BACMs	Best Available Control Measures
BIOS	Biogeographic Information and Observation System
BMPs	Best Management Practices
BTU	British Thermal Units
BUOW	Burrowing Owl
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate average fuel economy
Cal/ARP	California Emergency Management Agency's Accidental Release Prevention
CalEEMod	California Emissions Estimator Model
CAL/EPA	California Environmental Protection Agency
Cal Green	California Green Building Standards
Cal OES	Governor's Office of Emergency Service
Cal/OSHA	California Department of Industrial Relations' Division of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CBSC	California Building Standard Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDA	Chino Desalter Authority
CDC	Center for Disease Control
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CDSG	Citywide Design Guidelines and Sign Guidelines
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act

Mission Grove Apartments Project DEIR

Acronyms

CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CHWMP	County Hazardous Waste Management Plan
CITY	City of Riverside
CNDDB	California Native Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
COC	Chemicals of Concern
COG	Council of Governments
COP	Conference of the Parties
Corps	U.S. Army Corps of Engineering
CPUC	California Public Utilities Commission
CR	Commercial Retail Zone
CREC	Controlled Recognized Environmental Conditions
CRHR	California Register of Historic Resources
CSO	Complete Street Ordinance
CTC	County Transportation Commissions
CTR	Commuter Trip Reduction Trip
CWA	Clean Water Act
CWC	California Water Code
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fee
DMV	Department of Motor Vehicle
DPM	Diesel Particulate Matter
DR	Design Review
DTSC	Department of Toxic Substance Control
DWR	Department of Water Resources
EIA	Energy Information Administration
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
EV	Electric Vehicle
EVSE	Electrical Vehicle Charging Station
FAA	Federal Aviation Administration
FAOES	FAA Obstruction Evaluation Service
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission

Mission Grove Apartments Project DEIR

Acronyms

FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRMs	Flood Insurance Rate Maps
FMMP	Farmland Monitoring and Mapping Program`
FP	Fully Protected
FTA	Federal Transit Administration
GCC	Global Climate Change
GHG	Greenhouse Gas
GIS	Geographic Information System
GPA	General Plan Amendment
GWP	Global Warming Potential
GWR	Groundwater Recharge
HVAC	Heating, ventilating, and air-conditioning
HWCL	California Hazardous Waste Control Law
IBC	International Building Code
IEPR	Integrated Energy Policy Report
IPA	Inland Port Airport
IPS LUCP	Inland Port Airport Land Use Compatibility Plan
IPCC	Intergovernmental Panel on Climate Change
IRP	Integrated Resource Plan
ITE	Institute of Transportation Engineers
JPA	Joint Powers Authority
LCFS	Low Carbon Fuel Standards
LDMF	Local Development Mitigation Fee
LHMP	Local Hazard Mitigation Plan
LID	Low-Impact Development
LOS	Level of Service
LRA	Local Responsibility Area
LSA	LSA Associates, Inc
LST	Localized Significance Thresholds
LUCP	Land Use Compatibility Plan
LUST	Leaking Underground Storage Tank
MARB	March Air Reserve Base
MHDR	Medium High Density Residential
MMRP	Mitigation Monitoring and Reporting Program
MPO	Metropolitan Planning Organizations
MRMHMP	Mineral's Resources and Mineral Hazard Mapping Program
MRF	Materials Recover Facility
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System

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Acronyms

MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MUN	Municipal and Domestic Supply
MU-N	Mixed-Use Neighborhood
MU-U	Mixed-Use Urban
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NDCs	Nationally Determined Contributions
NIOSH	National Institute for Occupational Safety and Health
NOC	Notice of Completion
NOD	Notice of Determination
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OAL	Office of Administrative Law
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PEIR	Program Environmental Impact Report
PG&E	Pacific Gas and Electric
PID	Photo ionization detector
PRC	Public Resources Code
PTS	Pedestrian Target Safeguard Plan
PUC	Public Utilities Code
PV	Photovoltaic
PWWFs	Peak Wet Weather Flows
RCA	Western Riverside County Regional Conservation Authority
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCHCA	Riverside County Habitat Conservation Agency
RCIP	Riverside County Integrated Plan
RCRA	Resource Conservation and Recovery Act
RCWRD	Riverside County Waste Resources Department
REC	Recognized Environmental Conditions
RFD	Riverside Fire Department
RHN	Regional Housing Needs Assessment
RIRO	Right-in-right-out

Mission Grove Apartments Project DEIR

Acronyms

RIVCO	Riverside County Transportation Mode
RMC	Riverside Municipal Code
ROW	Right-of-way or rights-of-way
RP	Rock Products
RPD	Riverside Police Department
RPR	Rare Plant Rank
RPU	Riverside Public Utilities
RRG	Riverside Restorative Growthprint
RRG-CAP	Restorative Growthprint Climate Action Plan
RRG-EPAP	Riverside Restorative Growthprint Economic Prosperity Action Plan
RTA	Riverside Transit Authority
RTPA	Regional Transportation Plan Agency
RTP	Regional Transportation Plans
RUSD	Riverside Unified School District
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plan
RZ	Zoning Code Amendment
SAFE	Safer Affordable Fuel-Efficient
SAR	Second Assessment Report
SARA	Superfund Amendments and Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas & Electric
SF	Square footage
SIP	State Implementation Plan
SKRHCP	Stephen's Kangaroo Rat Habitat Conservation Plan
SMARA	Surface Mining and Reclamation Act
SoCalGas	Southern California Gas Company
SPA	Specific Plan Amendment
SP	Specific Plan
SP	Service populations
SR	State Route
SRA	Source Receptor Area
SRRE	Source Reduction Plan and Recycling Element
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology
SWPPP	Storm Water Pollution Prevention Plan

Mission Grove Apartments Project DEIR

Acronyms

SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TB	Technical Background Report
TD	Transportation Demand Management
TMDL	Total Maximum Daily Load
TMP	Trails Master Plan
TOA	Traffic Operational Analysis
TPM	Tentative Parcel Map
TRI	Toxics Release Inventory
TUMF	Transportation Uniform Mitigation Fee
UCR	University of California of Riverside
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plant
VEC	Vapor Encroachment Condition
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled
VP5	Vapor Samples Collected
WL	Watch List
WoUS	Waters of the State of the U.S.
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRP	Waste Recycling Plan
WSA	Water Supply Assessment
WSC	Water Shortage Contingency Plan
ZEV	Zero Emissions Vehicle
ZC	Change of Zone

Units of Measurement and Chemical Symbols

CO	Carbon monoxide
CO ₂ e	Carbon dioxide equivalent
dBA	Decibels
Du/ac	Dwelling Units per acre
°F	Degrees in Fahrenheit
gdi	Quartz Diorite
GPM	Gallons per minute
GWh	Gigawatt hours
H ₂ S	Hydrogen Sulfide

Mission Grove Apartments Project DEIR

Units of Measurement and Chemical Symbols

kBTU	Thousands British Thermal Units
kWh	Kilowatt hours
LCD	Liquid Crystal Display
L _{dn}	Day-night average noise level
L _{eq}	Equivalent continuous sound level
L _{max}	Maximum Instantaneous noise level
MGD	Million gallons per day
MPG	Miles per gallon
msl	Mean Sea Level
Mt/yr	Metric ton per year
N ₂	Nitrogen
N ₂ O	Nitrous oxide
NF ₃	Nitrogen trifluoride
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
O ₂	Oxygen
O ₃	Ozone
Pb	Lead
PM	Atmospheric Particulate Matter
PM ₁₀	Particulate matter 2.5 to 10 microns in diameter
PM _{2.5}	Particulate matter 2.5 microns or less in diameter
Ppm	Parts per million
PPt	Parts per trillion
PPV	Peak Particle Velocity
RMS	Root Mean Square
ROG	Reactive organic gases
SF ₆	Sulfur hexafluoride
SO ₂	Sulfur dioxide
SO ₄	Sulfides
SO _x	Oxides of sulfur
SPL	Sound Power Level
TPHg	petroleum hydrocarbons as gasoline
UVOCs	Undifferentiated Volatile organic compounds
VdB	Vibration Total Velocity Decibels
VOC	Volatile organic compounds

1.0 Executive Summary

The purpose of this Environmental Impact Report (EIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the Mission Grove Apartments Project (Project). This section summarizes the characteristics of the Project, alternatives to the proposed Project, and the environmental impacts and mitigation measures associated with the proposed Project.

1.1 Project Applicant

Michelle Rubin, President
Regional Properties, Inc.
9150 Wilshire Boulevard, Suite 210
Beverly Hills, CA 90212

1.2 Lead Agency

Veronica Hernandez, Senior Planner
City of Riverside
Community & Economic Development Department – Planning Division
3900 Main Street, 3rd floor
Riverside, California 92522

1.3 Project Description

The proposed Project includes a total of 347 studio, one-, two-, and three-bedroom residential apartment units within five, 4-story buildings. The project will include indoor amenities including a leasing office, clubroom, fitness center, and outdoor amenities including a pool and spa, outdoor seating and dining areas, and a dog park. The habitable gross square footage (SF) of the apartment community is 419,358 SF, the uninhabited square footage (e.g., garages, utility and storage closets) of the project is 55,143 SF in total. The gross square footage of the project is 474,501. The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the Proposed apartment project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site.

The project includes a General Plan Amendment to change the General Plan Land Use Designation from C – Commercial to MU-U – Mixed-Use – Urban, to allow the residential land use. A Zone Change is also proposed to change the existing zoning of the site from CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones to MU-U-SP – Mixed Use-Urban and Specific Plan (Mission Grove) Overlay Zones. Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking.

The project also includes a Specific Plan Amendment (SPA) to the Mission Grove Specific Plan. The SPA is to include Mixed-Use land use designation, zoning, and development standards.

The following environmental review and entitlements are requested for implementation of the project, Planning Case PR-2022-001359:

Discretionary Actions and Approvals

- General Plan Amendment (GPA) – to change the General Plan Land Use Designation from C - Commercial to MU-U - Mixed Use-Urban, to allow residential land use.
- Zoning Code Amendment (RZ) – to change the zoning from CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones to MU-U-SP – Mixed Use-Urban and Specific Plan (Mission Grove) Overlay Zones.
- Specific Plan Amendment (SPA) – to revise the Mission Grove Specific Plan.
- Tentative Parcel Map (TPM) 38598 – to subdivide the existing Parcel 1 of Parcel Map 26320 into two parcels for financing and conveyance purposes.
- Design Review (DR) – for the proposed site design and building elevations.
- Environmental Impact Report (EIR) – for the preparation of an Environmental Impact Report for the proposed Project.
- Airport Land Use Commission (ALUC) – determination of consistency or inconsistency with applicable airport land use compatibility criteria of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP).

Existing Site Conditions

The project site is a 9.92 acre parcel and is part of the 70-acre Mission Grove Plaza Shopping Center. The project site is currently developed with a 104,231 square foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991. The former K-Mart retail store closed in October of 2020. The site also includes portions of a signalized intersection at Mission Grove Parkway, and a shared driveway providing ingress and egress from Mission Grove Parkway, for the shopping center.

Construction and Grading

Construction of the proposed project is expected to occur over approximately 28 months. The project is anticipated to be fully built and open in 2028. Construction activity would comply with the City's Municipal Code Section 7.35.020 and would not occur between the hours of 7:00 PM and 7:00 AM on weekdays, between the hours of 5:00 PM and 8:00 AM on Saturdays, or at any time on Sundays or federal holidays. Construction activity would consist of demolition, site preparation and grading, building construction, and paving.

Grading would require a maximum cut and fill of 5 feet under the building, not including remedial grading. Proposed grading activities anticipate 5,118 cubic yards of cut and 5,950 cubic yards of fill on site, with a net soil import of 832 cubic yards. Additionally, there is a potential that some additional export of rock/boulders may be required if the rock/boulder material cannot be utilized in the landscaping on site. All construction activities, with the exception of the import of fill and the potential export of rock/boulders, would be on site, including staging of equipment and materials and construction worker parking.

Project Objectives

The proposed project intends to achieve the following objectives:

- Provide a high-quality residential development in close proximity to many existing amenities and transit corridors.
- Increase the type and amount of housing available consistent with the goals of the City's Housing Element.
- Maximize the residential potential of the site to assist the City of Riverside in meeting project housing demand as part of the City's housing needs and growth projections.
- Use land resources more efficiently by providing a well-planned, infill redevelopment on a underutilized vacant site.
- Identify mixed-use development standards in the Specific Plan Amendment to create a framework for cohesive integration of uses.
- In furtherance of the City's Climate Action Plan, replace aging building construction with green building practices and other sustainable development methods.
- Create a mixed-use environment encouraging walkability.
- Provide for enhanced residential architecture and aesthetically coherent design elements that are compatible and complementary with the existing surrounding residential built environment in terms of colors and materials and landscaping.

1.4 Alternatives

The *CEQA Guidelines*, Section 15126.6, identify the parameters within which consideration and discussion of alternatives to the proposed Project should occur. As stated in this section of the guidelines, alternatives must focus on those that are potentially feasible, reduce significant impacts, and which attain most of the basic objectives of the Project.

Included in this analysis are four alternatives, including the CEQA-required "No Project" alternative, that involve changes to the Project that may reduce Project-related environmental impacts as identified in this DEIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed Project.

The following alternatives are evaluated in this DEIR:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Lower Density ALUC Consistent Multi-Family Residential Project
- **Alternative 3:** Retail Project Alternative
- **Alternative 4:** Off-Site Multi-Family Residential Project

1.4.1 Alternative 1 – No Project/ No Redevelopment

The No Project/No Redevelopment Alternative assumes that the proposed 347 residential unit development would not be constructed. Alternative 1 considers no redevelopment/disturbance on the Project site. As such, the entire 9.92-acre site would remain a 104,231-square-foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991 and the former K-Mart retail store closed in October of 2020. Although there is no permanent tenant of the retail building, since vacated by K-Mart, it has had a temporary and seasonal tenant, the Spirit Halloween Costume Store. The No Project/ No Redevelopment Alternative would continue to be consistent with the existing General Plan land use designation of C Commercial, the existing zoning of CR-SP- Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and with the Mission Grove Specific Plan and would not require a GPA, RZ, SPA, or TPM. The No Project alternative would not fulfill any of the Project's objectives as the existing site would not provide high-quality housing in close proximity to many amenities and high quality transit corridors, assist the City of Riverside in meeting housing needs; use land resources more efficiently with infill redevelopment on an underutilized vacant site; or further the City's Climate Action Plan by replacing aging building construction with green building practices and other sustainable development methods. Under this alternative, no improvements would be made to the Project site and the site would continue to be vacant with temporary/seasonal retail tenants. This alternative has no characteristics in common with the proposed Project nor any of the other alternatives as no proposed redevelopment would occur.

1.4.2 Alternative 2 – Lower Density ALUC Consistent Multi-Family Residential Project

This alternative assumes redevelopment of the site would occur with a high-quality residential development with a reduced density, such that it meets the density criteria of the C2 Compatibility Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan MARB/IPA LUCP). The density standard for the C2 zone is six or less dwelling units per acre (du/ac). As the Project site is 9.92 acres, in order to meet the C2 zone density criteria of 6.0 du/ac, only 58 dwelling units would be constructed. Under this alternative, a GPA would be required to change the land use designation to Mixed Use – Neighborhood (MU-N), with maximum of 10.0 dwelling units per acre, and associated zone change (MU-N) as well as a Specific Plan Amendment to the Mission Grove Specific Plan. A TPM may also be required under this alternative for leasing and financing purposes.

1.4.3 Alternative 3 – Retail Project Alternative

This alternative assumes development of the site would occur that remains in accord with the current land use and zoning designations and retains the existing development with the 104,231 square foot retail building and an associated surface parking lot. Under this alternative, the existing retail building and associated surface parking lot would be retained, with only minor improvements to the inside of the building, the outside of the building, and/or associated surface parking lot and landscaping which would house a permanent retail tenant that would utilize the full square footage of the building for retail. Under this alternative, the land use designation and zoning would remain as is, and no SPA would be required.

1.4.4 Alternative 4 – Off-Site Multi-Family Residential Project

This alternative assumes the proposed 347 residential apartment project would occur at an off-site location. This alternative does not include a specific off-site location; however, it is assumed for the purposes of this analysis that it would consist of redevelopment of a site similar in size and of a vacant or underutilized building or buildings within the City of Riverside. This development focuses on infill of abandoned or underutilized space. Alternative sites were not considered for this project, and thus, there are no specific off-site locations that were considered by the applicant to be evaluated under this alternative. It is assumed for the purposes of this analysis that the off-site alternative location would also require a General Plan Amendment and a Zone Change from CR - Commercial to Mixed-Use Urban (MU-U), as with the proposed Project.

Refer to Section 7.0, Alternatives, for the complete alternatives analysis.

1.5 Areas of Known Controversy

The City of Riverside circulated a Notice of Preparation (NOP) of the EIR for a 30-day agency and public review period starting on October 28th 2022 and ending on November 28th, 2022 at 5:00 p.m. The City distributed the NOP to the State Clearinghouse, responsible agencies, and other interested parties. The City held a virtual EIR Public Scoping Meeting on November 2nd, 2022, aimed at providing information about the proposed Project and the CEQA process to members of public agencies, interested stakeholders, and residents/community members.

The city received only one comment letter in response to the NOP and no comments during the virtual scoping meeting. Appendix A of this EIR contains the NOP, and the comment letter received during the 30-day review period and a summary is included in Section 2.0, Introduction.

Primary areas of concern include the following:

- Air quality and greenhouse gas emissions impacts;
- Reliance on fossil fuels and the Project's energy impacts.

The public written comment in response to the NOP is summarized in Table 2.0-1: NOP and Scoping Meeting Comments, which summarizes the comments and details where each is addressed in the EIR.

1.6 Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the environmental impacts of the proposed Project, proposed mitigation measures, and residual impacts (the impact after application of mitigation, if required). Impacts are categorized as follows:

- **Significant and Unavoidable:** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the CEQA Guidelines.
- **Less than Significant with Mitigation Incorporated:** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the CEQA Guidelines.
- **Less than Significant:** An impact that may be adverse but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed Project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Table 1.0-1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Aesthetics			
Threshold A: Would the Project have a substantial adverse effect on a scenic vista?	Less than significant	None required	Less than significant
Threshold B: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	No Impact	None required	No Impact
Threshold C: In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly-accessible vantage point). If the project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	Less than significant	None required	Less than significant
Threshold D: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less than significant	None required	Less than significant
Agriculture and Forestry Resources			
Threshold A: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance ("Farmland"), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring	No impact	None required	No impact



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Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
Program of the California Resources Agency, to nonagricultural use?			
Threshold B: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?	No impact	None required	No impact
Threshold C: Would the Project 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	None required	No impact
Threshold D: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?	No impact	None required	No impact
Threshold E: Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No impact	None required	No impact
Air Quality			
Threshold A: Would the Project conflict with or obstruct implementation of the applicable air quality plan?	Less than significant	None required	Less than significant
Threshold B: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable	Less than significant	None required	Less than significant



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Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
federal or state ambient air quality standard?			
Threshold C: Would the Project expose sensitive receptors to substantial pollutant concentrations?	Less than significant	None required	Less than significant
Threshold D: Would the Project result in emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than significant	None required	Less than significant
Biological Resources			
Threshold A: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?	Potentially significant without mitigation	MM BIO-1: To avoid and/or minimize potential impacts to migratory birds and raptors, landscape vegetation removal will take place outside of the bird nesting season of February 1 through August 31. If vegetation removal must take place during nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist (i.e., a biologist experienced with performing nesting bird presence/absence surveys and experienced with identifying signs of active nesting) within three (3) days prior to vegetation removal activities to ensure no active nests are present. If active nests are present, a protective avoidance buffer (a no work zone buffer around the tree containing the active nest as identified by the qualified biologist) will be established until the young have fledged or the nest is determined to be inactive by the qualified biologist. The design of the avoidance buffer shall be reviewed and approved by a qualified biologist in conjunction with the City. The size of the protective buffer will be determined by the qualified biologist depending on the nesting species. Vegetation removal may resume once nesting activity is complete.	Less than significant



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Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
<p>Threshold B: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?</p>	<p>No impact</p>	<p>None required</p>	<p>No Impact</p>
<p>Threshold C: Would the Project have a substantial adverse effect on Federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?</p>	<p>No impacts</p>	<p>None required</p>	<p>No Impact</p>
<p>Threshold D: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?</p>	<p>No impacts</p>	<p>None required</p>	<p>No Impact</p>
<p>Threshold E: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?</p>	<p>No impacts</p>	<p>None required</p>	<p>No impacts</p>
<p>Threshold F: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?</p>	<p>No impacts</p>	<p>None required</p>	<p>No impacts</p>
<p>Cultural Resources</p>			



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Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
<p>Threshold A: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 of the CEQA Guidelines?</p>	<p>No impact</p>	<p>None required</p>	<p>No impact</p>
<p>Threshold B: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines?</p>	<p>Potentially significant without mitigation</p>	<p>MM CUL-1: Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.</p> <p>MM CUL-2: Archaeological and Paleontological Monitoring: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.</p>	<p>Less than significant</p>



Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		<p>1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:</p> <ul style="list-style-type: none"> a) Project grading and development scheduling; b) The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists; c) The protocols and stipulations that the Applicant, tribes, and 	

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		<p>project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;</p> <p>d) Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and</p> <p>e) The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-4.</p> <p>MM CUL-3: Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:</p> <ol style="list-style-type: none"> Consulting Tribes Notified: within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. 	



Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		<p>Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.</p> <p>2. Temporary Curation and Storage: During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and</p> <p>3. Treatment and Final Disposition: The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:</p> <p>a) Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all</p>	



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		<p>cataloguing and basic recordation have been completed;</p> <p>b) A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;</p> <p>c) If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and</p>	



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		<p>d) At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the city of Riverside, Eastern Information Center, and interested tribes.</p>	



Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
		<p>MM CUL-4: Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.</p> <p>A Standard Condition of Approval will include the following – Consistent with State Law:</p> <p>Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Applicant shall comply with</p>	

Impact	Significance Pre-mitigation	Mitigation Measure(s)	Residual Impact
<p>Threshold C: Would the Project disturb any human remains, including those interred outside of formal cemeteries?</p> <p>Energy</p>	<p>Less than significant</p>	<p>the state relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.</p> <p>The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98. No photographs are to be taken except by the coroner, with written approval by the consulting Tribe(s).</p> <p>According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).</p>	<p>Less than significant</p>



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<p>Threshold A: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold B: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold C: Would the Project achieve the goal of energy conservation by the following?</p> <ul style="list-style-type: none"> ▪ Decreasing overall per capita energy consumption; ▪ Decreasing reliance on fossil fuels such as coal, natural gas and oil; and ▪ Increasing reliance on renewable energy sources. 	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Geology and Soils</p>			
<p>Threshold A: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) strong seismic ground shaking; iii) seismic-</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>



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related ground failure, including liquefaction; and/or iv) landslides?			
Threshold B: Would the Project result in substantial soil erosion or the loss of topsoil?	Less than significant	None required	Less than significant
Threshold C: Will the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Less than significant	None required	Less than significant
Threshold D: Will the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less than significant	None required	Less than significant
Threshold E: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No impact	None required	No impact
Threshold F: Will the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Potentially significant without mitigation	MM GEO-1: If one or more fossils are discovered during construction, all ground disturbing activities within 50 feet of the area of the find shall be ceased and the applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology (SVP) qualifications standards for the Project Paleontologist to oversee the documentation of the extent and potential significance of	Less than significant

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		the finds as well as recovery efforts. Ground-disturbing activities may resume in the area of the finds at the discretion of the Project Paleontologist. If the fossils are significant per the SVP's 2010 criteria, then paleontological monitoring shall be conducted on an as-needed basis for further ground-disturbing activities in the Project area.	
Greenhouse Gas Emissions			
Threshold A: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than significant	None required	Less than significant
Threshold B: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than significant	None required	Less than significant
Hazards			
Threshold A: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than significant	None required	Less than significant
Threshold B: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than significant	None required	Less than significant
Threshold C: Would the Project emit hazardous emissions or handle	No impact	None required	Less than significant



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<p>hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?</p>			
<p>Threshold D: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold E: Would the Project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?</p>	<p>Significant and unavoidable impact</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold F: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold G: Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Hydrology & Water Quality</p>			
<p>Threshold A: Would the Project violate any water quality standards or waste discharge requirements or</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>



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<p>otherwise substantially degrade surface or ground water quality?</p> <p>Threshold B: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold C: Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p> <ul style="list-style-type: none"> i) result in substantial erosion or siltation on- or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows? 	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>



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Threshold D: Would the Project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No impact	None required	Less than significant
Threshold E: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Less than significant	None required	Less than significant
Land Use and Planning			
Threshold A: Would the Project physically divide an established community?	No impact	None required	Less than significant
Threshold B: Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Significant unavoidable	None feasible that would reduce potential impacts to less than significant levels	Significant and unavoidable
Mineral Resources			
Threshold A: Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No impact	No impact	No impact
Threshold B: Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No impact	No impact	No impact
Noise			



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<p>Threshold A: Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold B: Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Threshold C: For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project are to excessive noise levels?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Thresholds A - C</p>	<p>Less than significant</p>	<p>Applicable Mission Grove Specific Plan mitigation measures: MM NOISE-1: The use and proper maintenance of noise reducing devices on construction equipment will minimize construction-related noise. MM NOISE-2: Construction activities will take place only during those days and hours specified in the City Noise Ordinance to reduce noise impacts during more sensitive time periods. MM NOISE-3: A program to inform prospective purchasers of dwelling units within the Specific Plan</p>	<p>Less than significant</p>



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		<p>area of high aircraft noise levels shall be submitted by the developer of City review and approval prior to issuance of any residential building permits. This program shall include a letter to be provided to the purchaser prior to completion of the sale.</p> <p>MM NOISE-4: Appropriate avigation and noise easements for all residentially developed property shall be prepared for City and U.S. Air Force review and approval and recorded prior to approval of implementing land division proposals or issuance of any individual building permits if no land division is proposed.</p>	
Population and Housing			
<p>Threshold A: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</p> <p>Threshold B: Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?</p>	<p>Less than significant</p> <p>No impact</p>	<p>None required</p> <p>None required</p>	<p>Less than significant</p> <p>No impact</p>
Public Services			
<p>Threshold A: Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>



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<p>significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:</p> <ul style="list-style-type: none"> • Fire protection, • Police protection, • Schools, • Parks, • Other public facilities? 			
Recreation			
<p>Threshold A: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</p>	Less than significant	None required	Less than significant
<p>Threshold B: Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</p>	Less than significant	None required	Less than significant
Transportation			
<p>Threshold A: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?</p>	Less than significant	None required	Less than significant
<p>Threshold B: Would the Project conflict or be inconsistent with CEQA</p>	Significant and unavoidable impacts	None required	Significant and unavoidable



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<p>Guidelines section 15064.3, subdivision (b)?</p> <p>Threshold C: Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)</p> <p>Threshold D: Result in inadequate emergency access?</p>	<p>Less than significant</p>	<p>None required</p>	<p>Less than significant</p>
<p>Tribal Cultural Resources</p>			
<p>Threshold A: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe that is</p> <ul style="list-style-type: none"> 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)? 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. <p>In applying the criteria set forth in</p>	<p>Potentially significant without mitigation</p>	<p>MM CUL-1 through MM CUL-4 as previously discussed above in Cultural Resources.</p>	<p>Less than significant</p>

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subdivision (c) of Public Resources Code Section 5024.1, would the lead agency consider the significance of the resource to a California Native American tribe?			
Utilities and Service Systems			
Threshold A: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less than significant	None required	Less than significant
Threshold B: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Less than significant	None required	Less than significant
Threshold C: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Less than significant	None required	Less than significant
Threshold D: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Less than significant	None required	Less than significant



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Threshold E: Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Less than significant	None required	Less than significant
Wildfire			
Threshold A: Would the Project Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than significant	None required	Less than significant
Threshold B: Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less than significant	None required	Less than significant
Threshold C: Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less than significant	None required	Less than Significant
Threshold D: Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less than significant	None required	Less than significant
Threshold F: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than significant	None required	Less than significant

2.0 Introduction

2.1 Purpose and Scope

In accordance with Section 15121 of the California Environmental Quality Act (CEQA) Guidelines, the purpose of this Environmental Impact Report (EIR) is to serve as an informational document that:

Will inform public agency decision makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project (California Code of Regulations, Title 14).

This EIR has been prepared as a project EIR pursuant to Section 15161 of the CEQA Guidelines. A Project EIR is appropriate for a specific development project. The CEQA Guidelines state:

This type of EIR 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.

This EIR discloses the potential environmental consequences from the implementation of the Mission Grove Apartments Project, a proposed multi-family residential development located in the eastern portion of the City of Riverside, east of Trautwein Road, west of Mission Grove Parkway, south of Alessandro Boulevard, and north of Mission Village Drive, Figure 3.0-3 – Project Site Map.

The Mission Grove Apartments Project (hereafter referred to as the “Project”) would be constructed on an approximately 9.92-acre site. The project site is currently developed with a 104,231 square foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991. The former K-Mart retail store closed in October of 2020. The site also includes portions of a signalized intersection at Mission Grove Parkway, and a shared driveway providing ingress and egress from Mission Grove Parkway for the shopping center.

The proposed Project includes a General Plan Amendment (GPA) to change the existing General Plan Land Use Designation of the project site from C - Commercial to MU-U - Mixed Use-Urban, to allow residential land use. The proposed Project includes a Zoning Code Amendment (RZ) to change the existing zoning of the project site from CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones to MU-U-SP – Mixed Use-Urban and Specific Plan (Mission Grove) Overlay Zones. The proposed Project includes a Specific Plan Amendment (SPA) to revise the Mission Grove Specific Plan to include Mixed-Use – Urban land use on 9.92 acres and reduce the Non-Residential, Retail Business & Office land use by 9.92 acres.

Development of the Project would involve demolition and site clearing, grading and compaction, pouring of concrete and asphalt, and construction and operation of the proposed structures. The proposed Project includes a total of 347 studio, one-, two-, and three-bedroom residential

apartment units within five, 4-story buildings. The proposed Project is anticipated to house approximately 829 tenants. The project will include indoor amenities including a leasing office, clubroom, fitness center, and outdoor amenities including a pool and spa, outdoor seating and dining areas, and a dog park. The habitable gross square footage (SF) of the apartment community is 419,358 SF, the uninhabited square footage (e.g. garages, utility and storage closets) of the project is 55,143 SF in total. The gross square footage of the project is 474,501 SF. The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the Proposed apartment project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site. The shared parking will be memorialized in a new covenant and restriction agreement between the residential developer and Mission Grove Plaza.

This EIR is to serve as an informational document for the public and City of Riverside (City) decision makers. The process to finalize the EIR includes public hearings before the Planning Commission and City Council to consider certification of a Final EIR and approval of the Project.

This section discusses (1) the EIR background; (2) the legal basis for preparing an EIR; (3) the scope and content of the EIR; (4) the lead, the responsible, and the trustee agencies; and (5) the environmental review process required by CEQA. The proposed Project is described in more detail in Section 3.0, Project Description.

2.2 Legal Authority

The City, as “Lead Agency,” prepared this EIR in accordance with the CEQA Guidelines, for the implementation of the California Environmental Quality Act (State CEQA Guidelines), Sections 15000-15387 of the California Code of Regulations, and the City’s CEQA Guidelines. The Project considered in this EIR is a “project,” as defined by Section 15378 of the State CEQA Guidelines, which states that an EIR must be prepared for any project that may have a significant impact on the environment. The City, as the Lead Agency, has determined the Project may have a significant adverse impact on the environment, and, therefore, preparation of an EIR was required for Project approval.

2.3 Environmental Procedure

The EIR process typically consists of three (3) parts: the Notice of Preparation (NOP), the Draft EIR, and the Final EIR. Pursuant to Section 15060(d) of the CEQA Guidelines, the City initiated the environmental process with the preparation of an Initial Study (Environmental Checklist) for the Project to determine if it would have a significant effect on the environment. Appendix A includes a copy of the NOP.

The City circulated the NOP of the EIR for a 30-day agency and public review period starting October 28, 2022 and ending on November 28, 2022 at 5:00 p.m. The City distributed the NOP to the State Clearinghouse, responsible agencies, and other interested parties.

The City held a virtual EIR Public Scoping Meeting on November 2, 2022, from 6 PM to 7 PM. The meeting aimed to provide information about the Project and the CEQA process to members of public agencies, interested stakeholders, and residents/community members. The NOP and all comments received during the 30-day review period are provided in Appendix A. Table 2.0-1 summarizes written comments from agencies and interested parties in response to the NOP and the virtual Scoping Meeting; it also details where each is addressed in the EIR.

Table 2.0-1: NOP and Scoping Meeting Comments

Commenter	Primary Comments to Address	Where in EIR it is addressed
Agency Comments		
None received.		
Native American Tribe Comments		
None received.		
Public Comments		
Earthjustice	<p>Earthjustice states it is important to incorporate building electrification requirements into the Project. New construction that relies on burning gas for end uses such as cooking and space and water heating has significant greenhouse gas (GHG), energy, and health impacts. One option to determine the significance of the Project’s GHG impacts is to apply a net-zero emissions threshold. Another option is to apply the approach recently adopted by the Bay Area Air Quality Management District in which it updated its CEQA GHG Guidance to require all new projects be built without natural gas in order to receive a finding of no significant impact. Earthjustice strongly cautions against using approaches to determine the significance of Project GHG impacts that involve comparisons against “business-as-usual” emissions or per capita emissions metric.</p>	<p>A detailed project description is contained in Section 3.0 Project Description.</p> <p>Potential impacts related to GHG and energy and the CEQA thresholds that are used in the analysis are discussed in Section 5.7 Greenhouse Gas Emissions and Section 5.6 Energy, of this EIR.</p>
	<p>Earthjustice states a key purpose of the evaluation of project energy impacts under CEQA is decreasing reliance on fossil fuels, such as coal, natural gas and oil. Addressing energy impacts of proposed projects requires more than mere compliance with Title Building Energy Efficiency Standards. Including gas hook-ups in new projects, and thereby perpetuating reliance on fossil fuels, is contrary to California’s energy objectives and should be considered a significant impact under CEQA. Gas appliances are also inherently wasteful because they are significantly less efficient than their electric alternatives.</p>	<p>Potential impacts related to GHG and energy and the CEQA thresholds that are used in the analysis are discussed in Section 5.7 Greenhouse Gas Emissions and Section 5.6 Energy, of this EIR.</p>
	<p>Earthjustice states CEQA also requires consideration of “health and safety problems” that may result from a project’s emissions. The health and safety hazards of gas-burning appliances in buildings are well-documented by the California Air Resources Board, the California Energy Commission, and numerous peer-reviewed academic studies. Gas appliances contribute</p>	<p>A detailed project description is contained in Section 3.0 Project Description.</p> <p>Potential impacts related to GHG and energy and the CEQA thresholds that</p>

Commenter	Primary Comments to Address	Where in EIR it is addressed
	to indoor air pollution even when they are not turned on.	are used in the analysis are discussed in Section 5.7 Greenhouse Gas Emissions and Section 5.6 Energy, of this EIR.
	A lead agency may not lawfully approve a project where there are feasible alternatives or feasible mitigation measures available which would substantially lessen its significant environmental effects. Eliminating natural gas use in new buildings is feasible mitigation that will substantially lessen the project's GHG, energy, and air quality/health impacts. All-electric new construction is also an economically feasible mitigation measure to avoid the health impacts of gas, particularly the indoor air pollution impacts in residential buildings. They urge incorporation of all-electric building design into the project.	Potential impacts related to GHG and energy and if any mitigation measures are required are discussed in Section 5.7 Greenhouse Gas Emissions and Section 5.6 Energy, of this EIR.

2.4 Scope and Content

This EIR addresses impacts identified to be potentially significant. The following issues have been studied in the EIR:

- Aesthetics
- Agriculture/ Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/ Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population/ Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

EIR preparation included use of pertinent City policies and guidelines, certified EIRs and adopted CEQA documents, and other background documents. References are provided at the end of each section.

The alternatives section of the EIR (Section 7.0) was prepared in accordance with Section 15126.6 of the CEQA Guidelines and focuses on alternatives capable of eliminating or reducing significant adverse effects associated with the project while potentially and feasibly attaining most of the basic project objectives. The alternatives section identifies the "environmentally superior" alternative among the alternatives assessed; the evaluation included the CEQA-required "No Project" alternative and three alternative development scenarios for the Project.

The level of detail throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the CEQA Guidelines provides the standard of adequacy on which this document is based, as follows:

An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.

2.5 Lead, Responsible, and Trustee Agencies

The CEQA Guidelines define lead, responsible, and trustee agencies. The City is the lead agency for the Project because the City holds principal responsibility for approving the Project.

A responsible agency refers to a public agency other than the lead agency with discretionary approval over the Project. Responsible agencies for the Project include:

- California State Water Resources Control Board for General Construction Storm Water Permit.
- Riverside County Airport Land Use Commission (ALUC) for consistency review with the 2014 March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan as the project site is located in the C2 Compatibility Zone.

A trustee agency refers to a State agency with legal jurisdiction over natural resources affected by a project. No trustee agencies have been identified for the Project.

2.6 EIR Format

This EIR has been organized in several sections as follows:

- **Table of Contents.** Assists readers in locating the analysis of different subjects and issues as required by Section 15122 of the State CEQA Guidelines. A list of acronyms used in the EIR is included in the table of contents.
- **Section 1.0 – Executive Summary.** Identifies the summary requirements of CEQA as required by Section 15123 of the State CEQA Guidelines and includes: the Project location, a brief Project description, a matrix containing a summary of environmental impacts and mitigation measures, Project objectives, approvals related to the Project, areas of controversy, and a brief description of the Project alternatives.
- **Section 2.0 – Introduction.** Describes the scope and purpose of the EIR, identifies the lead agency, and provides a brief summary of the CEQA process to date.
- **Section 3.0 – Project Description.** Contains the information required by Section 15124 of the State CEQA Guidelines including: a detailed description of the Project, the Project objectives, a general description of the Project’s environmental setting, the approvals needed to implement the Project, and a list of agencies expected to use the DEIR.
- **Section 4.0 – Environmental Setting.** Identifies the regional setting, the project site setting, and the cumulative development setting.
- **Section 5.0 – Environmental Impact Analysis.** Satisfies the requirements of Sections 15125, 15126, 15126.2, and 15126.4 of the State CEQA Guidelines by including an analysis of each environmental issue area determined to have potentially significant impacts during preparation of the NOP or as a result of comments received in response to the NOP. For each issue area analyzed, this section includes a discussion of the setting to which each issue area is analyzed against, defines the related regulations affecting the Project, identifies the thresholds used to determine significance, describes any Project design features that would reduce impacts, analyzes the Project’s impacts, provides a description of the mitigation measures used to reduce or lessen potential impacts, and discusses the Project’s impacts after implementation of mitigation. This section also includes the Project’s cumulative impact analysis.
- **Section 6.0 – Other CEQA Topics.** Includes an analysis of the Project’s consistency with applicable regional plans, irreversible environmental effects, and growth inducing impacts.
- **Section 7.0 – Alternatives.** Satisfies the requirements of Section 15126.6 of the State CEQA Guidelines by identifying and discussing the “No Project” alternative in addition to alternatives to the Project that lessen the severity of significant impacts and identifying the environmentally superior alternative.
- **Section 8 – References.** Includes a listing of all reference materials, the organizations and persons contacted in preparing the EIR, and a list of preparers as required by Section 15129 of the State CEQA Guidelines.

2.7 Environmental Review Process

The environmental review process, as required under CEQA, is summarized below. The steps are presented in sequential order.

1. **NOP.** After deciding an EIR is required, the Lead Agency (City) must publicly circulate an NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA Guidelines Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk's office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the Project would create significant environmental impacts.
2. **DEIR Prepared.** The Draft EIR must contain a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing, and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes.
3. **Notice of Completion (NOC).** The lead agency must file a NOC with the State Clearinghouse when it completes a Draft EIR and prepare a Public Notice of Availability of a Draft EIR. The lead agency must place the NOC in the County Clerk's office for 30 days (Public Resource Code Section 21092) and send a copy of the NOC to anyone requesting it (CEQA Guidelines Section 15087). Additionally, public notice of Draft EIR availability must be given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the Project site; c) direct mailing to owners and occupants of contiguous properties. The lead agency must solicit input from other agencies and the public, and respond to writing to all comments received (Public Resources Code Sections 21104 and 21253). The minimum public review period for a Draft EIR is 30 days. When a Draft EIR is sent to the State Clearinghouse for a review, the public review must be 45 days unless the State Clearinghouse approves a shorter period (Public Resource Code 21091).
4. **Final EIR.** A Final EIR must include a) the Draft EIR; b) copies of comments received during public review of the Draft EIR; c) list of persons and entities commenting; d) responses to comments and e) any errata to Draft EIR.
5. **Certification of Final EIR.** Prior to making any decision on a proposed project, the lead agency must certify that a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; c) the decision-making body reviewed and considered the information in the Final EIR prior to approving a project, and d) the Final EIR reflects the lead agency's independent judgement and analysis (CEQA Guidelines Section 15090).
6. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant

environmental effects, if the proper findings and a statement of overriding considerations are adopted (CEQA Guidelines Sections 15042 and 15043).

- 7. Findings/Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (CEQA Guidelines Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
- 8. Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures adopted or made conditions of project approval to mitigate significant effects.
- 9. Notice of Determination (NOD).** The lead agency should file an NOD after deciding to approve a project for which an EIR is prepared (CEQA Guidelines Section 15094). A local agency must file the NOD with the county clerk. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day status of limitations on CEQA legal challenges (Public Resources Code Section 21169[c]).

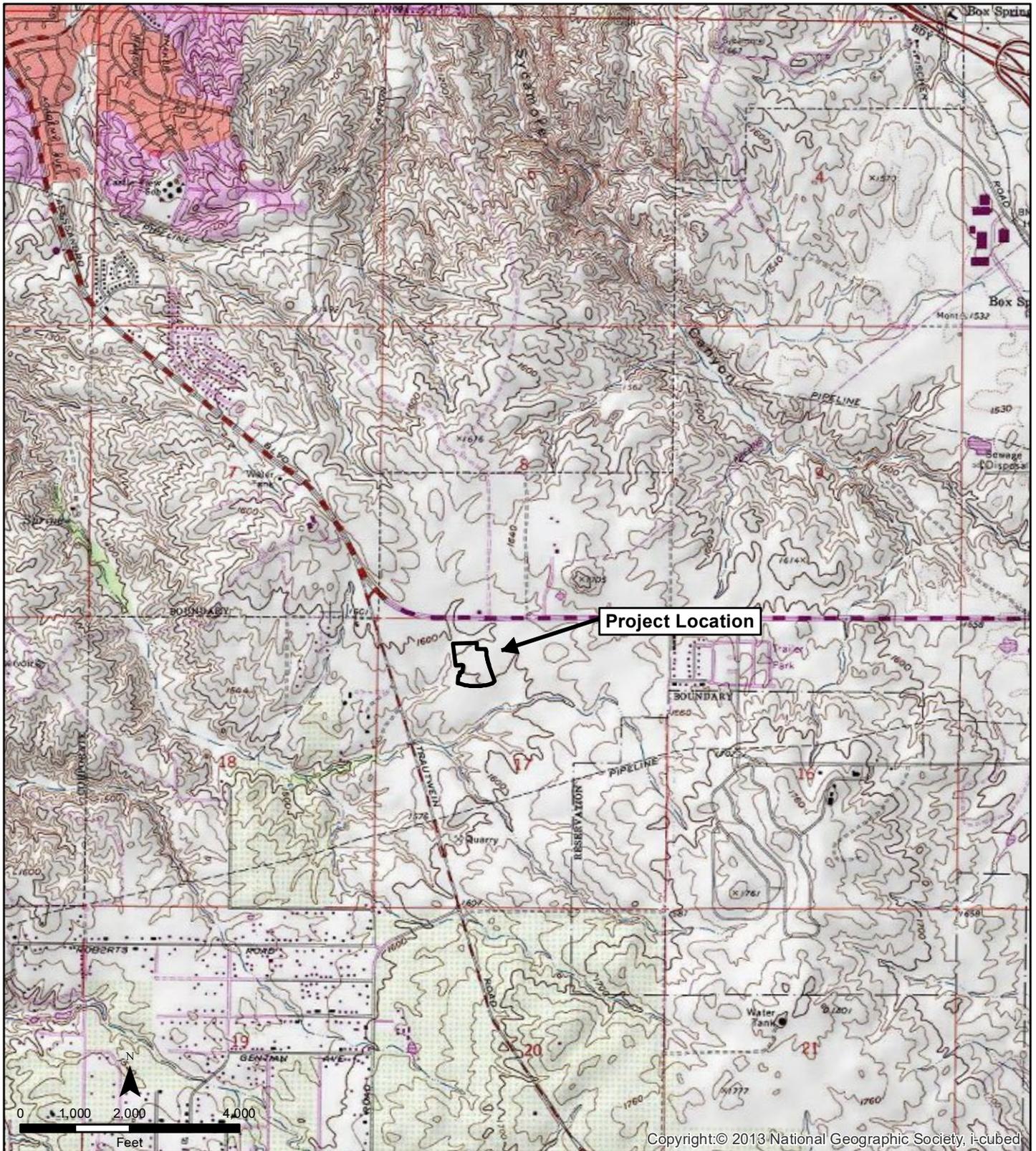
3.0 Project Description

This section describes the project location, the existing conditions, the project site and surrounding land uses, major project characteristics, project objectives, and discretionary actions needed for approval.

3.1 Project Location

The Project is located approximately 10 miles south of Downtown Riverside. The regional setting of the Project is shown in Figure 3.0-1 - Regional Map. The Project site is within the southwestern quarter of Section 17, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle, Figure 3.0-2 - USGS Topographic Map. The Project site is located in the eastern portion of the City of Riverside, east of Trautwein Road, west of Mission Grove Parkway, south of Alessandro Boulevard, and north of Mission Village Drive, Figure 3.0-3 – Project Site Map.

The project site address is 375 E. Alessandro Boulevard, Riverside, CA 92508. The Assessor's Parcel Number is 276-110-018. The project site is part of the Mission Grove Plaza Shopping Center and is currently developed with a former K-Mart retail store that closed in October of 2020. The surrounding areas include the Mission Grove retail shopping center to the east, west, and north, and single-family residences to the south (across Mission Village Drive). Multi-family residences are also located to the north (across Alessandro Boulevard).

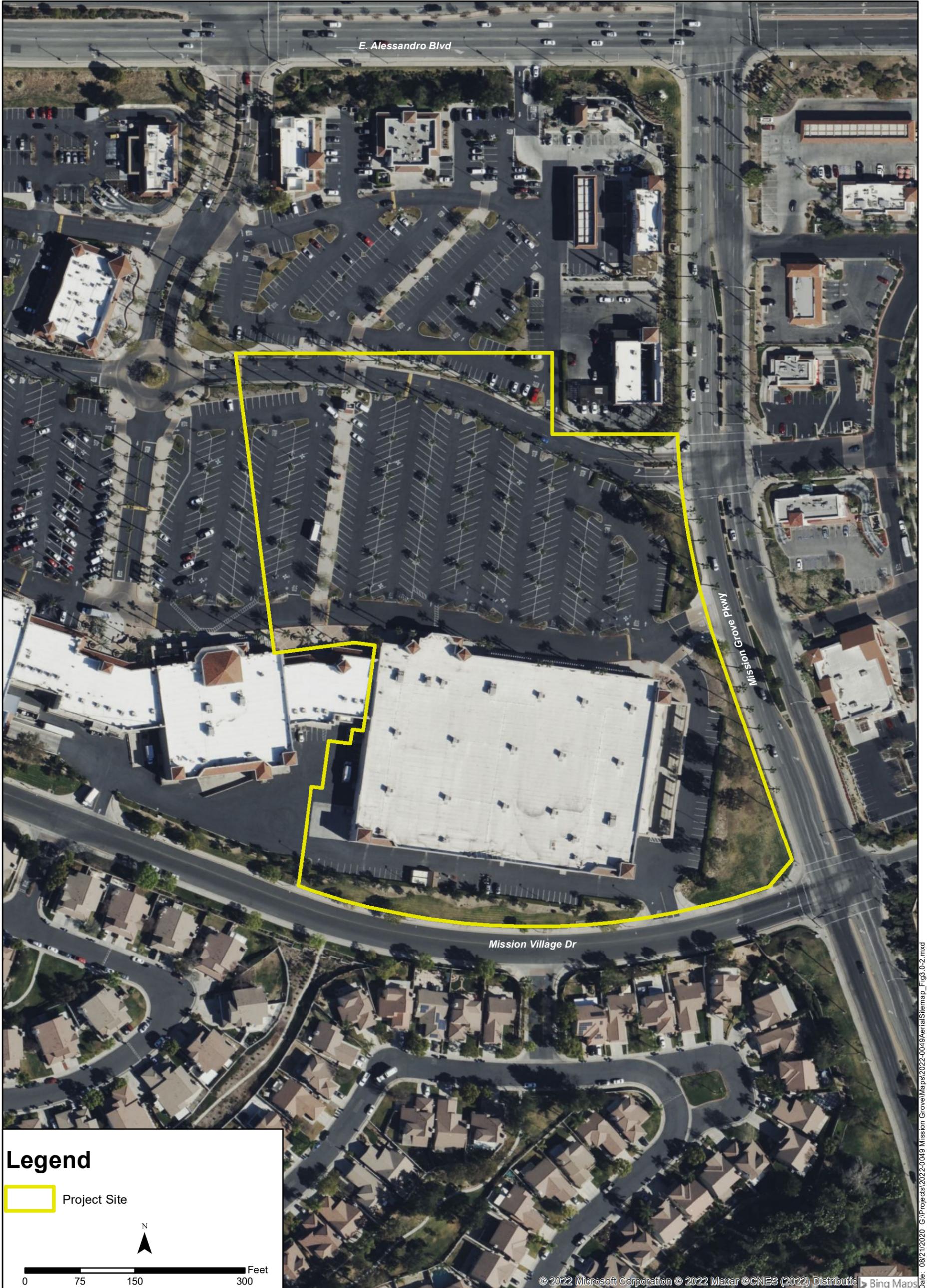


MISSION GROVE APARTMENTS

USGS Topographic Map

Figure 3.0-2





Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate System: State Plane 6

MISSION GROVE APARTMENTS

Project Site Map

Figure 3.0-3



3.2 Existing Site Characteristics

3.2.1 Project Site Background

The project site is a 9.92 acre parcel and is part of the 70-acre Mission Grove Plaza Shopping Center. The project site is currently developed with a 104,231 square foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991. The former K-Mart retail store closed in October of 2020. The site also includes portions of a signalized intersection at Mission Grove Parkway, and a shared driveway providing ingress and egress from Mission Grove Parkway, for the shopping center.

Mission Grove Specific Plan

The Mission Grove Specific Plan, formerly known as the Alessandro Heights Specific Plan, was adopted in 1985. The Mission Grove Specific Plan is a master-planned development to provide industrial and residential land uses in a park like atmosphere. As the 650-acre Specific Plan area is the eastern gateway into central Riverside, the development endeavored to create an entry statement that is attractive, and of the highest quality, reflecting Riverside's best assets. The Specific Plan is made up of a mix of land uses including 85 acres of industrial use, 403 acres of varying density residential, 69 acres of retail commercial, 10 acres of public facilities and institutions, and public streets. As part of Annexation Case No. 54, 531 acres of the Specific Plan area were annexed into the City of Riverside on June 25, 1985. Numerous amendments have been made to the Specific Plan from 1986 through 1997. As shown in Figure 3 – Original Land Use of the Specific Plan, the project site is located within an area designated as Retail Business & Office and generally in the central portion of the Specific Plan.

March Airport Land Use Compatibility (ALUC) Plan

The March Air Reserve Base (ARB) is located east of the project site and the Mission Grove Specific Plan. For most of the second half of the twentieth century, the base was known as March Air Force Base. The current March Air Reserve Base name became official in 1996 as a result of recommendations of the 1993 Defense Base Realignment and Closure Commission. Although the role of March ARB has evolved over time, the runway system and other basic aeronautical components of the base have existed in largely their present configuration since the World War II era. The airport's primary runway, oriented north-northwest/south-southeast, is 13,300 feet in length, making it one of the longest in the state, enabling it to accommodate nearly any type of military or civilian aircraft.

The basic function of airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. In addition, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances in their design of new development.

The proposed Project is located in the C2 Compatibility Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, which was adopted November 13, 2014.

3.2.2 Current and Proposed Land Use, Zoning & Specific Plan

The current land use of the project site is a vacant retail site. The General Plan designation for the project site is C - Commercial and it is currently zoned as CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. The site is designated as Retail Business & Office within the Mission Grove Specific Plan.

The project includes a General Plan Amendment to change the General Plan Land Use Designation from C – Commercial to MU-U – Mixed-Use – Urban, to allow the residential land use. A Zone Change is also proposed from CR – Commercial Retail – to MU-U – Mixed-use Urban. Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking. The existing and proposed General Plan Land Use Designations and zoning are shown in Figure 3.0-4 General Plan Land Use Map and Figure 3.0-5 Zoning, respectively.

The project also includes a Specific Plan Amendment (SPA) to the Mission Grove Specific Plan. The SPA introduces the residential land use and provides for specific design guidelines integrating both land uses.

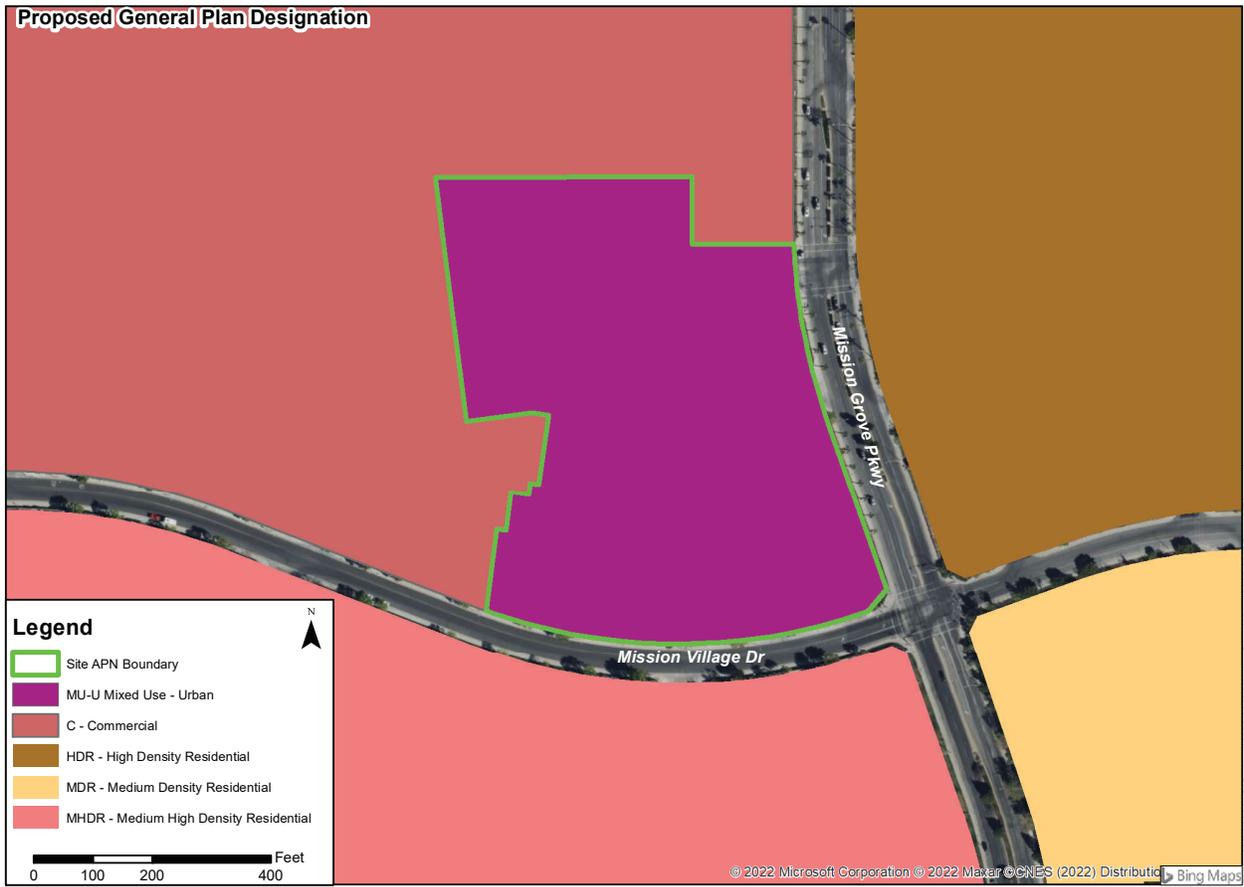
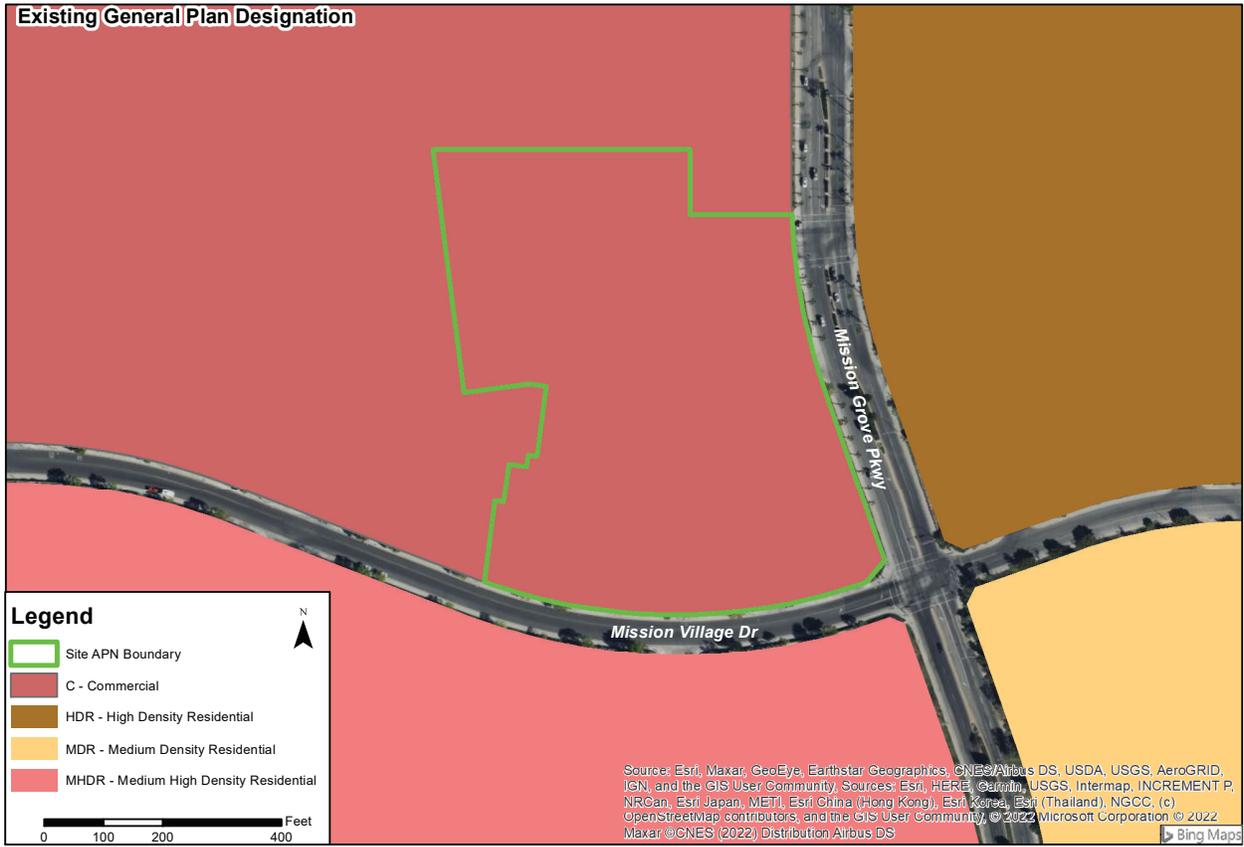
3.2.3 Surrounding Land Use and Zoning

The site is bordered on the north, west, and east (across Mission Grove Parkway) by the Mission Grove Plaza Shopping Center, which has a General Plan Land Use Designation of C - Commercial and is zoned CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones, and is developed with retail uses. Multi-family residences are located further north (across Alessandro Boulevard), which have a General Plan Land Use Designation of HDR – High-Density Residential, and are zoned R-3-3000-SP – Multi-Family Residential and Specific Plan (Mission Grove) Overlay Zones. The project site is bordered on the south by a single-family residential neighborhood (across Mission Village Drive), which has a General Plan Land Use Designation of Medium High Density Residential (MHDR) and is zoned R-1-7000-SP – Single-Family Residential and Specific Plan (Mission Grove) Overlay Zones.

Table 3.0-1 details the land use and zoning of the project site and its surrounding areas. A photo location map and photos of the Project site and surrounding areas are included in Figure 3.0-6A through 3.0-6C.

Table 3.0-1: Site and Surrounding Land Use/Zoning Designations

	Existing Land Use	General Plan Designation	Zoning Designation	Specific Plan Designation
Project Site	Commercial Retail	C – Commercial	CR-SP – Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office
North	Commercial Retail	C – Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office
East (across Mission Grove Parkway.)	Commercial Retail	C – Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office and Medium High Density Residential
South (across Mission Village Drive.)	Single Family Residential	MHDR - Medium High Density Residential	R-1-7000 and Specific Plan (Mission Grove) Overlay Zone	Medium High Density Residential
West	Commercial Retail	C - Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office



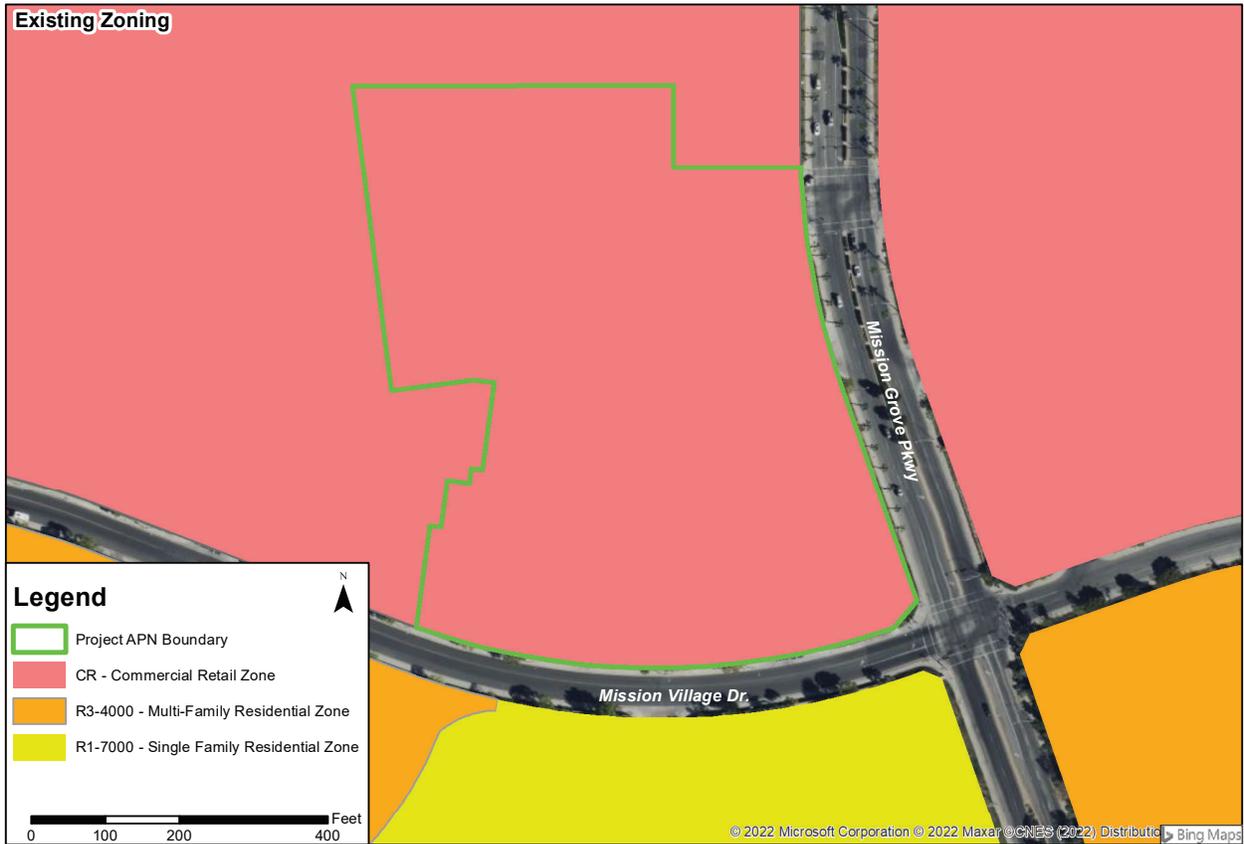
Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate System: State Plane 6

MISSION GROVE APARTMENTS

General Plan Land Use Map

Figure 3.0-4

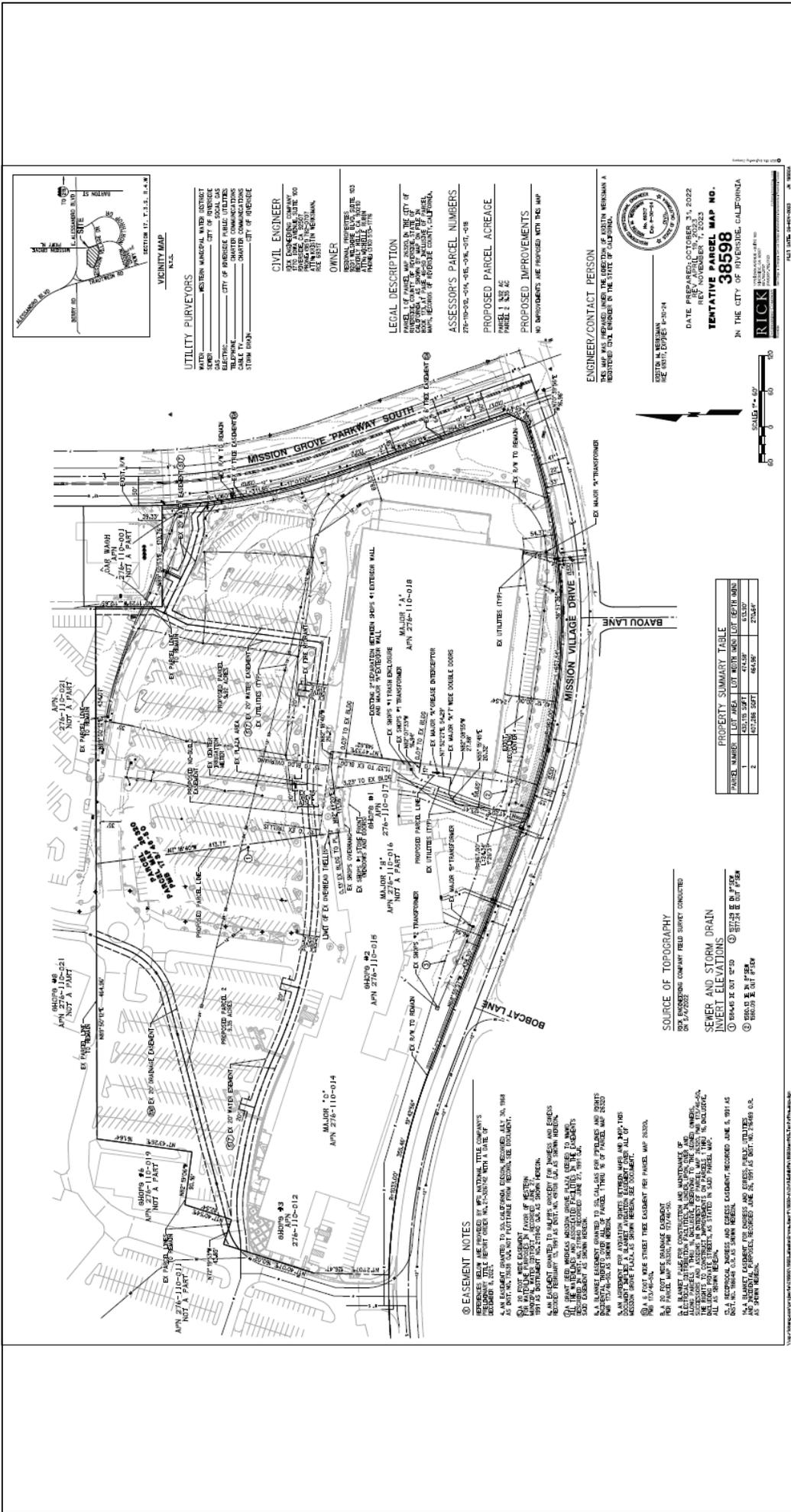




Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate System: State Plane 6

MISSION GROVE APARTMENTS

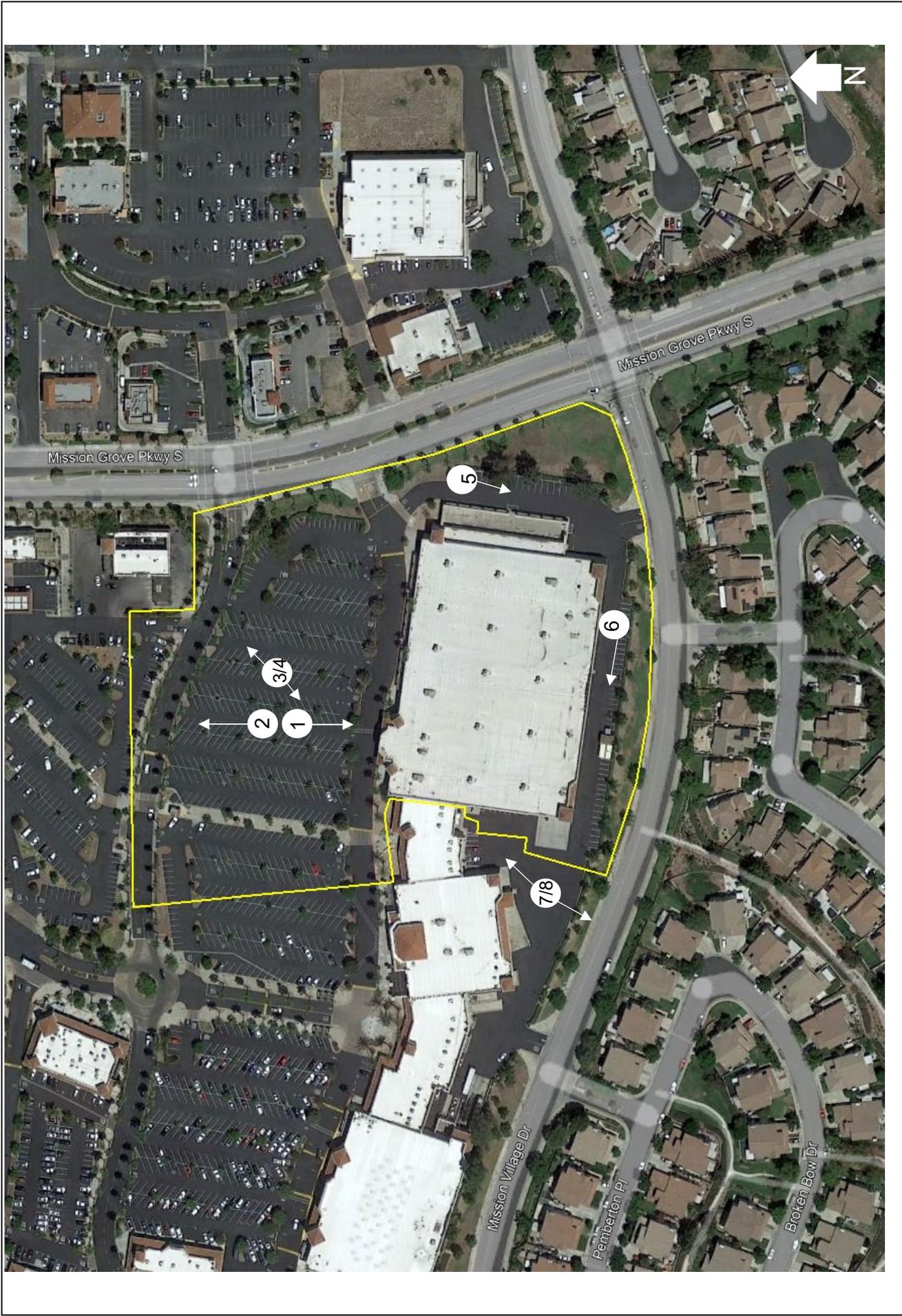




MISSION GROVE APARTMENTS PROJECT

Tentative Parcel Map

Figure 3.0-6



MISSION GROVE APARTMENTS PROJECT

Figure 3.0-7A – Site Photographs Photo Location Map



Photo 1: View South, showing current project site existing structures/buildings.



Photo 2: View North, showing current site parking lot area and surrounding businesses.



Photo 3: View Southwest showing current project site existing conditions.



Photo 4: View Northwest, showing current project site existing conditions.

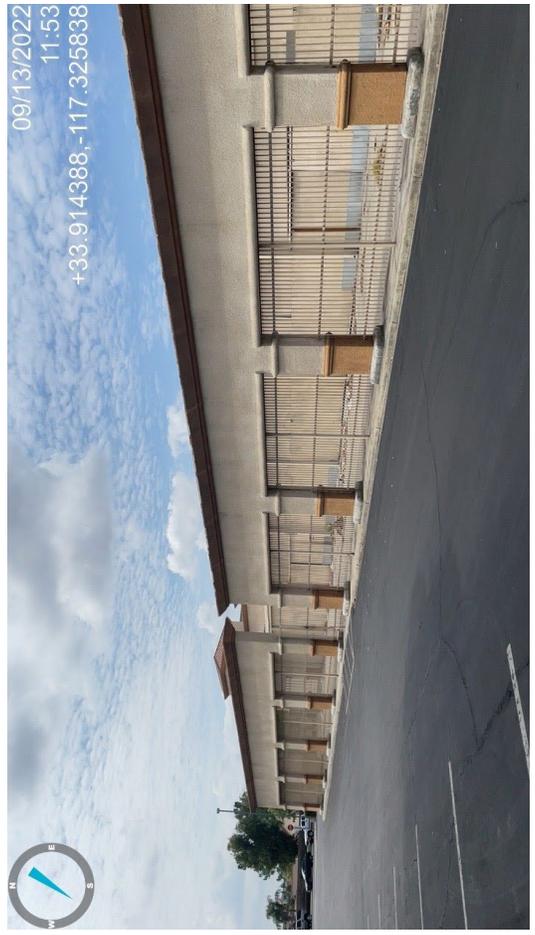


Photo 5: View Southwest of eastern side of project site existing structure.

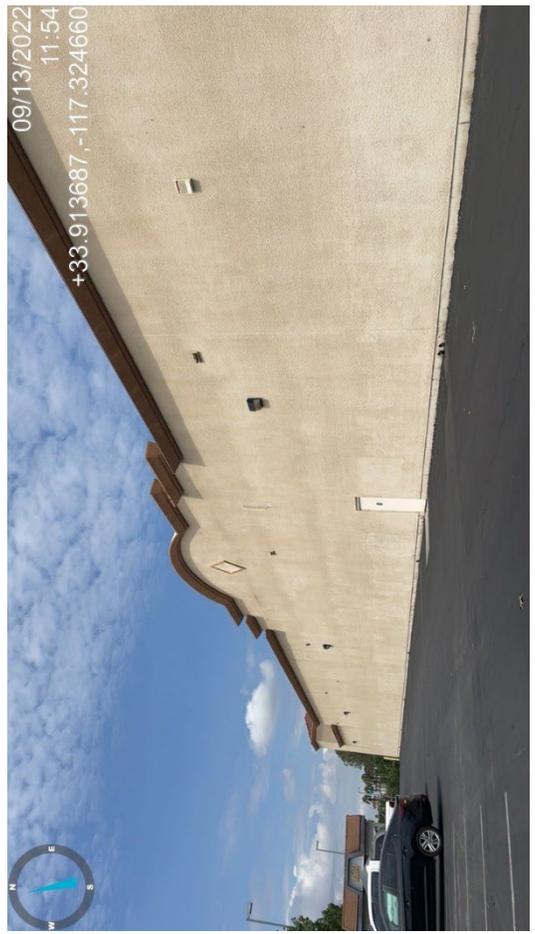


Photo 6: View Northwest of southern side of project site existing structure and active recycling center structure.

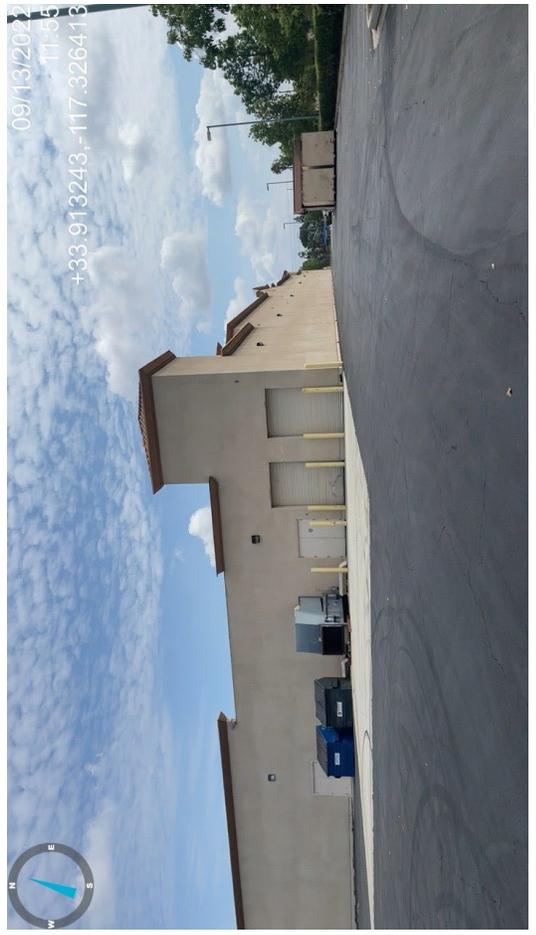


Photo 7: View Northeast of southern side of project site existing structure, also showing active recycling center structure.

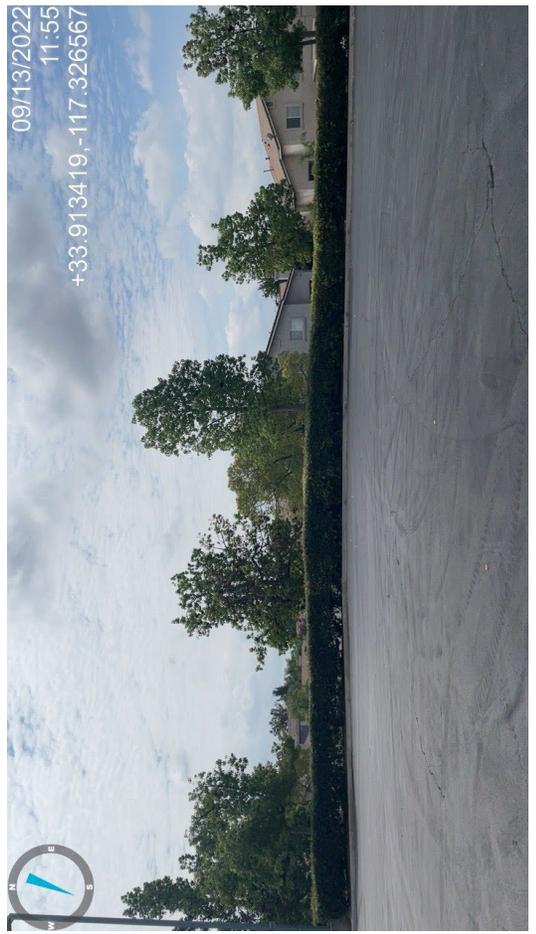


Photo 8: View South/Southwest, showing views of existing residential uses to the South of the project site.

3.3 Proposed Entitlements

3.3.1 General Plan Amendment

The proposed Project includes a General Plan Amendment (GPA) to change the existing General Plan Land Use Designation of the project site from C - Commercial to MU-U - Mixed Use-Urban, to allow residential land use.

3.3.2 Change of Zoning

The proposed Project includes a Zoning Code Amendment (RZ) to change the existing zoning of the project site from CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones to MU-U-SP – Mixed Use-Urban and Specific Plan (Mission Grove) Overlay Zones.

3.3.3 Specific Plan Amendment

The proposed Project includes a Specific Plan Amendment (SPA) to revise the Mission Grove Specific Plan. The proposed revisions to the Mission Grove Specific Plan include:

- The proposed Project includes a Specific Plan Amendment (SPA) to revise the Mission Grove Specific Plan. The proposed revisions to the Mission Grove Specific Plan include:
- Updating Table 2 – Amendment Descriptions to include the case number and description of the amendment.
- Updating Table 4 – Land Use (Updated to Reflect all Amendments) to include Mixed-Use – Urban for 9.92 acres, with density of 40 dwelling units per acre, and number of units of 396.80 and reducing the Non-Residential, Retail Business & Office to 59.84 acres.
- Revising various text throughout the Specific Plan for consistency with the revisions above.
- Revise Section III Development Standards, to include Mixed-Use
- Revise Figure 12 – Specific Plan Proposed Zoning to include MU-U at the Project site
- Revise Section IV Appendix 2 – Development Standards Matrix to include the Land Use Designate of Mixed Use – Urban and to add standards for Open Space, Parking Reduction, and Fence and Walls.

3.3.4 Tentative Parcel Map

The proposed Project includes Tentative Parcel Map (TPM) 38598 (Figure 3.0-6 – Tentative Parcel Map) to subdivide the existing Parcel 1 of Parcel Map 26320 into two parcels for financing and conveyance purposes. Proposed Parcel 1 (Project site) would total 9.92 acres, similar shape and size as APN 276-110-018 with only minor realignment of parcel line in the southwest corner. The remainder parcel, currently developed with the Mission Grove shopping center, will be approximately 9.35 acres and will be similar to the combined APNs 276-110-012, -014, -015, -016, and -017 in shape and size with only minor realignment of parcel line in the southeast corner. As TPM 38598 creates legal parcels for financing purposes, the TPM itself would not have a significant effect on the environment and is not discussed in detail in this EIR.

3.3.5 Design Review

Site Plan

The proposed Project includes a total of 347 studio, one-, two-, and three-bedroom residential apartment units within five, 4-story buildings. The proposed Project is anticipated to house approximately 829 tenants. Refer to Figure 3.0-8 Conceptual Site Plan

The project will include indoor amenities including a leasing office, clubroom, fitness center, and outdoor amenities including a pool and spa, outdoor seating and dining areas, and a dog park. The habitable gross square footage (SF) of the apartment community is 419,358 SF, the uninhabited square footage (e.g. garages, utility and storage closets) of the project is 55,143 SF in total. The gross square footage of the project is 474,501.

Table 3.0-2: Residential Unit Details

Unit Types	Number of Units	Percentage of Total Unit Count	Average Unit Size (Square Feet)
Studio	24	7%	594
1 Bedroom	133	38%	774
1 Bed + Den	39	11%	888
2 Bedroom	141	41%	1,143
3 Bedroom	10	3%	1,384
Total	347	100%	940 Avg

Table 3.0-3: Building Development Standards

City's Site Development Standard			Proposed
Max Floor Area Ratio	4.0		0.97
Building Height	60 feet		57'-2"
Building Minimum Setbacks	Front Yard (East fronting Mission Grove Parkway)	0 feet	13'-5"
	Front Yard (South fronting Mission Village Drive)	0 feet	11'
	Side Yard (North, Interior)	0 feet	58'-9"
	Side Yard (West, Interior, from carport)	0 feet	2'

	<u>Unit Type</u>	<u>Parking Stalls Required</u>	<u>Unit Type Count</u>	<u>Total Parking Required</u>	<u>Provided</u>
Minimum Parking	Studio	1	24	24	604 spaces
	1 Bedroom	1.5	133	200	
	1 Bedroom + Den	2	39	78	
	2 Bedroom	2	141	282	
	<u>3 Bedroom</u>	<u>2</u>	<u>10</u>	<u>20</u>	
	Total		347	604	
Minimum Landscape Setbacks	Parking Area along Street Frontage (South fronting Mission Village Drive)			15 feet	11' minimum to 19'-10" maximum, averaging 15'+

Parking and Site Access

The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the Proposed apartment project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site. The shared parking will be memorialized in a new covenant and restriction agreement between the residential developer entity and Mission Grove Plaza.

Table 3.0-4: Residential Unit Parking Requirements

Chapter 19.580 – Parking and Loading

Unit Types		Parking Ratio (spaces per unit)	Parking Spaces Required	Required Parking with 15% Parking Reduction ⁽¹⁾	Parking Spaces Provided
347 units	24 Studios	1.0	24 spaces	513 spaces	24 spaces
	133 1-Bedrooms	1.5	200 spaces		200 spaces
	39 1-Bed + Den	2.0	78 spaces		78 spaces
	141 2-Bedrooms	2.0	282 spaces		282 spaces
	10 3-Bedrooms	2.0	20 spaces		20 spaces
	Total				604 spaces

A 15% parking reduction request has been outlined for the Project site as noted in the Project's Specific Plan Amendment, per City of Riverside municipal code 19.580.060.C.2.b.

**Table 3.0-5: Parking Type Requirement
Chapter 19.580 – Parking and Loading**

Standard	Required	Provided	Percent
Covered Parking (75 percent of required parking)	386 spaces	182 garages	75%
		204 carports	
Open Spaces	127 spaces	58 tandem spaces	25%
		160 standards spaces	
Total Parking Spaces	513 spaces	604 spaces	100%

LEGEND

- RESIDENTIAL PARKING GARAGE
- RESIDENTIAL APARTMENTS
- RESIDENTIAL AMENITY SPACE
- EXISTING RETAIL
- RESIDENTIAL PEDESTRIAN PATH OF TRAVEL
- PUBLIC PEDESTRIAN PATH OF TRAVEL

SITE PLAN DATA:

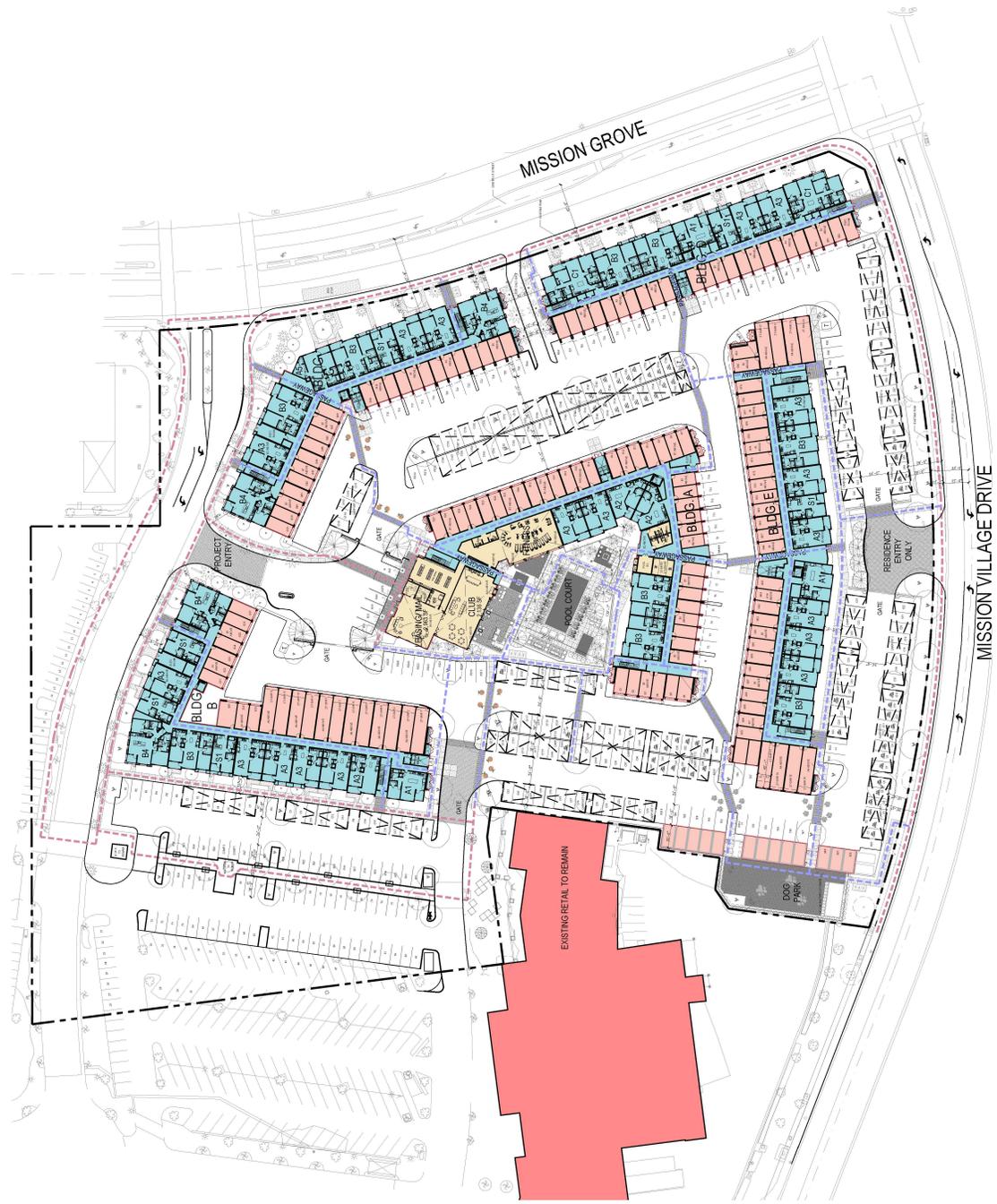
SITE AREA: 9.92 AC
 UNITS: 347 DU
 DENSITY: 35 DU/AC

NOTES:

- 1 Standard stalls are 9'x18'
 1 car garage size is 10'x20'
 Tandem stalls are 9'x18'
 2 car tandem garage is 10'x40'
 Compact stalls are 8'x16'
- 2 EV parking stalls to be studied for location and minimum size.
- 3 The existing water easement to be relocated off site.
- 4 The existing B of A and watermill kiosks to remain in place.

NORTH

1"=40'-0"



MISSION GROVE APARTMENTS

Conceptual Site Plan
 Figure 3.0-8



Architecture

The Project offers a contemporary Spanish architectural style that consists of stucco with score lines, concrete “S” roof tiles, and decorative stone veneer to enhance project entries. This contemporary Spanish architectural style also includes enhanced decorative iron details at roof vents, decorative tiles at project entries, foam trims, sills, and corbels, and trellis at upper balconies. The project leasing and clubhouse incorporates aluminum storefront windows, metal canopies with cable brackets, and decorative stone veneer.

Walls & Fencing

The Project will be secured by utilizing the front facade of the residential buildings along with tubular steel fencing between the buildings along the western, northern, and eastern sides of the site. Along the southern side of the site, adjacent and parallel with Mission Village Drive, a 6-foot tubular steel fence will be installed. Along the southwest corner of the project site, adjacent to the commercial retail site, a 6-foot tubular steel fence will be constructed with planting hedges which will act as a barrier between the residential use and the back-of-house use for the commercial retail. There are no retaining walls proposed on the project site. All of the fences and walls will be designed to enhance the aesthetics of the proposed project, while providing security and privacy. See Figure 3.0-9, Conceptual Wall and Fence Exhibit.

Lighting

The Project includes a variety of exterior lighting fixtures that have been selected to complement and enhance the contemporary Spanish architecture and the landscape features, as well as to provide functional light to vehicular and pedestrian pathways and wayfinding features. Exterior light fixtures include pole lights along the Project’s main driveways and parking areas, downlights at carports, wall-mounted lights adjacent to garages, sconce lights at building entries, bollard lights along pedestrian pathways, overhead festival lighting and pendent lighting in outdoor amenity areas, and a sign light at the Project’s monument sign.

Open Space & Landscaping

The project will include a combination of private and common open space in accordance with City of Riverside open space requirements for Mixed Use-Urban zones and the proposed Mission Grove Specific Plan Amendment.

The private open space required is 50 square feet per unit, for a total of 17,350 square feet or 0.40 acres. The proposed private open space provided is 21,523 square feet.

The Zoning Code requires 150 square feet of common usable open space per unit for projects in the Mixed-Use – Urban Zone, for a total of 52,050 square feet of required open space. The applicant is proposing a Specific Plan Amendment to require 75 square feet of common usable open space per unit for the Mixed-Use – Urban designation, for a total of 26,025 square feet of required usable open space. The common open space that is provided totals 28,611 square feet or 0.66 acres and includes a pool and spa, a dog run area with a dog wash station, fitness center, clubhouse, and shade structure with barbeques and tables.

Landscaping throughout the project site will consist of low water use trees, shrubs, and ground cover. The existing Mexican fan palms located along Mission Grove Parkway South will be protected in place and kept as part of the Project. Large trees are proposed on the periphery of the project site, along roadways (Mission Grove Parkway South and Mission Village Drive), within parking lot planters, and throughout the residential common open space areas and around the apartment structures, Figure 3.0-10, Conceptual Landscape. Trees in the landscape plan include

Magnolia G. 'Little Gem' Dwarf Magnolia, Olea 'Swan Hill' Fruitless Olive, Laurus X 'Saratoga' Hybrid Laurel, Cercis 'Forest Pansy' Redbud, and Phoenix Dactylifera 'Medjool' Date Palm. Groundcover, shrubs and accent plants are proposed along walkways and throughout the residential common open space areas. Stormwater will be treated by flowing through modular wetlands throughout the site which are detailed and sized by the Preliminary Water Quality Management Plan.

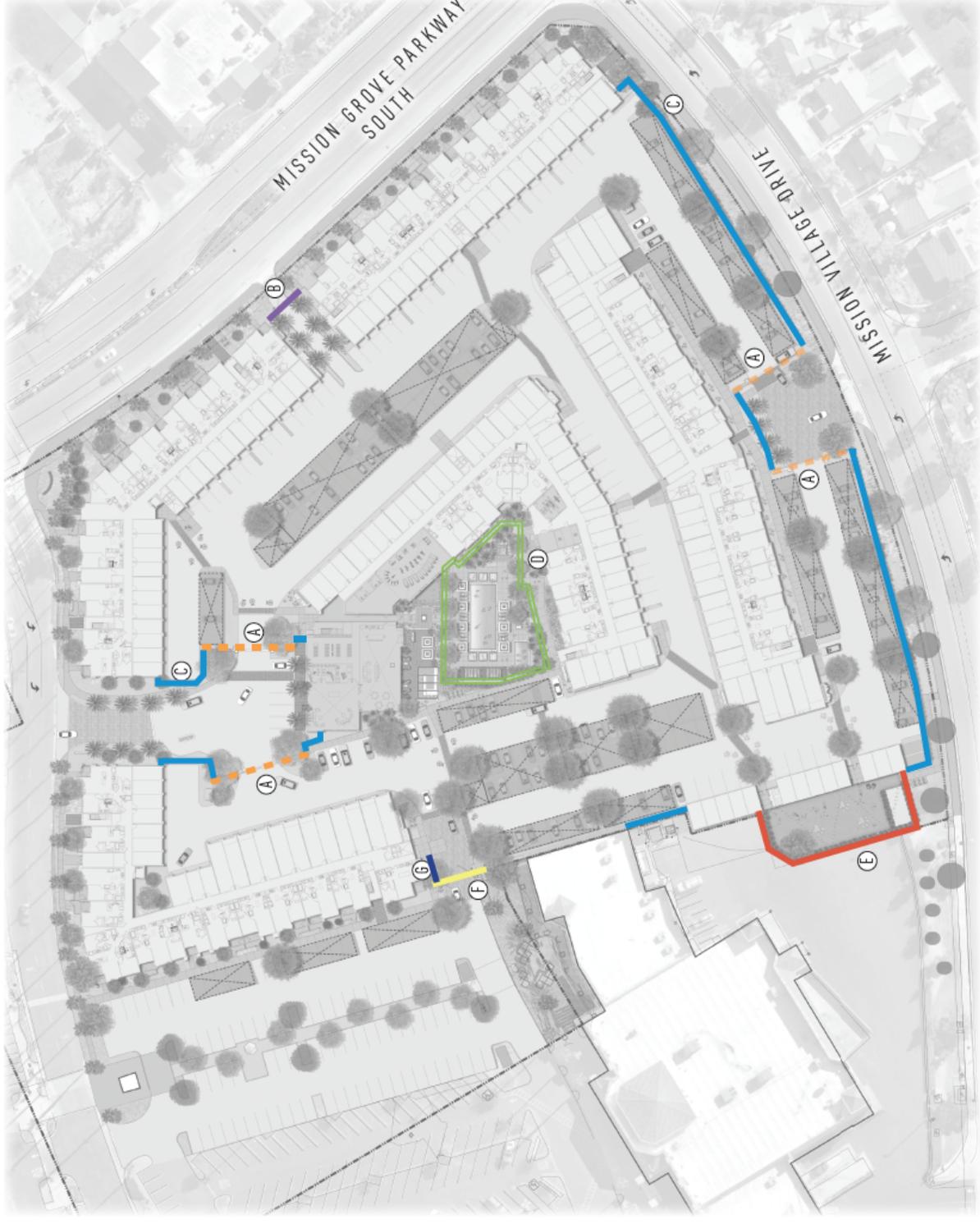
Site Preparation and Grading

Construction of the proposed project is expected to occur over approximately 28 months. Construction activity would comply with the City's Municipal Code Section 7.35.020 and would not occur between the hours of 7:00 PM and 7:00 AM on weekdays, between the hours of 5:00 PM and 8:00 AM on Saturdays, or at any time on Sundays or federal holidays. Construction activity would consist of demolition, site preparation and grading, building construction, and paving.

Construction activity would begin with demolition of the existing building, site preparation and grading which would utilize equipment such as tractors, dozers, graders, and scrapers. Grading would require a maximum cut and fill of 5 feet under the building, not including remedial grading. The existing site ranges in elevation from 1,589 feet to 1,599 feet above mean sea level. The proposed improvements range in elevation from 1,591 to 1,650 feet. Proposed grading activities anticipate 5,118 cubic yards of cut and 5,950 cubic yards of fill on site, with a net soil import of 832 cubic yards. Additionally, there is a potential that some additional export of rock/boulders may be required if the rock/boulder material cannot be utilized in the landscaping on site. All construction activities, with the exception of the import of fill and the potential export of rock/boulders, would be on site, including staging of equipment and materials and construction worker parking.

The previously placed fill within the existing Kmart building footprint areas will be over excavated to a depth of three feet below planned finished grades or one foot below footings, whichever is deeper. Fill will be placed and compacted in layers to provide a fill mat on which to construct the proposed residential buildings. There is a potential that grading activities will require heavy ripping, or the use of breakers, if areas of hard bedrock are encountered.

Building construction and paving activities would utilize cranes, welders, rollers, and other paving equipment for construction. Construction is expected to begin in 2025 and take approximately 28 months to complete. The project is anticipated to be fully built and open in 2028.



LEGEND

- (A) ENTRY VEHICULAR GATES
- (B) EXIT ONLY VEHICULAR GATE
- (C) 6' TUBULAR STEEL PERIMETER FENCE
- (D) 6' TUBULAR STEEL POOL ENCLOSURE
- (E) 8' TUBULAR STEEL DOG PARK FENCE
- (F) RETAIL PORTAL VEHICULAR GATE
- (G) 42" SCREEN FENCE

MISSION GROVE APARTMENTS

Conceptual Wall and Fence Exhibit

Figure 3.0-9





MISSION GROVE APARTMENTS

Conceptual Landscape
 Plan Figure 3.0-10

Utilities

The Project will be served by Riverside Public Utilities for electric utility service, by the City of Riverside for sewer service, by Western Municipal Water District for water utility service, and by Southern California Gas Company (SoCalGas) for gas utility service. Gas utility service will be provided for use in the common areas, but not to the apartment units. Dry utility (electrical, gas, telecommunications) extensions from existing lines in Mission Village Drive will be constructed within the City's street Right-of-Way (ROW) into the development. The Project will construct new water laterals connecting to the existing WMWD 12" water main in off of Mission Village Drive and Mission Grove Parkway South. The project will utilize the existing sewer line on the southwestern side of the property. Athens, one of the City's franchise haulers will provide solid waste disposal services for the Project.

Off-site Improvements

The project will install driveway approaches, curb and gutter, and sidewalk along the Mission Grove Parkway South and Mission Village Drive frontage in compliance with applicable City standards. The existing utility poles and boxes located along Mission Grove Parkway South and Mission Village Drive do not need to be relocated. Mission Village Drive is built to its ultimate half-section width as collector (66-foot right-of-way). Mission Grove Parkway South is built to its ultimate half-section width as an arterial (100-foot right-of-way). The project will protect in place the existing street trees already along both streets. The existing bus stop on Mission Grove Parkway South will be relocated to the north to allow better utilization and will be built per Riverside Transit Agency standards.

3.4 Project Objectives

The proposed project intends to achieve the following objectives:

- Provide a high-quality residential development in close proximity to many existing amenities and transit corridors.
- Increase the type and amount of housing available consistent with the goals of the City's Housing Element.
- Maximize the residential potential of the site to assist the City of Riverside in meeting project housing demand as part of the City's housing needs and growth projections.
- Use land resources more efficiently by providing a well-planned, infill redevelopment on a underutilized vacant site.
- Identify mixed-use development standards in the Specific Plan Amendment to create a framework for cohesive integration of uses.
- In furtherance of the City's Climate Action Plan, replace aging building construction with green building practices and other sustainable development methods.
- Create a mixed-use environment encouraging walkability.
- Provide for enhanced residential architecture and aesthetically coherent design elements that are compatible and complementary with the existing surrounding residential built environment in terms of colors and materials and landscaping.

3.5 Discretionary Actions and Approvals

In conformance with State CEQA Guidelines Sections 15050 and 15367, the City has been designated as the “Lead Agency”, defined as the “public agency which has the principal responsibility for carrying out or approving a project,” for the Project’s environmental analysis. The following discretionary actions are required:

City of Riverside – Planning Case PR-2022-001359

- General Plan Amendment (GPA) – to amend approximately 9.92 acres of the proposed Project area from C Commercial to MU-U Mixed Use-Urban.
- Zoning Code Amendment (RZ) – to rezone approximately 9.92 acres of the proposed Project area from CR-SP- Commercial Retail and Specific Plan (Mission Grove) Overlay Zones to MU-U-SO – Mixed Use-Urban and Specific Plan (Mission Grove) Overlay Zones;
- Specific Plan Amendment (SPA) – to revise the Mission Grove Specific Plan;
- Design Review (DR) – for the proposed site design and building elevations;
- Environmental Impact Report (EIR) – for the preparation of an Environmental Impact Report for the proposed Project; Planning Case County of Riverside
- Airport Land Use Commission (ALUC) – determination of consistency or inconsistency with applicable airport land use compatibility criteria of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP).

The following public agencies will use this EIR when considering the Project:

California State Water Resources Control Board

The Project is required to obtain coverage under the General Construction Stormwater Permit (Water Quality Order 2009-0009-DWQ) regulating stormwater runoff from construction sites 1 acre in size or greater.

The project will require the following consultation processes:

Senate Bill (SB) 18 and Assembly Bill (AB) 52

Pursuant to SB 18, consultation with California Native American Tribes on the contact list maintained by the California Native American Heritage Commission is triggered by the proposed General Plan Amendment. Also, pursuant to AB 52, the City is required to notify and consult with local tribes who requested notification from the City for projects subject to CEQA

4.0 Environmental Setting

This section provides a general overview of the environmental setting for the proposed Project. Detailed descriptions of the environmental setting for each environmental issue area can be found in Section 5.0, Environmental Impact Analysis.

4.1 Regional Setting

The approximately 9.92-acre Project site is located in Riverside County, in the City of Riverside California. The Project site is within the southwestern quarter of Section 17, Township 3 South, Range 4 West, as shown on the Riverside East, California, United States Geological Survey (USGS) 7.5-minute quadrangle, Figure 3.0-2 - USGS Topographic Map. The Project site is located in the eastern portion of the City of Riverside, east of Trautwein Road, west of Mission Grove Parkway, south of Alessandro Boulevard, and north of Mission Village Drive, Figure 3.0-3 – Project Site Map. The City of Riverside encompasses approximately 81 square miles and is located approximately 50 miles east of downtown Los Angeles, and 9 miles south of San Bernardino. Currently the City is the 12th most populous city in California and has the largest employment base in the Inland Empire region. A grid system of east-west and north-south roadways, including arterials, collectors, and local streets provide circulation throughout the City. The region is characterized by a semi-arid climate with hot and dry summers and relatively mild, wet winter.

4.2 Project Site Setting

The approximately 9.92-acre Project site address is 375 E. Alessandro Boulevard, Riverside, CA 92508. The Assessor's Parcel Number is 276-110-018. The project site is part of the Mission Grove Plaza Shopping Center and is currently developed with a former K-Mart retail store that closed in October of 2020. The surrounding areas include the Mission Grove retail shopping center to the east, west, and north, and single-family residences to the south (across Mission Village Drive). Multi-family residences are also located to the north (across Alessandro Boulevard).

The current land use of the project site is a vacant retail site. The General Plan designation for the project site is C - Commercial and it is currently zoned as CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. The site is designated as Retail Business & Office within the Mission Grove Specific Plan.

4.3 Developments Considered in Cumulative Impact Analysis

In addition to the specific impacts of individual projects, CEQA requires EIRs to consider potential cumulative impacts of the proposed project. CEQA defines “cumulative impacts” as two or more individual impacts that are substantial or will compound other environmental impacts, when considered together. Cumulative impacts are the combined changes in the environment that result from the incremental impact of development of the proposed Project and other nearby projects. For example, transportation impacts of two nearby projects may be less than significant when

analyzed separately, but could have a significant impact when analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and gauge the effects of a series of projects more accurately.

As outlined in the CEQA Guidelines Section 15130 the cumulative impact analysis in an EIR should consider either a list of planned and pending projects that may contribute to cumulative effects or a forecast of future development potential. Currently planned and pending projects in Riverside and surrounding areas are included in Table 4.0-1 and shown on Figure 4.0-1 – Cumulative Project Locations. The cumulative project list was developed in the Focused Traffic Analysis (TA) and created in consultation with the City of Riverside Planning and Public Works staff. The Focused Traffic Analysis is included in Appendix I. The cumulative list included projects anticipated to contribute measurable traffic impacts to the study area. The cumulative project list below includes the cumulative project list for the Focused Traffic Analysis and any additional projects identified during the Notice of Preparation (NOP) review and comment period, or by the City of Riverside Planning Division as a pending project.

Overall the cumulative projects include:

- Total of six (6) developments
- One residential development with 54 residential dwelling units
- Three commercial developments
- Two distribution warehouses
- Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public).

The cumulative projects range in distance from the Project site from the closest project approximately 800 feet north, across Alessandro Boulevard, to the farthest project site, approximately 1.75 miles east, on Alessandro Boulevard (refer to Figure 4.0-1 – Cumulative Project Locations). The cumulative list of development projects in Table 4.0-1 and are considered in the cumulative analyses in Section 5.0, Environmental Impact Analysis.

Table 4.0-1: Summary of Cumulative Development Projects

Map ID	Project Name/Case Number & Location	Proposed Land Use	Quantity ¹	
City of Riverside				
1	PR-2021-001030 – 18399 Ferrari Drive, Riverside	Single Family Residential (Tentative Tract Map 38074)	54	DU
2	PR-2021-001023 – 360 E. Alessandro Boulevard, Riverside	Commercial - Vehicle Wash Facility	3.6	TSF
3	PR-2021-001082 – 1920 Lindbergh Drive, Riverside	Commercial – Tesla Dealership with Body Shop	51.6	TSF
4	P-19-0626 – 1220 Alessandro Boulevard, Riverside	Industrial – Two Distribution Warehouses	603.1	TSF
5	PR-2022-001254 – 2000 Alessandro Boulevard, Riverside	Commercial – Drive Thru Coffee Shop	0.93	TSF
County of Riverside				
6	Meridian Specific Plan – West Campus Upper Plateau Project	Industrial Buildings, Business Park, Park		
	Building B Warehouse	High-Cube Fulfillment	1250	TSF
	Building C Warehouse	High-Cube Fulfillment	587	TSF
	Warehouse	High-Cube Cold Storage	500	TSF
	Remaining Industrial Warehouse	High-Cube Fulfillment	725.56	TSF
	Business Park Office		324.12	TSF
	Business Park Office		60	TSF
	Business Park Warehouse		896.28	TSF
	Business Park Mixed-Use		482.77	TSF
	Business Park Warehouse		337.94	TSF
	Business Park Mixed-Use		160.92	TSF
	Active Park		42.20	AC
	Public Park		18.08	AC

¹ DU = Dwelling Unit; TSF = Thousand Square Feet; AC = Acres

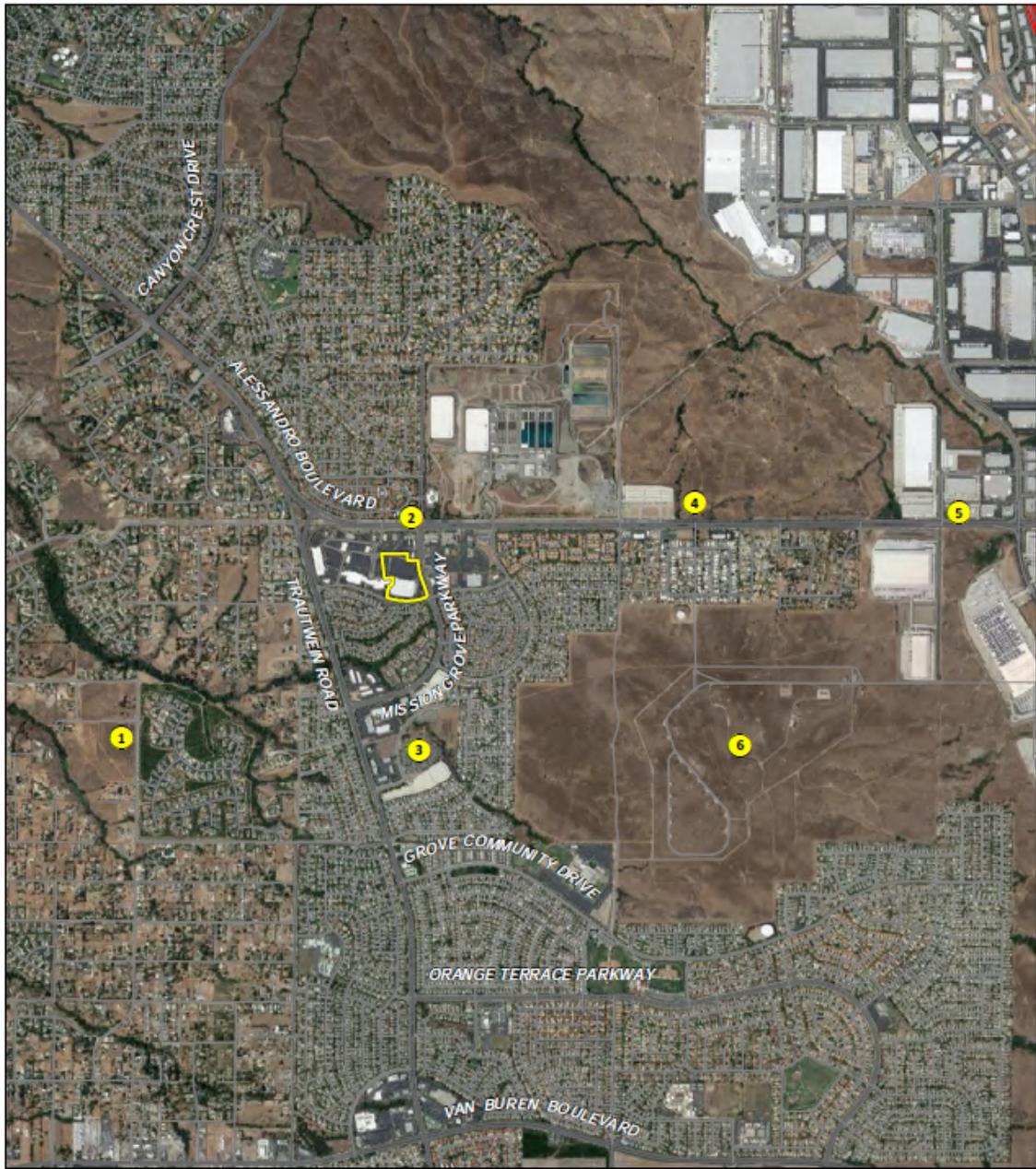
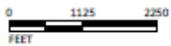


FIGURE 6-2

LEGEND

- Project Location
- Cumulative Project Location



SOURCE: ESRI Streetmap, 2013; Google Earth, 2018
 I:\AGV2101\GIS\Reports\fig6-1_Cumulative.mxd (12/2/2022)

*Anton Mission Grove Project
 Traffic Operational Analysis
 Cumulative Project Locations*

MISSION GROVE APARTMENTS PROJECT

Cumulative Development Location Map

Figure 4.0-1



5.0 Potentially Significant Environmental Effects

This section discusses the possible environmental effects of the Project on the specific issue areas identified as having the potential for significant effects. As defined in the *CEQA Guidelines* (Section 15382) a “significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

Sections 5.1 through 5.20 of the DEIR examine the potential environmental impacts associated with implementation of the Project and focus on the following issues:

- Aesthetics
- Agriculture/Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Hydrology/ Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population/ Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities/ Service Systems
- Wildfire

5.0.1 Appendices/Technical Studies

Technical and supporting studies were prepared in order to provide detailed analysis for the Project and this DEIR. The following studies are identified in the discussion for the individual environmental issues and included as technical appendices of the DEIR:

- Notice of Preparation (NOP) & NOP Comment Letter (Appendix A)
- Air Quality, Greenhouse Gas, Energy Impact Analysis (Appendix B)
- Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis (Appendix C)
- Cultural Resources Assessment (Appendix D)
- Due Diligence Geotechnical Investigation Report & Grading Plan Review and Geotechnical Update (Appendix E)

- Phase I ESA & Phase II ESA (Appendix F)
- Project Specific Water Quality Management Plan (Appendix G)
- Noise and Vibration Impact Analysis (Appendix H)
- Traffic Operations Analysis & Vehicle Miles Traveled Analysis (Appendix I)
- Sewer Capacity Study (Appendix J)

5.0.2 Analysis Format

The DEIR assesses how the Project would impact the issue areas identified above. Each environmental issue addressed in this DEIR is presented in terms of the following subsections:

- **Setting:** Provides information describing the existing setting on or surrounding the Project site which may be subject to change and affected as a result of the implementation of the Project and provides a description of the “baseline” conditions from which potential impacts are assessed. This setting describes the physical conditions that existed when the NOP was published and sent to responsible agencies and the State Clearinghouse.
- **Related Regulations:** Provides a discussion of the applicable regulations with respect to each environmental issue.
- **Project Design Considerations:** Provides a discussion of the Project design features as it relates to each environmental issue. Project design features are those features or elements of the Project that serve to avoid or minimize potential environmental impacts.
- **Thresholds of Significance:** Provides criteria for determining the significance of Project impacts for each environmental issue.
- **Environmental Impacts:** Provides a discussion of the characteristics of the Project that may have an effect on the environment; analyzes the nature and extent to which the Project is expected to change the existing environment, and whether or not the Project impacts are less than or exceed the levels of significance thresholds, with or without mitigation.
- **Proposed Mitigation Measures:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible. Identifies if mitigation measures reduce the Project’s impacts to less than significant levels or if after mitigation measures are implemented the Project’s impacts would remain significant and unavoidable.
- **Cumulative Environmental Effects:** Describes potential environmental changes to the existing physical conditions that may occur with the Project together with all other reasonably foreseeable, planned, and approved future projects.

5.1 Aesthetics

This section evaluates the Project's potential impacts to scenic vistas, scenic resources, visual character or quality of public views, and light or glare.

Aesthetics refers to what is perceived as being visually pleasing or beautiful. Because "beauty is in the eye of the beholder," this aspect of environmental impact analysis is an inherently subjective issue. It is not the purpose of this section of the DEIR to try to determine if the existing vacant site is more aesthetically pleasing than the proposed Project. Rather, this analysis will address definable thresholds of significance related to City policy, designated scenic resources, and known landmarks, to determine if the Project will cause significant negative aesthetic effects.

Negative aesthetic effects relate to obstruction of scenic vistas or views, creation of a negative aesthetic effect, and creation of light or glare. An important criterion for visual impacts is visual consistency. Project design should be consistent or complimentary with natural surroundings and adjacent land uses. Additionally, it is more practical and effective to prevent offensive visual contrasts through a combination of building siting, setbacks, height restrictions, color and texture of building materials, and landscaping. This evaluation measures the existing visual resources at the site and in the surrounding area against the Project, analyzing the nature of the anticipated change considering that the Project site is currently developed.

5.1.1 Setting

Regional Visual Setting

Although the majority of the City is urbanized, the hills and ridgelines that surround the City provide scenic vistas to residents where they can experience long distance views of natural terrain. Vista points can be found throughout the City, both as viewed from urban areas toward the hills and from wilderness areas toward the City. The most notable scenic vistas in the City include the La Sierra/Norco Hills, Sycamore Canyon Wilderness Park, and Box Springs Mountain Regional Park. The peaks of the Box Springs Mountain, as well as Mt. Rubidoux, Arlington Mountain, Alessandro Heights and the La Sierra/Norco Hills provide scenic views of the City and the region. Per the Riverside General Plan 2025 EIR (GP 2025 EIR), the higher elevation hills shape the visual outline of the City and drainage areas of the City provide a visual backdrop as viewed from streets, buildings, and open spaces. (GP 2025 EIR, p. 5.1-2)

No officially designated State scenic highways or eligible State scenic highways traverse the City (GP 2025 EIR, p. 5.1-4). However, there are several scenic and special boulevards within the City. The nearest designated Scenic Boulevards to the Project site include Alessandro Boulevard (approximately 450 ft to the north) and Trautwein Road (approximately 1,200 feet to the west). Neither Mission Village Drive nor Mission Grove Parkway South in the vicinity of the proposed Project location have scenic designations. (GP 2025 EIR, Figure 5.1-1). The Project site is generally visible from Alessandro Boulevard, however, some views of the Project site will be blocked by existing trees and landscaping along Alessandro Boulevard, as well as existing buildings in the Mission Grove Shopping Center closest to Alessandro Boulevard (i.e., McDonald's, Bank of America, IHOP, Starbucks, 76 gas station/convenient store). The project

site is not generally visible from Trautwein Road, as it is blocked by existing trees and landscaping along Trautwein Road, and the existing buildings in the Mission Grove Shopping Center closest to Trautwein Road (i.e., Cactus Cantina, Galaxy Theatres Mission Grove, and Café Le Reve, and existing residential south of Mission Village Drive.

Visual Character of the Project Site

The project site is a 9.92-acre parcel and is part of the 70-acre Mission Grove Plaza Shopping Center (refer to Figures 3.0-6A, 3.0-6B, and 3.0-6C in Section 3.0 Project Description). The project site is currently developed with a 104,231-square-foot vacant retail building (a former K-Mart retail store) that was constructed in 1991 and an associated surface parking lot. The former K-Mart retail store closed in 2020. The building is located on the southern portion of the Project site and abuts the neighboring commercial building to the west while the northern portion of the site is occupied by an asphalt surfaced parking lot. A Bank of America ATM and a coin-operated water dispensary are located to the northwest of the property. Narrow planters with small trees and shrubs are located throughout the parking lot and along the north side of the building walkway. Asphalt paved driveway/access is located on the east and south sides of the building.

Visibility of the Project Site

The Project site is visible by motorists and pedestrians walking alongside and driving Mission Village Drive and Mission Grove Parkway South, and is partially visible from Alessandro Boulevard. The backside of the existing vacant building is also visible to the residential neighborhood located to the south, across from Mission Village Drive.

Visual Character of the Surrounding Area

The Project site is bordered on the north, west, and east (across Mission Grove Parkway South) by the Mission Grove Plaza Shopping Center, which has a General Plan Land Use Designation of C - Commercial and is zoned CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and is developed with retail uses. Multi-family residences are located further north (across Alessandro Boulevard), which have a General Plan Land Use Designation of HDR – High-Density Residential and zoned R-3-3000-SP – Multi-Family Residential and Specific Plan (Mission Grove) Overlay Zones. The project site is bordered on the south by a single-family residential neighborhood (across Mission Village Drive), which has a General Plan Land Use Designation of Medium High Density Residential (MHDR) and is zoned R-1-7000-SP – Single-Family Residential and Specific Plan (Mission Grove) Overlay Zones.

North: Businesses within the Mission Grove Shopping Center include a car wash, gas station, restaurant, bank, and a coffee shop with drive-thru.

East: Mission Grove Parkway South. Immediately across Mission Grove Parkway South includes a gas station, an instant oil change business, two restaurants, a liquor store, and grocery store. Single family residential homes are located immediately southeast of the Project site across Mission Grove Parkway South.

South: Mission Village Drive. Immediately across Mission Village Drive are single family residential homes.

West: Businesses within the Mission Grove Shopping Center include a hobby store, hair salon, fitness studio, retail, restaurants and a grocery store.

State Scenic Routes Highways

According to Caltrans' California Scenic Highway System, there are no existing or proposed State Scenic Highways near the proposed Project site. Additionally, there are no State Scenic Highways near the Project site that are eligible for listing.

Scenic Views and Vistas

"Hillsides and ridgelines above Riverside" are identified as scenic benefits for the community, especially those who are mobilizing through the area. (GP 2025) The nearest Scenic landmarks to the Project site include the top of the hills in Sycamore Canyon Wilderness Park (approximately 1 mile north), Box Springs Mountain (approximately 4 miles to the northeast), and Mount Rubidoux (approximately 6 miles northwest).

Light and Glare

The City is primarily urbanized, with significant existing sources of light and glare, such as streetlights along roadways, parking lots and walkways, and light emitted from residential and non-residential buildings (GP 2025 FPEIR, p. 5.1-4). There are existing lights within the Project site, within the parking area (light posts), outside the existing retail building at the entrance, and within the building. There are existing streetlights along both sides of Mission Grove Parkway South east of the Project site and along Alessandro Boulevard north of the Project site. There are signal lights at the intersections of Mission Grove Parkway South and the shopping center's eastern entrance/driveway, Alessandro Boulevard and Mission Grove Parkway South, and at Alessandro Boulevard and the shopping center's northern entrance/driveway. Existing night lighting in the Project area also comes from headlights on vehicles traveling along these adjacent roadways and within the shopping center. Overall, the level of light and glare in the project vicinity is typical of a commercial area next to commercial and nearby residential uses.

5.1.2 Related Regulations

5.1.2.1 Federal Regulations

No Federal regulations are applicable to the Project with respect to aesthetics.

5.1.2.2 State Regulations

California Scenic Highway Program

The California Scenic Highways Program was established in 1963 to "preserve and protect scenic highway corridors from change which would diminish any aesthetic value of lands adjacent to highways" (Street and Highway Code §260 et seq.). No State-designated or eligible scenic highways exist in or near the Project site, and, therefore, no State regulations apply.

5.1.2.3 Regional Regulations

There are no regional regulations applicable to this Project.

5.1.2.4 Local Regulations

Riverside General Plan 2025

The GP 2025 guides development in the City through a compilation of community values, ideals, and aspirations pertaining to the natural and manmade environments (City of Riverside Citywide Design Guidelines and Sign Guidelines (CDG)). The following objectives and policies pertaining to aesthetics are drawn from the City's GP 2025 and are applicable to the proposed Project.

Land Use and Urban Design Element

The GP 2025 Land Use and Urban Design Element describes present and planned land uses and their relationship to Riverside's goals for development in terms of the City's character. Objectives and policies from the general plan applicable to scenic resources and aesthetics relative to development in the City, and applicable to the Project include:

Objective LU-27: Enhance, maintain, and grow Riverside's inventory of street trees.

Policy LU-27.4: Encourage trees on private property to add to the City's urban forest.

Objective LU-30: Establish Riverside's neighborhoods as the fundamental building blocks of the overall community, utilizing Neighborhood and Specific Plans to provide a more detailed design and policy direction for development projects located in particular neighborhoods.

Policy LU-30.2: Ensure that every neighborhood has a unique community image that is incorporated and reflected in all public facilities, streetscapes, signage and entryways proposed for each neighborhood.

Policy LU-30.3: Ensure that the distinct character of each of Riverside's neighborhoods is respected and reflected in all new development, especially infill development.

Mission Grove Specific Plan (SP)

The Mission Grove SP includes development standards, which are separated into six policy categories that form the framework for future project implementation. The categories are Landform Alteration, Parkway and Setback Treatment, Low Density Residential, Medium Low Density Residential, Medium High Density Residential, Commercial and Industrial. The proposed Project includes a SPA to add a Mixed-Use category. The standards of the Landform Alteration category do not apply to the proposed Project as it is already developed and has existing storm drain infrastructure that it will tie into. The Parkway and Setback Treatment standards apply to parkways and setbacks primarily along Trautwein Road and Alessandro Boulevard, which have already been constructed and which the Project is not proposing any changes to. The remaining standards do not apply to the proposed Project as they are for lower density residential than the proposed Project and for commercial and industrial development.

City of Riverside Municipal Code

TITLE 17 – GRADING

Title 17 of the Riverside Municipal Code governs grading and other earthwork during construction, including fills and embankments. In part, it regulates hillside and arroyo grading in a manner that “minimizes the effects of grading on natural landforms...[and ensures] that significant natural characteristics such as land form...[and] scenic qualities...can be substantially maintained” (Riverside Municipal Code §17.01.010).

TITLE 19 – ZONING CODE

The City of Riverside’s Zoning Code restricts the location, size, density, and design of buildings in the City to encourage appropriate land use, conserve and stabilize property values, provide adequate open spaces for light and air, promote the general welfare of the population, and produce healthy, safe, livable, and attractive neighborhoods within the City (City of Riverside Zoning Code Title 19.020.010; 19.100.010). Specifically, the Mixed-Use Zones were established to encourage a mixture of synergistic land uses, revitalize deteriorating commercial areas, provide alternatives to new development of small shopping centers, increase the area available for residential development, and provide appropriate locations for a broad range of live/work activities to occur (Riverside Municipal Code § 19.120.010).

Outdoor Lighting Ordinance

Through Ordinance No.7447, the City adopted outdoor lighting regulations to ensure that outdoor lighting is adequate for safety and security while preserving the naturally dark sky through mitigating artificial sky glow and preventing light and glare pollution. The ordinance, located in Chapter 19.556 of the Riverside Municipal Code, includes various light zones in the City and development standards for each zone. The proposed project area is located in a CR commercial zone and therefore is designated as a Lighting Zone 3, as it does not fall into the categories of Lighting zones 0, 1, or 2.

Citywide Design Guidelines and Sign Guidelines

Through Resolution Number 21544, the City of Riverside adopted the Citywide Design Guidelines and Sign Guidelines to manage developing of the physical image of the City’s residential neighborhoods and shopping centers to emphasize “a small-town character within an urban metropolis.” This document offers an overview of what the City considers good design, outlines design objectives in terms of architectural styles relative to context and historic character in the areas where development occurs. It also provides specific guidance on scale and mass, landscaping, fences, privacy protection, common open space, and parking.

5.1.3 Project Design Considerations

Building Component

The proposed Project includes a total of 347 studio, one-, two-, and three-bedroom residential apartment units within five, 4-story buildings. Refer to *Figure 3.0-7 Conceptual Site Plan*. The

project will include indoor amenities including a leasing office, clubroom, fitness center, and outdoor amenities including a pool and spa, outdoor seating and dining areas, and a dog park.

As summarized in Table 3.0-3: Building Development Standards, the proposed Project would comply with all of the City's building development standards.

Table 3.0-3: Building Development Standards

City's Site Development Standard				Proposed		
Max Floor Area Ratio	4.0			0.97		
Building Height	60 feet			57'2"		
Building Minimum Setbacks	Front Yard (East fronting Mission Grove Parkway South)	0 feet		13'-5"		
	Front Yard (South fronting Mission Village Drive)	0 feet		11'		
	Side Yard (North, Interior)	0 feet		58'-9"		
	Side Yard (West, Interior, from carport)	0 feet		2'		
		<u>Unit Type</u>	<u>Parking Stalls Required</u>	<u>Unit Type Count</u>	<u>Total Parking Required</u>	<u>Provided</u>
	Studio	1	24	24		
	1 Bedroom	1.5	133	200		
	1 Bedroom + Den	2	39	78		
	2 Bedroom	2	141	282		
	3 Bedroom	2	10	20		
	Minimum Parking	Total	347	604		604 spaces
	Minimum Landscape Setbacks	Parking Area along Street Frontage (South fronting Mission Village Drive)	15 feet	11' minimum to 19'-10" maximum, averaging 15'+		

The elevations for Buildings B, C, D and E, which face the Mission Grove Shopping Center to the north, Mission Grove Parkway South to the east, and Mission Village Drive to the south, respectively, are shown in Figures 5.1-3: Building B Elevations, Figures 5.1-4: Building C Elevations, Figures 5.1-5: Building D Elevations, Figures 5.1-6: Building E Elevations. Building A is interior to the Project site and is generally not visible from public roadways. The maximum height of the buildings is 57 feet 2 inches.

Architecture

The Project offers a contemporary Spanish architectural style that consists of stucco with score lines, concrete “S” roof tiles, and decorative stone veneer to enhance project entries. This contemporary Spanish architectural style also includes enhanced decorative iron details, decorative tiles at building entries, foam trims, sills, , roof overhangs with wood corbels and metal railing at upper balconies. Colors, materials, and other architectural details are shown in Figure 5.1-7: Colors and Materials.



Walls & Fencing

The Project will be secured by utilizing the front facade of the residential buildings along with 6-foot tubular steel fencing between the buildings along the western, northern, and southern sides of the Project site. Along the southern side of the site, adjacent and parallel with Mission Village Drive, a 6-foot tubular steel fence will be installed with entry vehicular gates for the southern entrance/driveway. The northern and southern entrances will have entry vehicular gates with 6-foot tubular steel sliding gates between 7-foot stone clad pilasters. Along the southwest corner of the project site, an 8-foot tubular steel fence will enclose the dog park. There are no retaining walls proposed. All of the fences and walls will be designed to enhance the aesthetics of the proposed project, while providing security and privacy. See Figure 3.0-8, Wall and Fence Exhibit.

Lighting

The Project includes a variety of exterior lighting fixtures that have been selected to complement and enhance the contemporary Spanish architecture and the landscape features, as well as to provide functional light to vehicular and pedestrian pathways and wayfinding features. See *Figure 5.1-8: Lighting Plan*. Exterior light fixtures include pole lights along the Project's main driveways and parking areas, downlights at carports, wall-mounted lights adjacent to garages, sconce lights at building entries, bollard lights along pedestrian pathways, overhead festival lighting and pendent lighting in outdoor amenity areas, and a sign light at the Project's monument sign.

Open Space & Landscaping

The project will include a combination of private and common open space in accordance with City of Riverside open space requirements for Mixed Use-Urban zones and the proposed Mission Grove SPA. The private open space required is 50 square feet per unit, for a total of 17,350 square feet or 0.40 acres. The proposed private open space provided is 21,523 square feet or 0.49 acres. The Zoning Code requires 150 square feet of common usable open space per unit for projects in the Mixed-Use – Urban Zone, for a total of 52,050 square feet of required common usable open space. The applicant is proposing a Specific Plan Amendment to require 75 square feet of common usable open space per unit for the Mixed-Use – Urban designation, for a total of 26,025 square feet of required usable open space. The common open space that is provided totals 28,611 square feet or 0.66 acre and includes a pool and spa, a dog park, leasing/mail, fitness center, and clubhouse, see Figure 5.1-9: Pool Courtyard and Figure 5.1-10: Design Vision and Vibe which shows various outdoor style elements that represent the aesthetic design concept of the proposed Project.

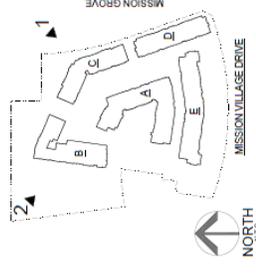
Landscaping throughout the project site will consist of low water use trees, shrubs, and ground cover. The existing Mexican fan palms located along Mission Grove Parkway South will be protected in place and kept as part of the Project. Large trees are proposed on the periphery of the project site, along roadways (Mission Grove Parkway South and Mission Village Drive), within parking lot planters, and throughout the residential common open space areas and around the apartment structures, Figure 3.0-9, Conceptual Landscape Plan. Trees in the landscape plan

include hybrid strawberry tree (*Arbutus* X 'Marina'), king palm multi-trunk (*Archontophoenix cunninghamiana*), carrot wood (*Cupaniopsis anacardioides*), bay laurel (*Laurus nobilis* 'column'), Saritoga hybrid laurel (*Laurus* X 'Saratoga'), swan hill olive (*Olea europaea*), Medjool date palm (*Phoenix dactylifera* 'Medjool'), Afghan pine (*Pinus eldarica*), coast live oak (*Quercus agrifolia*), southern live oak, (*Quercus virginiana*), Drake lacebark elm (*Ulmus parvigolia* 'Drake'), and Mexican fan palm (*Washingtonia robusta*). Groundcover, shrubs and accent plants are proposed along walkways and throughout the residential common open space areas. All proposed shrubs are compliant with Cal Green requirements for water conserving and non-invasive. Stormwater will be treated by flowing through modular wetlands throughout the site which are detailed and sized by the Preliminary Water Quality Management Plan.



View 1: Looking South-West from Mission Grove Project Entry

KEY MAP



A1.0
 Scale 2001-505
 Job No. 10-21-2002
 Date



MISSION GROVE APARTMENTS
 Riverside, CA
 Anton Mission Grove, LLC



MISSION GROVE APARTMENTS PROJECT

Building C Perspective

Figure 5.1-1



View 2: Looking South-East from Existing Retail Parking

MISSION GROVE APARTMENTS
 Riverside, CA
 Anton Mission Grove, LLC

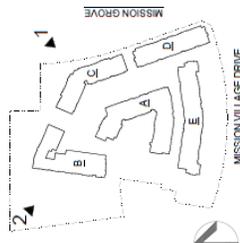


A1.0

Scale 2021-505
 Job No. 10-21-2022
 Date



KEY MAP



MISSION GROVE APARTMENTS PROJECT

Building B Perspective

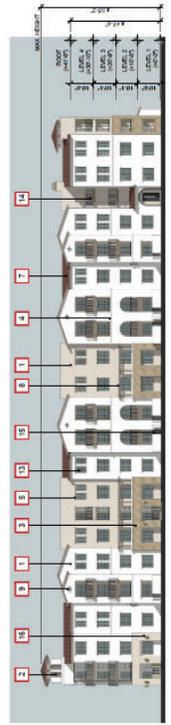
Figure 5.1-2



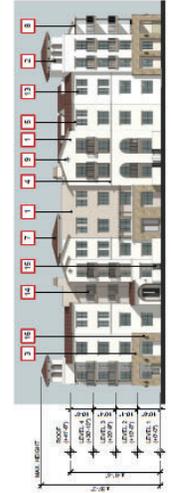
PR-2022-001359 (GPA, SPZ, RZ, DR, TPM, EIR)
 Exhibit 15 - Draft EIR

MATERIAL / COLOR LEGEND

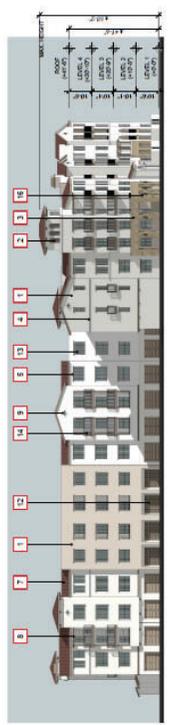
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 - 2 DECORATIVE TILE
 - 3 DECORATIVE STONE LINER
 - 4 EXTERIOR CHALK TRIM
 - 5 WINDOW TRIM
 - 6 METAL LAMPPOST VERTICAL CABLE BRACKETS
 - 7 CONCRETE ROOF TILE
 - 8 TRELLIS
 - 9 DECORATIVE SMALL FOUNT
 - 10 EXTERIOR METAL DOOR BRONZE FINISH
 - 11 ALUMINUM EXTERIOR DOOR WITH GLASS BRONZE FINISH
 - 12 METAL PANEL LAMINATE DOOR
 - 13 METAL PANEL BRONZE SILET BRONZE COLOR WITH CLEAR GLASS BRONZE SILET BRONZE COLOR WITH 10% LEVEL GLASS WINDOW
 - 14 METAL PANEL PAINTED
 - 15 METAL PANEL PAINTED
 - 16 EXTERIOR WALL LIGHT FIXTURE
 - 17 METAL PANEL PAINTED
 - 18 EXTERIOR WALL LIGHT FIXTURE
- FOR ALL OTHER MATERIALS NOT SHOWN HERE, REFER TO SHEET A45 FOR THE COLOR AND FINISH SAMPLES.



Right Elevation 2



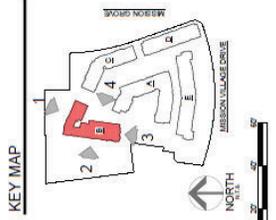
Front Elevation 1



Left Elevation 4



Rear Elevation 3



A2.1.1
AO Architecture, Design, Relationships.
 Scale: 1" = 20'
 Date: 10/27/2022

BUILDING B
 Exterior Elevations

MISSION GROVE APARTMENTS
 Riverside, CA
 Anton Mission Grove, LLC



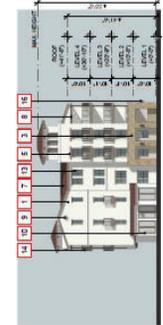
MISSION GROVE APARTMENTS PROJECT

Building B Elevations

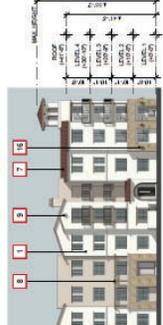
Figure 5.1.3

MATERIAL / COLOR LEGEND

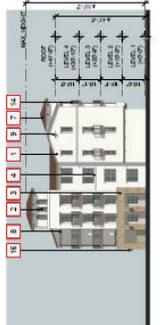
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- 2 ACCENT TILE
- 3 ACCENTIVE STONE COURSE
- 4 EXTERIOR FOAM TRIM
- 5 BRICK TRIM
- 6 METAL CLAMP WITH STYL. GALV. BRONZE
- 7 CONCRETE ROOF TILE
- 8 TRUSS
- 9 ACCENTIVE GABLE TRUSS
- 10 EXTERIOR METAL DOOR BRONZE FINISH
- 11 ALUMINUM EXTERIOR DOOR WITH CLEAR GLASS BRONZE FINISH
- 12 METAL PANEL GARAGE DOOR
- 13 STAINLESS STEEL TRUSS BRONZE COLOR WITH STAINLESS STEEL TRUSS BRONZE COLOR WINDOW TRIM WITH BLACK WINDOW TRIM
- 14 METAL TRUSS PAINTED
- 15 EXTERIOR WALL LIGHT FIXTURE
- 16 ROOF FINISH AT JOINTS AND CORNERS REFER TO SHEET A5E FOR THE COLOR AND MATERIAL USED



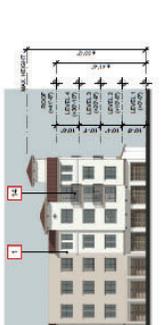
Left Elevation 2



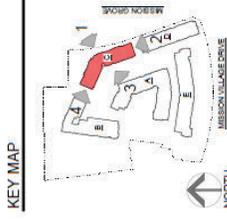
Front Elevation 1



Right Elevation 4



Rear Elevation 3



AO
Architecture.
Design.
Relationships.

A2.2.1

Scale: 1" = 20'
Date: 8-10-2022

BUILDING C
Exterior Elevations

MISSION GROVE APARTMENTS
Riverside, CA
Anton Mission Grove, LLC



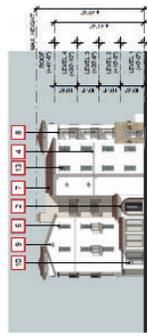
MISSION GROVE APARTMENTS PROJECT

Building C Elevations

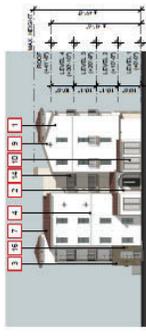
Figure 5.1.4

MATERIAL / COLOR LEGEND

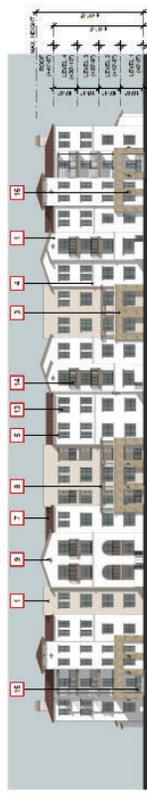
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- 3 DECORATIVE STONE VENEER
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- 5 EXTERIOR CHALK TRIM
- 6 WINDOW TRIM
- 7 METAL CLAMP WITH POLY CARBONATE
- 8 CONCRETE ROOF TILE
- 9 TRELLIS
- 10 DECORATIVE SHAFT FINISH
- 11 EXTERIOR METAL DOOR BRONZE FINISH
- 12 ALUMINUM EXTERIOR DOOR WITH CLEAR GLASS BRONZE FINISH
- 13 METAL PANEL LAMINATE DOOR
- 14 METAL PANEL LAMINATE DOOR WITH BRONZE COLOR FINISH
- 15 METAL PANEL LAMINATE DOOR WITH CLEAR GLASS BRONZE FINISH
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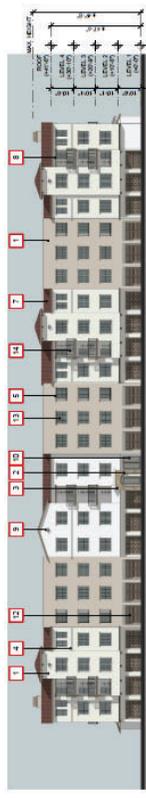
Left Elevation 2



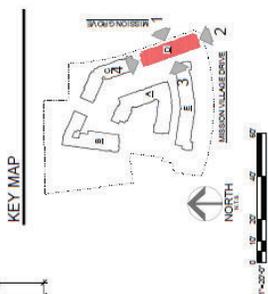
Right Elevation 4



Front Elevation 1



Rear Elevation 3



A2.3.1
 Architecture, Design, Relationships.
 Scale: 1" = 20'
 Date: 10-27-2022

AO
 Architecture, Design, Relationships.

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 Anton Mission Grove, LLC

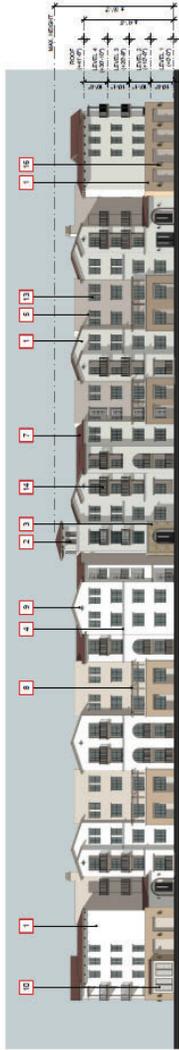
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MISSION GROVE APARTMENTS PROJECT

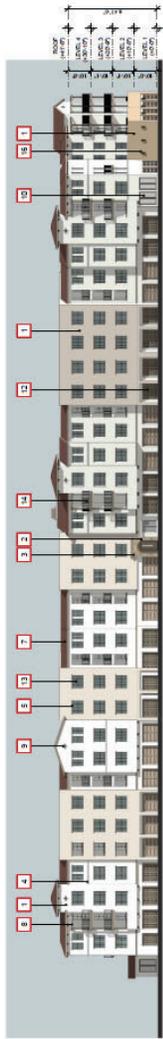
Building D Elevations
 Figure 5.1.5

MATERIAL / COLOR LEGEND

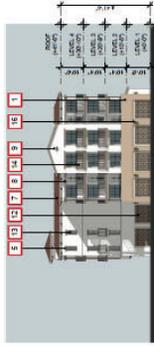
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- 100 METAL PANEL GRANITE COLOR WITH CLEAR GLASS BRACKET FINISH



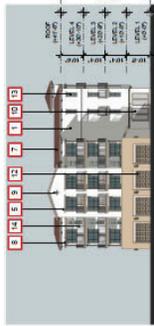
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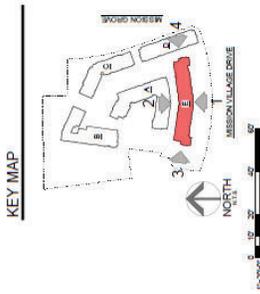
Rear Elevation 2



Left Elevation 3



Right Elevation 4



MISSION GROVE APARTMENTS
 Riverside, CA
 Anton Mission Grove, LLC

BUILDING E
 Exterior Elevations

AO Architecture.
 Design.
 Relationships.
A2.4.1
 Scale: 1/8" = 1'-0"
 Date: 10.21.2022

MISSION GROVE APARTMENTS PROJECT

Building E Elevations

Figure 5.1.6



1 Sherwin Williams
Pure White SW7005

1 Omega Stucco
w/ Score Lines
1000 Sand Finish to match
Paint in space

2 Sherwin Williams
Coral Reef SW2226

2 Fabricated Metal Railing
Or similar to match Paint Space D

3 Sherwin Williams
French Red SW6069

3 Eagle Roofing
Concrete Roof Tiles
Caststone II, Monarch Island SPC 2029

4 Sherwin Williams
Iron Ore SW7029

4 Wigan Vinyl
Windows/Doors
Monarch w/ 1" Scabbled Grate
White on White

5 Veto Foam Jims,
Sills & Casbels
To match Paint Spaces



6 Decorative Iron detail



7 Creative Mines
Natural Corn Flint Lodge



8 Decorative Tiles
at Building Entries



MISSION GROVE APARTMENTS
Riverside, CA
Anton Mission Grove, LLC



COLORS AND MATERIALS



A5.0
2023.02.02
Job No. 10-21-2023
Date

MISSION GROVE APARTMENTS PROJECT

Colors and Materials

Figure 5.1-7





STREET LIGHT
AT DRIVE



THEME POLE LIGHT
ENTRY, DRIVE AND LARGE
APARTMENT SPACES - 12 FT. POLE



BOLLARD
RECREATION PATH OF TRAVEL



OVERHEAD FESTIVAL LIGHT
AT POOL AND DOG PARK



DOWNLIGHT
AT GARAGE



PENDANT LIGHT
AT OVERHEAD TRELLIS



WALL MOUNTED
ON GARAGE



SIGN LIGHT
AT MONUMENT SIGN

EXTERIOR LIGHTING LEGEND	
SYMBOL	LOCATION
	AT DRIVE AND PARKING LOT
	ENTRY, DRIVE AND LARGE APARTMENT SPACES
	AT PEDESTRIAN PATH OF TRAVEL
	ATTACHED TO POLES, MINIMUM 12 FEET HIGH SPAN
	CARPOOLS
	MOUNTED ON OVERHEAD TRELLIS
	ON GARAGE
	AT MONUMENT SIGNS
	BUILDING ENTRIES

* FOR REFERENCE ONLY *

ANTON
MISSION GROVE APARTMENTS
Riverside, CA
Mission Grove, LLC

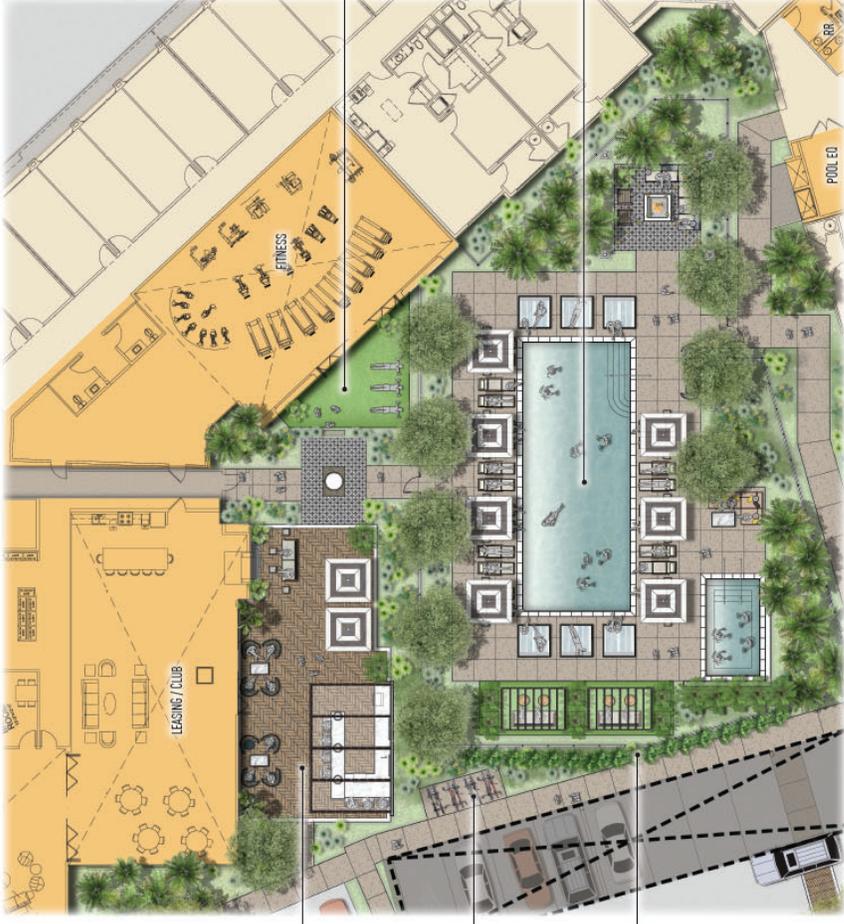


MDS
LIGHTING PLAN L.11
SUBMITTAL # 3, OCTOBER 21, 2022

MISSION GROVE APARTMENTS PROJECT

Lighting Plan

Figure 5.1-8



- CLUBROOM TERRACE**
- built-in bbq counter & bar
 - overhead shade structure
 - pendant lighting
 - dining furnishings
 - fire place
 - lounge furnishings
 - accent paving

SHORT-TERM BIKE PARKING

LUSH PLANTING SCREEN

OUTDOOR FITNESS

- POOL COURTYARD**
- pool (50ft x 20ft)
 - spa (11ft x 7ft)
 - day beds
 - chaise lounge chairs
 - fire pit
 - cabanas
 - lounge furnishings

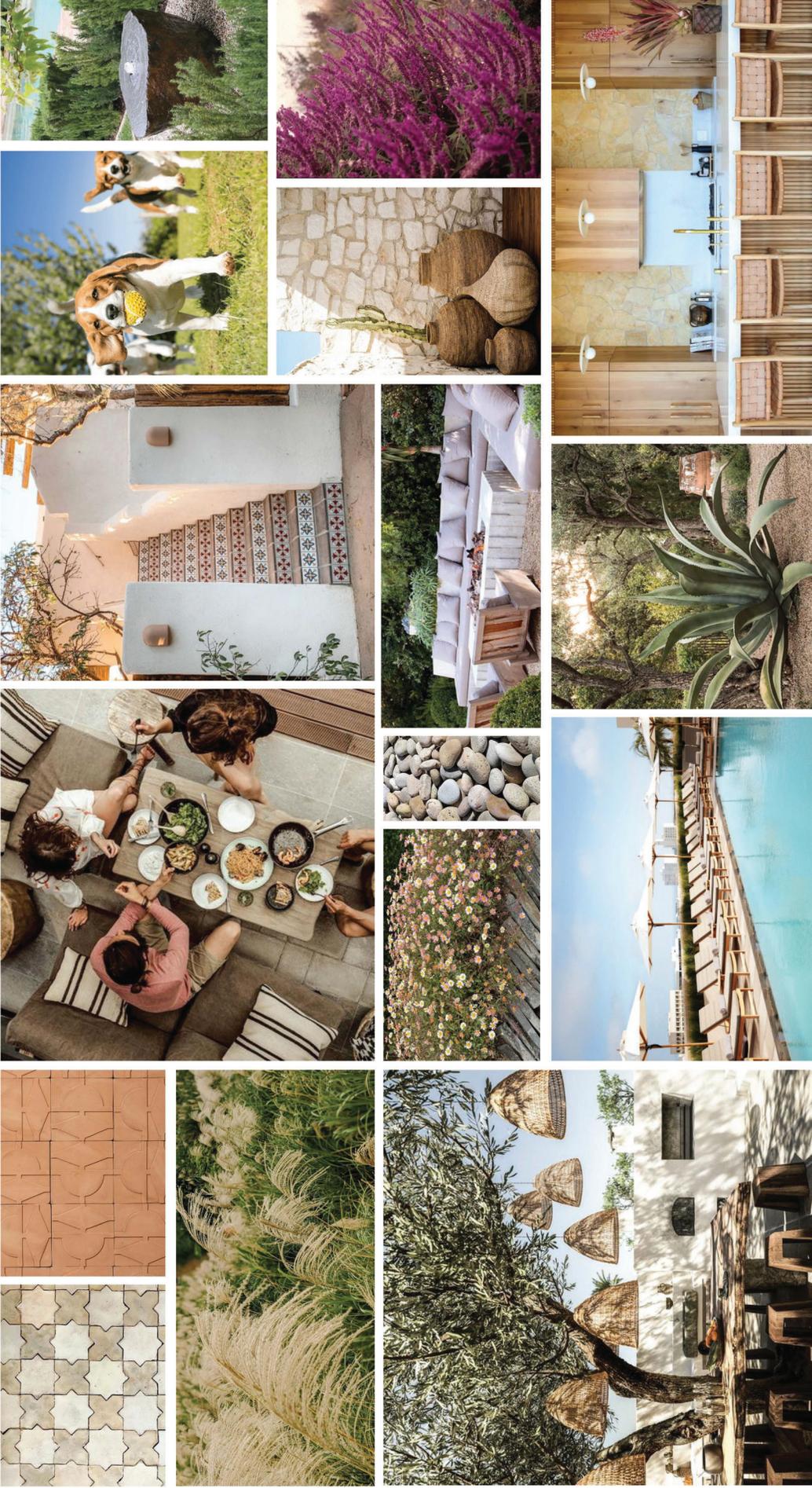
ANTON ARCHITECTS
 MISSION GROVE APARTMENTS
 Riverside, CA
 Mission Grove, LLC

MS ARCHITECTURE
 POOL COURTYARD ENLARGEMENT L.3
 SUBMITTAL # 3, OCTOBER 21, 2022

MISSION GROVE APARTMENTS PROJECT

Pool Courtyard

Figure 5.1-9



MISSION GROVE APARTMENTS

Design Vision and Vibe

Figure 5.1-10



5.1.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. Impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed project would:

- (Threshold A) Have a substantial adverse effect on a scenic vista;
- (Threshold B) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- (Threshold C) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly-accessible vantage point). If the project is in an urbanized area, the project would conflict with applicable zoning and other regulations governing scenic quality; or
- (Threshold D) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

5.1.5 Environmental Impacts

Threshold A: *Would the Project have a substantial adverse effect on a scenic vista?*

The proposed Project site is not a scenic vista itself. Of the scenic vistas identified in section 5.1.1 Setting above, only Box Springs Mountain is partially visible from proposed Project site. Views of it from the Project site and surrounding area (including the residential neighborhoods to the west and southwest, the Mission Grove Plaza, and public roadways of Trautwein Road, Mission Village Drive, and Mission Grove Parkway) are either partially blocked or completely blocked by existing surrounding development and trees. As views of Box Springs Mountain from the Project site and surrounding area are currently partially or completely blocked, the proposed Project would not result in a substantial change to the view from the Project area of the Box Springs Mountain. As the view of Box Springs Mountain from the site is already partially or completely blocked, from existing structures and mature trees in the Mission Grove Plaza, the proposed taller apartment buildings would only result in a minor incremental obstruction of this view from the Project area. The proposed Project, therefore, would not result in a substantial change in the view of this scenic vista or result in substantial adverse effects on a scenic vista. Therefore, adverse effects on scenic vistas would be **less than significant**.

Threshold B: *Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

No officially designated State scenic highways or any eligible State scenic highways traverse the City or its Sphere of Influence. There are no rock outcroppings or historic building scenic resources located on the proposed Project site. The Project intends to protect in place and keep as part of the Project the existing Mexican fan palm trees located along Mission Grove Parkway.

A portion of Mission Grove Parkway North, north of Alessandro Boulevard, is designated as a Scenic and Special Boulevard in the City's General Plan. However, the proposed project is located approximately 1,800 feet to the south of that designated special boulevard. Mission Grove Parkway South, which is located along the Project's eastern boundary, is not designated as a Special or Scenic Boulevard.

As there are no State scenic highways or City designated Scenic or Special Boulevards or Parkways in the vicinity of the Project site, there would be **no impacts** to a State scenic highway or City designated Scenic or Special Boulevards or Parkways. As the Project site does not contain rock outcrop or historic building scenic resources and it will preserve in place the existing Mexican fan palm trees located along Mission Grove Parkway, there would be **no impacts** to scenic resources.

Threshold C: *In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?*

The proposed Project is located in an urbanized area and is a redevelopment project. While the Project includes both a General Plan Amendment and a Specific Plan Amendment to change the land use designation and zoning the Project is not changing the site from a non-urbanized area to an urbanized area, as the existing land use designation and zoning are intended for commercial development. The project is consistent with all applicable zoning and other regulations governing scenic quality.

The Citywide Design and Sign Guidelines provide pictorial guidance on building treatments, façade articulation, site planning, sign guidelines and other matters in an effort to improve the overall visual quality of new development citywide. The Guidelines prevent large windowless blank walls through requiring building articulation and vegetation screening and establishing appropriate landscape areas along walls. The Guidelines also provide requirements for façade and signage treatments to prevent the use of highly reflective surfaces, large, blank, unarticulated wall surfaces, exposed, untreated precision block walls, chain link fencing, barbed wire, and materials requiring high maintenance such as stained wood, shingles, or metal siding. The Design and Sign Guidelines also encourage the use of neutral paint colors, subtle lighting, and courtyard entrances where feasible. The Design and Sign Guidelines limit impacts to aesthetic resources by reducing interruptions of scenic vistas, maintaining and enhancing scenic resources and visual character, and reducing light and glare. The Design and Sign Guidelines will also serve to enhance Riverside's visual character and avoid negative impacts by promoting and maintaining design continuity in the City's neighborhoods. As the Guidelines encourage high-quality design, the proposed Project would comply with all City regulations governing scenic quality.

The proposed Project includes a contemporary Spanish architectural style that consists of stucco with score lines, concrete "S" roof tiles, and decorative stone veneer and decorative tiles to enhance project and building entries. The buildings include varying roof heights, articulation of building façades, and exterior building materials (stucco, decorative tile, decorative stone veneer,

etc.) to provide building articulation to help break up the massing and provide detail and interest. This contemporary Spanish architectural style also includes enhanced decorative iron details at roof vents, decorative tiles at project entries, foam trims, sills, and corbels, and trellises at upper balconies. Landscaping throughout the Project site will consist of low water use trees, shrubs, and ground cover. The existing Mexican fan palms located along Mission Grove Parkway South will be protected in place and kept as part of the Project. Large trees are proposed on the periphery of the project site, along roadways, within parking lot planters, and throughout the residential common open space areas and around the apartment structures. Groundcover, shrubs and accent plants are proposed along walkways and throughout the residential common open space areas. The Project's design and landscaping comply with the City's Design Guidelines and Zoning Code and would not substantially degrade the existing visual character of the area. As outlined above in the analysis for Threshold A, the proposed Project would not result in a significant change in the viewshed from what currently exists in the Project area and the proposed Project's structures will not have a substantial adverse effect on an existing scenic vista. Therefore, impacts to the applicable zoning and other regulations governing scenic quality would be **less than significant**.

Threshold D: *Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

The Project includes a variety of exterior lighting fixtures that have been selected to complement and enhance the contemporary Spanish architecture and the landscape features, as well as to provide functional light to vehicular and pedestrian pathways and wayfinding features. Exterior light fixtures include pole lights along the Project's main driveways and parking areas, downlights at carports, wall-mounted lights adjacent to garages, sconce lights at building entries, bollard lights along pedestrian pathways, overhead festival lighting and pendent lighting in outdoor amenity areas, and a sign light at the Project's monument sign. The Project includes 40,00 square feet of solar panel area on the building's rooftops and carports.

The proposed Project's exterior lighting from the buildings or from the parking area will meet the City's Zoning Code requirements for support structure height, intensity, flickering/flashing, placement, shielding, orientation, and style. The proposed project area is located in a CR commercial zone and therefore is designated as a Lighting Zone 3, as it does not fall into the categories of Lighting zones 0, 1, or 2. The City requires an exterior lighting plan as a condition of approval (City of Riverside Zoning Code, Chapter 19.566). A Photometric Plan was prepared as part of the Project plans and shows no light spillage from the Project outside of the property boundaries. Overall levels of light generated by the new buildings and passing cars would be comparable to typical light levels currently at the Project site and in the surrounding developed areas.

A Solar Glare Hazard Study was prepared for the Project and reviewed by the Riverside County Airport Land Use Commission staff. As outlined in the Riverside County Airport Land Use Commission, Staff Report, Agenda Item: 3.2, Case Number: ZAP1548MA22, September 14, 2023 (RCALUC 2023), no glare from the solar panels would affect the March Air Reserve Base/Inland Port Airport Air Traffic Control Tower. Some potential for glare was identified within the Air Force

traffic pattern and evaluation of the Air Force traffic patterns indicated that the panels would result in a low potential for temporary after-image (“green” level glare). The anticipated amount of green glare produced annually from the Project is below ALUC’s threshold of 20% of daylight minutes. And there would be no significant (red glare) glint or glare impacts. Therefore, the Project’s solar panels would not result in a solar glare impacts on MARB/IPA flight operations.. The Project will also comply with recommended conditions related to light and glare with minor modifications, to continue to ensure safety, but allow for flexibility in the final design of the Project’s solar panels. Additionally, in May 2021 the FAA released a new policy which no longer requires the glare and glint studies for green glare.

Therefore, the proposed Project will not result in a substantial new source of light or glare and impacts with regard to daytime or nighttime views in the vicinity of the project site will be **less than significant**.

5.1.6 Proposed Mitigation Measures

The Project does not exceed any of the aesthetics thresholds of significance and potential Project-related impacts would be less than significant. Therefore, no aesthetics-related mitigation measures have been proposed for the Project.

5.1.7 Cumulative Environmental Effects

Cumulative developments in the City and the surrounding area would modify the visual characteristic of the surrounding area through the development of vacant lots or through redevelopment. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects including residential, commercial, and distribution warehouse developments, as well as the County of Riverside’s Meridian Specific Plan – West Campus Upper Plateau Project, which includes warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and parks (active and public). The cumulative projects range in distance from the Project site, from the closest project approximately 800 feet north, across Alessandro Boulevard, to approximately 1 mile southwest of the Project site, approximately 1.2 miles southeast of the site, to the farthest project site, approximately 1.75 miles east, on Alessandro Boulevard (refer to Figure 4.0-1 – Cumulative Project Locations).

Only the closest cumulative project, which is a commercial vehicle wash facility, located approximately 800 feet north, across Alessandro Boulevard, would have the potential to result in cumulative aesthetic impact on a scenic vista or degrade the existing visual character of the Project site as they are close enough to be viewed at the same time by individuals in the Project area. As outlined above, the proposed Project would not result in a substantial adverse effect on a scenic vista, and therefore, it would not cumulatively contribute to an adverse effect on a scenic vista.

Each of the proposed developments would change the existing visual character of the area in which they are located. Each project located within the City would go through a design review of site design and building elevations and for consistency with the Citywide Design Guidelines and

Sign Guidelines, and the Meridian Specific Plan – West Campus Upper Plateau Project would go through design review with the March Joint Powers Authority for site design and building elevations and consistency with development standards of the March Joint Powers Authority General Plan Land Use Element (March JPA GP). Design review is anticipated to ensure the projects would have architecture and design elements that are aesthetically coherent and compatible and complimentary with the existing surrounding built environment in terms of colors, materials and landscaping, and thus, would not result in adverse aesthetic impacts to the visual character in the City or adjacent unincorporated Riverside County. Furthermore, the lighting elements have no plans to increase lumens nor the elevation of the proposed structures to increase and impede visual elements. All projects within the MARB/IPA LUCP Zone C or higher that proposes solar panels would be required to provide a solar glare study, for review and approval by Riverside County ALUC staff. As each project would be required to ensure it would not result in solar glare impacts, they would not be expected to result in cumulative glare impacts. Thus, cumulatively the Project does not have a substantial adverse effect on a scenic vista or resource, substantially degrade the existing visual character of the area, or create a substantial new source of light or glare, when considered with other cumulative projects. Similar to the Project, visual quality impacts associated with other cumulative projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies. Potential cumulative aesthetics impacts are **less than significant**.

5.1.8 References

The following references were used in the preparation of this section of the DEIR:

CDG	City of Riverside, Citywide Design Guidelines and Sign Guidelines, adopted November 2007. https://riversideca.gov/cedd/planning/zoning-code-and-regulations (Accessed September 2023).
Caltrans	California Department of Transportation (Caltrans) California State Scenic Highways Riverside County. California Scenic Highway Mapping System. https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (Accessed September 2023).
GP 2025	City of Riverside, <i>General Plan 2025</i> , certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
GP 2025 FPEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report</i> (PEIR) (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)

March JPA GP	March Joint Powers Authority (JPA), <i>General Plan</i> , March 7, 2023. (Available at https://marchjpa.com/planning-permits/ , accessed January 2024)
RCALUC 2023	Riverside County Airport Land Use Commission, Staff Report, Agenda Item: 3.2, Case Number: ZAP1548MA22 – Anton Mission Grove LLC, September 14, 2023. (Available at https://rcaluc.org/meeting-agendas accessed September 2023)
RMC, 19	Title City of Riverside, Code of Ordinances, Title 19 Zoning https://riversideca.gov/cedd/planning/zoning-code-and-regulations accessed September 2023)

5.2 Agriculture and Forestry Resources

This analysis focuses on the Project's potential impacts related to agriculture and forestry resources. The focus of the following discussion is related to the potential impacts to the conversion of farmland to non-agricultural uses, conflicts with Williamson Act contracts or existing zoning for agricultural use and other changes to the existing environment that could result in the conversion of farmland.

5.2.1 Setting

Agriculture represents a finite and unique resource that is an important part of the City's history. The citrus industry was the mainstay of the City's economy starting in the late nineteenth century and continuing well into the twentieth. The climate and soils were favorable to widespread commercial citrus crops. Historically, agriculture was the largest industry in Riverside County, providing employment for a significant portion of the City's population. During the late twentieth century, however, there was significant pressure to convert agricultural land to suburban use. Currently, agriculture faces continuing pressure from urbanization, foreign competition, and rising production and water costs. Numerous citriculture areas were completely converted to urban and suburban uses after the 1970s. The only significant block of agriculture in the City limits in the early twenty-first century is the Arlington Heights Greenbelt, in the south and central portion of the City. Even in this area, many of the citrus groves are being converted to wholesale nurseries. (GP 2025; GP 2025 PEIR)

The region is experiencing rapid loss of farmland, contracted lands, and agriculture in general. In terms of dollar value, agriculture is today the largest industry in Riverside County, providing employment for a significant portion of the County's population. According to the Riverside County Agricultural Crop and Livestock Report, for every dollar received by farmers in Riverside County, the financial impact to the region is three times that amount. With crop valuations that have hovered around \$100,000,000 over the last ten years, it represents a tremendous economic benefit to the County. Currently, agriculture faces continuing pressure from urbanization, foreign competition, and rising production costs. Despite these pressures, those areas, which remain in agricultural production, represent a significant open space and economic resource for the County. As values of differing crops vary significantly, it is the loss of agricultural land that is the appropriate measure of whether significant environmental impacts related to agriculture are occurring. (GP 2025; GP 2025 PEIR)

5.2.2 Regulatory Setting

Pursuant to CEQA §21060.1, "agricultural land" means Prime Farmland, Farmland of Statewide Importance and Unique Farmland as defined by the United States Department of Agriculture, as modified for California by the Department of Conservation's Farmland Monitoring and Mapping Program ("FMMP"). For purposes of this analysis, the City also considers "farmland" to be land subject to a Williamson Act contract as well as land designated for agricultural use in the City's General Plan or Zoning Code.

5.2.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to agriculture or forestry resources.

5.2.4 Project Design Considerations

There are no Project-specific design considerations proposed that relate to agriculture and forestry resources.

5.2.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;
- (Threshold B) conflict with existing zoning for agricultural use, or a Williamson Act contract;
- (Threshold C) conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- (Threshold D) result in the loss of forest land or conversion of forest land to non-forest use;
- (Threshold E) involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

5.2.6 Environmental Impacts

Threshold A: *Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (“Farmland”), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?*

A review of Figure OS-2 – Agricultural Suitability of the GP 2025 reveals that the project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and is not adjacent to or in proximity to any land classified as, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Figure OS-2 was prepared pursuant to the California Department of Conservation, Farmland Mapping and Monitoring Program. Figure OS-2 shows

the project site and adjacent areas as Urban and Built-Up Land. An area designated as Farmland of Local Importance is the closest Farmland Mapping and Monitoring Program designation to the project site, located approximately one mile northwest. The project will not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (“Farmland”) or of Local Importance. Therefore, the project will have **no impact** directly, indirectly or cumulatively to agricultural uses.

Threshold B: *Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

A review of Figure OS-3 – Williamson Act Preserves of the GP 2025 and Figure 5.2-2 – Williamson Act Preserves of the General Plan 2025 FPEIR reveals that the project site is not located within an area that is affected by a Williamson Act Preserve or under a Williamson Act Contract. Moreover, the project site is not zoned for agricultural use and is not next to land zoned for agricultural use; therefore, the project will have **no impact** directly, indirectly or cumulatively.

Threshold C: *Would the Project 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))?*

Forest land, as defined in the Public Resources Code section 12220(g), is land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Timberland, as defined in the Public Resources Code section 4526, is land, other than land owned by the federal government, and land designated by the State Board of Forestry and Fire Protection as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees.

The project site does contain riparian vegetation, including scrub woodland, and forest subtypes that are associated with waterways and drainages throughout the City. (GP 2025 PEIR) The project site does not contain timberland, is not zoned for timberland production and is not next to land zoned for timberland. The City has no designated forest land or timberland as defined in Sections 12220[g] and 4526 of the *California Public Resources Code*. Therefore, the project would have **no impact** on forest land or timberland.

Threshold D: *Would the Project result in the loss of forest land or conversion of forest land to non-forest use?*

The City has no designated forest land. Presently, the project site has the zoning designations of Commercial-Retail (CR) per the City’s current zoning map. There are no active forest land resources or operations in proximity of the project site and the proposed Project would not result in the conversion of any forest land. Therefore, the Project would have **no impact** on the loss or conversion of forest land.

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

The Project site is not designated as, or in close proximity to any land classified as Prime Farmland or Unique Farmland, and it does not support agricultural resources or operations. The proposed Project will not result in the conversion of designated farmland to non-agricultural uses. In addition, there are no agricultural resources or operations, including farmlands immediately adjacent to the Project site. Therefore, **no impacts** will occur from this project directly, indirectly or cumulatively to conversion of Farmland, to non-agricultural use or to the loss of forest land.

5.2.7 Proposed Mitigation Measures

There were found to be **no impacts** to agriculture or forestry resources from the proposed Project; therefore, no mitigation measures are necessary.

5.2.8 Summary of Project-Specific Environmental Effects

As there would be **no impact** to agriculture or forestry resources as a result of the proposed Project, no Mitigation Measures are required.

5.2.9 Cumulative Environmental Effects

As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks). However, as there are no impacts to agriculture or forestry resources, and therefore there are also **no cumulative environmental impacts** from Project implementation to agriculture or forestry resources.

5.2.10 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)

5.3 Air Quality

This section analyzes the effects of the Project on Air Quality. All thresholds related to air quality will be analyzed below. The analysis in this section is based on data and information in the *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the Proposed Mission Grove Apartments Project in Riverside, California*, prepared by LSA Associates, Inc. (LSA 2023; see Appendix B).

5.3.1 Setting

South Coast Air Basin

The Project site is located in Riverside, Riverside County, California, which is part of the South Coast Air Basin (Basin) and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties.

Regional Climate and Air Quality

Existing Air Quality

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect public health and welfare. Both the State of California and the Federal government have established health-based ambient air quality standards (AAQS) for seven (7) air pollutants. As detailed in Table 5.3-1 – Ambient Air Quality Standards, these pollutants include: ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than 10 microns in size (PM₁₀), particulate matter less than 2.5 microns in size (PM_{2.5}), and lead (Pb). Additionally, the State has set standards for sulfates, hydrogen sulfide (H₂S), vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.3-2 summarizes the most common health and environmental effects for each of the air pollutants for which there is a national and/or California AAQS, as well as for toxic air contaminants. Because of the concentration standards that were set at a level that protects public health with an adequate margin of safety (by the U.S. Environmental Protection Agency [EPA]), these health effects would not occur unless the standards are exceeded by a large margin or for a prolonged period of time. State AAQS are typically more stringent than federal AAQS. Among the pollutants, O₃ and particulate matter (PM_{2.5} and PM₁₀) are considered pollutants with regional effects, while others have more localized effects.

The California Clean Air Act (CCAA) provides SCAQMD and other air districts with the authority to manage transportation activities at indirect sources. Indirect sources of pollution include any facility, building, structure, or installation, or combination thereof, that attracts or generates mobile-source emissions of any pollutant. In addition, area-source emissions that are generated when minor sources collectively emit a substantial amount of pollution are also managed by the

local air districts. Examples of this would be the motor vehicles at an intersection, at a mall, and on highways. SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. The California Air Resources Board (CARB) regulates direct emissions from motor vehicles.

Table 5.3-1 – Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ⁵	Secondary ⁶	Method ⁷
O ₃ ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	--	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
PM ₁₀ ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		--		
PM _{2.5} ⁹	24 Hour	--	--	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³		
CO	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	--	NDIR
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	--	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		--	--	
NO ₂ ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	--	Gas Phase Chemilumin- escence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
SO ₂ ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	--	Ultraviolet Fluorescence; Spectrophoto- metry (Pararosaniline Method)
	3 Hour	--		--	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	--	
	Annual Arithmetic Mean	--		0.030 ppm (for certain areas) ¹¹	--	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	--	--	High Volume Sampler and Atomic Absorption
	Calendar Quarter	--		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3- Month Average	--		0.15 µg/m ³		

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ⁵	Secondary ⁶	Method ⁷
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (25 µg/m ³)	Gas Chromatography			

ppm = parts per billion.
 µg/m³ = Microgram per Cubic Meter
 -- = not applicable

¹ California standards for O₃, CO (except for 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and PM₁₀, PM_{2.5} and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

² National standards (other than O₃, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ 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 PM₁₀, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, 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. Contact the U.S. EPA for further clarification and current national policies.

³ 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.

⁴ Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

⁷ Reference method as described by the U.S. EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the U.S. EPA.

⁸ On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.

⁹ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over three (3) years.

¹⁰ 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 10hour 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.

¹¹ On June 2, 2010, a new 1-hour SO₂ 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 exceed 75 ppb. The 1971 SO₂ 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 for nonattainment 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 parts per billion (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.

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ⁵	Secondary ⁶	Method ⁷
<p>¹² The 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.</p> <p>¹³ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.</p> <p>¹⁴ In 1989, the 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.</p>						

Table 5.3-2 – Summary of Health and Environmental Effects of the Criteria Air Pollutants

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	<ul style="list-style-type: none"> • Chest pain in patients with heart disease • Headache • Light-headedness • Reduced mental alertness
SO ₂	SO ₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO ₂ oxidizes in the atmosphere, it forms sulfates (SO ₄). Collectively, these pollutants are referred to as sulfur oxides (SO _x).	Coal or oil burning power plants and industries, refineries, diesel engines	<ul style="list-style-type: none"> • Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
NO _x	NO _x consist of nitric oxide (NO), nitrogen dioxide (NO ₂) and nitrous oxide (N ₂ O) and are formed when nitrogen (N ₂) combines with oxygen (O ₂).	Any source that burns fuel such as automobiles, trucks, heavy construction	<ul style="list-style-type: none"> • Lung irritation • Enhanced allergic responses

Criteria Pollutant	Description	Sources	Health Effects
	<p>Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO_x are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO₂ is the most abundant in the atmosphere. As ambient concentrations of NO₂ are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO₂ than those indicated by regional monitoring station.</p>	<p>equipment, farming equipment and residential heating.</p>	
<p>O₃</p>	<p>O₃ is a highly reactive and unstable gas that is formed when VOCs and NO_x, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.</p>	<p>Formed when reactive organic gases (ROG) and NO_x react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and storage and pesticides.</p>	<ul style="list-style-type: none"> • Respiratory symptoms • Worsening of lung disease leading to premature death • Damage to lung tissue • Crop, forest, and ecosystem damage • Damage to a variety of materials, including rubber, plastics, fabrics, paint, and metals
<p>Particulate Matter</p>	<p>PM₁₀ (Particulate Matter less than 10 microns): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light and</p>	<p>Sources of PM₁₀ include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_x, SO_x, organics).</p>	<ul style="list-style-type: none"> • PM₁₀: <ul style="list-style-type: none"> ○ Premature death and hospitalization, primarily for worsening or respiratory disease ○ Reduced visibility and material soiling

Criteria Pollutant	Description	Sources	Health Effects
	<p>consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. Additionally, it should be noted that PM₁₀ is considered a criteria air pollutant.</p> <p>PM_{2.5} (Particulate Matter less than 2.5 microns): A similar air pollutant to PM₁₀ consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO₂ release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. PM_{2.5} is a criteria air pollutant.</p>	<p>Incomplete combustion of any fuel.</p> <p>PM_{2.5} comes from fuel combustion in motor vehicles, equipment and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_x, SO_x, organics).</p>	<ul style="list-style-type: none"> • PM_{2.5}: <ul style="list-style-type: none"> ○ Premature death ○ Hospitalization for worsening of cardiovascular disease ○ Hospitalization for respiratory disease ○ Asthma-related emergency room visits ○ Increased symptoms, increased inhaler usage
<p>Volatile Organic Compounds (VOC)</p>	<p>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 ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include</p>	<p>Organic chemicals are widely used as ingredients in household products. Paints, varnishes and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic compounds while</p>	<ul style="list-style-type: none"> • Irritation of eyes, nose, and throat • Difficulty breathing • Nausea • Can cause central nervous system damage • Some VOCs are cancerous

Criteria Pollutant	Description	Sources	Health Effects
	<p>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. VOCs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms VOC and ROG (see below) are used interchangeably.</p>	<p>you are using them, and, to some degree, when they are stored.</p>	
<p>ROG</p>	<p>Similar to VOC, ROGs are also precursors in forming ozone 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 NO_x react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O₃, which is a criteria pollutant. The terms ROG and VOC (see previous) are used interchangeably.</p>	<p>Sources similar to VOCs.</p>	<p>Health effects similar to VOCs.</p>
<p>Lead (Pb)</p>	<p>Lead is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. The major sources of lead emissions are ore and metals processing, particularly lead smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or lead acid battery manufacturing. As such, the Project is not anticipated to</p>	<p>Metal smelters, resource recovery, leaded gasoline, deterioration of lead paint.</p>	<ul style="list-style-type: none"> • Impaired mental functioning in children • Learning disabilities in children • Brain and kidney damage

Criteria Pollutant	Description	Sources	Health Effects
	generate a quantifiable amount of lead emissions.		
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves.	Odors can come from many sources including animals, human activities, industry, natures, and vehicles.	<ul style="list-style-type: none"> • Irritation of eyes, nose, and throat, which can reduce respiratory volume • VOCs that can cause odors can stimulate sensory nerves to cause neurochemical changes and compromise the immune system • Unpleasant odors can trigger memories or attitudes causing emotional effects such as stress

Climate/Meteorology

Air quality in the planning area is affected not only by various emission sources (e.g., mobile and industry) but also by atmospheric conditions (e.g., wind speed, wind direction, temperature, and rainfall). The regional climate within the Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Basin is primarily influenced by a wide range of emission sources – such as dense population centers, heavy vehicular traffic, and industry – and meteorology.

The annual average temperature varies little throughout the Basin, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station closest to the Project site is the Riverside Fire Station 3 (Western Regional Climate Center 2022). The monthly average maximum temperature recorded at this station ranged from 66.8°F in January to 94.4°F in August, with an annual average maximum of 79.5°F. The monthly average minimum temperature recorded at this station ranged from 39.1°F in January to 59.6°F in August, with an annual average minimum of 48.6°F. January is typically the coldest month, and July and August are typically the warmest months in this area of the Basin.

Regional Air Quality

Air pollution contributes to a wide variety of adverse health effects. The EPA has established national AAQS for six of the most common air pollutants: CO, lead (Pb), O₃, PM, NO₂, and SO₂, which are known as criteria pollutants. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and five (5) single-pollutant source Pb air monitoring sites

throughout the air district. On February 21, 2019, CARB posted the 2018 amendments to the State and national area designations.

CARB has divided the State into 15 air basins based on meteorological and topographical factors of air pollution. Data collected at these stations are used by CARB and the EPA to classify air basins as Attainment, Nonattainment, Nonattainment-Transitional, or Unclassified, based on air quality data for the most recent three (3) calendar years compared with the AAQS.

Attainment areas may be the following:

- **Attainment/Unclassified:** ('Unclassifiable' in some lists) These basins have never violated the air quality standard of interest or do not have enough monitoring data to establish Attainment or Nonattainment status.
- **Attainment-Maintenance:** (national ambient air quality standards [NAAQS] only) These basins violated a NAAQS that is currently in use (were Nonattainment) in or after 1990, but now attain the standard and are officially redesignated as Attainment by the EPA with a Maintenance State Implementation Plan.
- **Attainment:** (usually only for California ambient air quality standards [CAAQS], but sometimes for NAAQS). These basins have adequate monitoring data to show attainment, have never been Nonattainment, or, for NAAQS, have completed the official Maintenance period.

Nonattainment areas are imposed with additional restrictions as required by the EPA. The air quality data is also used to monitor progress in attaining air quality standards. Table 5.3-3 lists the attainment status of criteria pollutants in the Basin.

Table 5.3-3 – Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
O ₃	Nonattainment (1-hour) Nonattainment (8-hour)	Extreme Nonattainment (1-hour) Extreme Nonattainment (8-hour)
PM ₁₀	Nonattainment (24-hour) Nonattainment (Annual)	Attainment-Maintenance (24-hour)
PM _{2.5}	Nonattainment (Annual)	Serious Nonattainment (24-hour) Moderate Nonattainment (Annual)
CO	Attainment (1-hour) Attainment (8-hour)	Attainment-Maintenance (1-hour) Attainment-Maintenance (8-hour)
NO ₂	Attainment (1-hour) Attainment (Annual)	Attainment/Unclassified (1-hour) Attainment-Maintenance (Annual)
SO ₂	Attainment (1-hour) Attainment (24-hour)	Attainment/Unclassified (1-hour) Attainment/Unclassified (Annual)
Pb ¹	Attainment (30-day average)	Attainment (3-month rolling)
All Others	Attainment/Unclassified	N/A

Source: SCAQMD
¹Only the Los Angeles County portion of the Basin is in nonattainment for lead.
N/A = not applicable

Local Air Quality

SCAQMD, together with CARB, maintains ambient air quality monitoring stations. The air quality monitoring station that monitors air pollutant data closest to the site is the Rubidoux Monitoring Station at 5888 Mission Boulevard, in Riverside, approximately eight (8) miles northwest of the Project site. The air quality trends from this station are used to represent the ambient air quality in the Project area. The ambient air quality data in Table 5.3-4 shows that NO₂ and CO levels are below the applicable state and federal standards. However, PM₁₀ and O₃ levels frequently exceed their respective standards and PM_{2.5} levels occasionally exceed the federal 24-hour standard.

Table 5.3-4 – Air Quality Concentrations in the Project Vicinity

Pollutant	Standard	2019	2020	2021
CO (Measured at the Riverside – Rubidoux Monitoring Station)				
Maximum 1-hour concentration (ppm)		1.5	1.8	2.1
No. of days exceeded	State: 20 ppm	0	0	0
	Federal: 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		1.2	1.5	1.8
No. of days exceeded	State: 9 ppm	0	0	0
	Federal: 9 ppm	0	0	0
O₃ (Measured at the Riverside – Rubidoux Monitoring Station)				
Maximum 1-hour concentration (ppm)		0.123	0.143	0.117
No. of days exceeded	State: 0.09 ppm	24	46	ND
Maximum 8-hour concentration (ppm)		0.096	0.115	0.097
No. of days exceeded	State: 0.07 ppm	63	86	ND
	Federal: 0.07 ppm	59	82	ND
PM₁₀ (Measured at the Riverside – Rubidoux Monitoring Station)				
Maximum 24-hour concentration (µg/m ³)		57.6	61.9	76.0
No. of days exceeded	State: 50 µg/m ³	110	115	0
	Federal: 150 µg/m ³	0	0	0
Annual avg. concentration (µg/m ³)		40.9	ND	33.2
Exceeds Standard?	State: 20 µg/m ³	Yes	ND	Yes
PM_{2.5} (Measured at the Riverside – Rubidoux Monitoring Station)				
Maximum 24-hour concentration (µg/m ³)		57.7	59.9	44.4
No. of days exceeded	Federal: 35 µg/m ³	5	12	0
Annual avg. concentration (µg/m ³)		11.2	14.1	13.3
Exceeds Standard?	State: 12 µg/m ³	No	Yes	No
	Federal: 12 µg/m ³	No	Yes	No
NO₂ (Measured at the Riverside – Rubidoux Monitoring Station)				
Maximum 1-hour concentration (ppb):		56.0	62.0	52
No. of days exceeded	State: 180 ppb	0	0	0
	Federal: 100 ppb	0	0	0
Annual avg. concentration (ppg):		14.0	14.0	14.3
Exceeds standard?	State: 30 ppb	No	No	No
	Federal: 53 ppb	No	No	No
Sources: Air Data: EPA (2022b) and CARB				
Notes: Data was collected from the closest stations to the Project site where each criteria pollutant data was available.				
µg/m ³ = micrograms per cubic meter		O ₃ = ozone		
CARB = California Air Resources Board		PM _{2.5} = particulate matter smaller than 2.5 microns in size		
CO = carbon monoxide		PM ₁₀ = particulate matter smaller than 10 microns in size		
EPA = U.S Environmental Protection Agency		ppb = parts per billion		

ND = No data available NO ₂ = nitrogen dioxide	ppm = parts per million
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Air Quality Standards

The EPA has set primary NAAQS for O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb. Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. In addition, California has established health-based ambient air quality standards (CAAQS) for these and other pollutants, some of which are more stringent than Federal standards. Table 5.3-5 lists the current Federal and State standards for regulated pollutants.

Table 5.3-5 – Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	--	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	--	--
	24-Hour	--	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM ₁₀	Annual	--	20 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
PM _{2.5}	Annual	12 µg/m ³	12 µg/m ³
	24-Hour	35 µg/m ³	--
Lead	30-Day Average	--	1.5 µg/m ³
	3-Month Average	0.15 µg/m ³	--

ppm = parts per million
µg/m³ = micrograms per cubic meter
Source: CARB 2016a

Toxic Air Contaminants

The California Health and Safety Code defines a toxic air contaminant (TAC) as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines. According to CARB, diesel engine emissions are believed to be responsible for about 70 percent of California’s estimated known cancer risk attributable to TACs and they make up about eight (8) percent of outdoor PM_{2.5}.

Sensitive Receptors

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as “sensitive receptors”. These structures typically include residences,

hotels, hospitals, etc. as they are also known to be locations where an individual can remain for 24 hours. Schools are also considered to be sensitive receptors. Consistent with the *Localized Significance Threshold (LST) Methodology*, the nearest sensitive receptors to the Project site are single-family residential units that are at least 115 feet south of the Project site boundary, across Mission Village Drive.

5.3.2 Related Regulations

5.3.2.1 Federal Regulations

The EPA is responsible for setting and enforcing the NAAQS for O₃, CO, NO_x, SO₂, PM₁₀, and Pb. The EPA has jurisdiction over emissions sources that are under the authority of the Federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

Federal Clean Air Act

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the Federal air quality standards, the NAAQS, and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O₃, NO₂, SO₂, PM₁₀, CO, PM_{2.5}, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O₃ and to adopt a NAAQS for PM_{2.5}. Table 5.3-2 (above) provides the NAAQS within the Basin.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of nitrogen oxides (NO, NO₂, NO₃) which are emitted as byproducts of the combustion process.

National Ambient Air Quality Standards

The Federal CAA requires the EPA to establish primary and secondary NAAQS for a number of criteria air pollutants. The air pollutants for which standards have been established are considered

the most prevalent air pollutants known to be hazardous to human health. NAAQS have been established for O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and Pb.

5.3.2.2 State Regulations

California Air Resources Board

In 1967, the State Legislature passed the Mulford-Carrell Act, which combined two Department of Health bureaus (i.e., the Bureau of Air Sanitation and the Motor Vehicle Pollution Control Board) to establish CARB. Since its formation, CARB has worked with the public, the business sector, and local governments to find solutions to the State's air pollution problems. California adopted the CCAA in 1988. CARB administers the CAAQS for the 10 air pollutants designated in the CCAA. These 10 State air pollutants are the 6 criteria pollutants designated by the federal CAA as well as 4 others: visibility-reducing particulates, H₂S, sulfates, and vinyl chloride.

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practical date. CARB is the State air pollution control agency and is a part of the California Environmental Protection Agency (CalEPA). CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California, and for implementing the requirements of the CCAA. CARB oversees local district compliance with Federal and California laws, approves local air quality plans, submits the state implementation plans to the EPA, monitors air quality, determines and updates area designations and maps, and sets emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Ambient Air Quality Standards

The CCAA requires CARB to establish CAAQS. Similar to the NAAQS, CAAQS have been established for ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, Pb, vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In most cases, the CAAQS are more stringent than the NAAQS. The California CAA requires all local air districts to endeavor to achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources.

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas (GHG) emissions. The 2022 version of Title 24 was adopted by the California Energy Commission (CEC) and became effective on

January 1, 2023. It should be noted that the analysis herein assumes compliance with the 2022 Title 24 Standards. The 2022 Standards update energy efficiency standards for newly constructed buildings, as well as additions and alterations to existing buildings.

CCR Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission. CALGreen is updated on a regular basis, with the most recently approved update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. CALGreen recognizes that many jurisdictions have developed existing construction and demolition ordinances and defers to them as the ruling guidance provided, they establish a minimum 65 percent diversion requirement. The code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. 2022 CALGreen standards are applicable to the Project and require:

- Electric vehicle (EV) charging for new construction. For multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more sleeping units or guest rooms (4.106.4.2.2):
 - Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be EV charging spaces capable of supporting future Level 2 electric vehicle charging station (EVSE).
 - 25 percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.
 - Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.
- Construction waste management: Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with either (CalGreen) Section 4.408.2, 4.408.3, or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance (4.408.1)

- Recycling by occupants: Where five (5) or more multifamily dwelling units are constructed on a building site, provide easily accessible area(s) that serve(s) all building on the site and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive (4.410.2).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (4.303.1.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush (4.303.1.2)
 - Showerheads. Single showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute and 80 psi (4.303.1.3). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (4.303.1.3.2).
 - Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi (4.303.1.4.1). The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

Assembly Bill 1493

Assembly Bill (AB) 1493 (2002), California's Advanced Clean Cars program (Pavley), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of Greenhouse Gas (GHG) emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG standards for motor vehicles beginning with the 2009 model year. Pavley I took effect for model years starting in 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction from 2009 levels by 2012 and 30 percent by 2016. The Advanced Clean Cars program coordinates the goals of the LEV, Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs and would provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels.

5.3.2.3 Regional Regulations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a regional planning agency that serves as a forum for regional issues relating to transportation, economics, community development, and environmental issues. SCAG is not an air quality management agency, but it is responsible for development transportation, land use, and energy conservation measures that impact air quality. SCAG's Regional Comprehensive Plan and Guide provide growth forecasts used by SCAQMD to develop air quality and land use strategies. SCAG is charged with developing and implementing Senate Bill 375, a measure that addresses greenhouse gas reduction in the State, with participation from Riverside County and the other cities and counties that make up SCAG. The USEPA has designated SCAG as the Metropolitan Planning Organization responsible for ensuring compliance with the requirements of the CAA for the Basin.

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with SCAG, county transportation commissions, and local governments, and cooperates actively with State and Federal government agencies. The SCAQMD develops air quality-related rules and regulations, establishes permitting requirements, inspects emissions sources, and provides regulatory enforcement through such measures as educational programs or fines, when necessary.

SCAQMD Rule 402

SCAQMD Rule 402 regarding nuisances states:

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

Air Quality Management Planning

SCAQMD and SCAG are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the Basin. The main purpose of the AQMP is to bring the area into compliance with Federal and State air quality standards. SCAQMD prepares a new AQMP every three (3) years, updating the previous plan and a 20-year horizon.

The 2022 AQMP builds upon measures already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.

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

Although SCAQMD is responsible for regional air quality planning efforts, it does not have the authority to directly regulate the air quality issues associated with new development projects within the Basin, such as the proposed Project. Instead, SCAQMD published the *CEQA Air Quality Handbook* (1993) to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in Environmental Impact Reports and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* (1993) with the *Air Quality Analysis Guidance Handbook*.

To assist in conducting an air quality analysis in the interim while the replacement *Air Quality Analysis Guidance Handbook* is being prepared, supplemental guidance/information is provided in the SCAQMD website and includes (1) on-road vehicle emission factors, (2) background CO concentrations, (3) localized significance thresholds (LST), (4) mitigation measures and control efficiencies, (5) mobile-source toxics analysis, (6) off-road mobile-source emission factors, (7) PM_{2.5} significance thresholds and calculation methodology, and (8) updated SCAQMD Air Quality Significance Thresholds. SCAQMD additionally recommends using approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod). These recommendations were followed in the preparation of the Project's air quality analysis.

The following SCAQMD rules and regulations would apply to the Project:

- SCAQMD Rule 403 requires projects to incorporate fugitive dust control measures.
- SCAQMD Rule 1113 limits the volatile organic compound content of architectural coatings.

5.3.2.4 Local Regulations

City of Riverside General Plan 2025

The City of Riverside General Plan 2025 (GP 2025) was adopted in November 2007 to preserve the vision and values of Riverside looking ahead to future improvements, increasing industry, and population growth. The Air Quality Element of the implemented policies intended to limit air pollution and reduce the potential sensitive receptor exposure. The following policies from the Air Quality Element of the GP 2025 are applicable to the Project:

Objective AQ-1: Adopt land use policies that site polluting facilities away from sensitive receptors and vice versa; improve job-housing balance; reduce vehicle miles traveled and length of work trips; and improve the flow of traffic.

Policy AQ-1.2: Consider potential environmental justice issues in reviewing impacts (including cumulative impacts for each project proposed).

Policy AQ-1.3: Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.

Policy AQ-1.4: Facilitate communication between residents and businesses on nuisance issues related to air quality.

Policy AQ-1.5: Encourage infill development projects within urbanized areas that include job centers and transportation nodes.

Policy AQ-1.6: Provide mixed-use development that allows the integration of retail, office, institutional and residential uses for the purpose of reducing costs of infrastructure construction and maximizing the use of land.

Policy AQ-1.7: Support appropriate planned residential developments and infill housing, which reduce vehicle trips.

Policy AQ-1.12: Support mixed-use land use patterns but avoid placing residential and other sensitive receptors in close proximity to businesses that emit toxic air contaminants to the greatest extent possible. Encourage community centers that promote community self-sufficiency and containment and discourage automobile dependency.

Policy AQ-1.16: Design safe and efficient vehicular access to commercial land uses from arterial streets to ensure efficient vehicular ingress and egress.

Policy AQ-1.17: Avoid locating multiple-family developments close to commercial areas that emit harmful contaminants.

Objective AQ-2: Reduce air pollution by reducing emissions from mobile sources.

Policy AQ-2.4: Monitor and strive to achieve performance goals and/or VMT reduction which are consistent with SCAG's goals.

Objective AQ-3: Prevent and reduce pollution from stationary sources, including point sources (such as power plants and refinery boilers) and area sources (including small emission sources such as residential water heaters and architectural coatings).

Policy AQ-3.4: Require projects to mitigate, to the extent feasible, anticipated emissions which exceed AQMP Guidelines.

Policy AQ-3.6: Support "green" building codes that require air conditioning/filtration installation, upgrades or improvements for all buildings, but particularly for those associated with sensitive receptors.

Policy AQ-3.7: Require use of pollution control measures for stationary and area sources through the use of best available control activities, fuel/material substitution, cleaner fuel alternatives, product reformulation, and change in work practices and of control measures identified in the latest AQMP.

Objective AQ-4: Reduce particulate matter, as defined by the Environmental Protection Agency, as either airborne photochemical precipitates or windborne dust.

Policy AQ-4.5: Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

Policy AQ-5.1: Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Policy AQ-5.3: Continue and expand use of renewable energy sources such as wind, solar, water, landfill gas, and geothermal sources.

Policy AQ-5.8: Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.

Objective AQ-7: Support a regional approach to improving air quality through multi-jurisdictional cooperation.

Policy AQ-7.9: Adhere with Federal, State and regional air quality laws, specifically with Government Code Section 65850.2, which requires that each owner or authorized agent of a project indicate, on the development or building permit for the project, whether he/she will need to comply with the requirements for a permit for construction or modification from the SCAQMD.

Policy AQ-7.10: Incorporate, to the extent applicable and permitted by law, current and proposed AQMP measures.

5.3.3 Project Design Considerations

The Project would adhere to applicable 2019/2022 CALGreen building code standards as described in Section 5.3.2.2 above as they relate to reducing potential impacts to air quality.

5.3.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) conflict with or obstruct implementation of the applicable air quality plan;
- (Threshold B) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard;
- (Threshold C) expose sensitive receptors to substantial pollutant concentrations;

- (Threshold D) result in emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.3.5 Environmental Impacts

Threshold A: *Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

As discussed in Section 5.3.2.3 above, the SCAQMD published the 1993 *CEQA Air Quality Handbook* to assist lead agencies, as well as consultants, project proponents, and other interested parties in evaluating potential air quality impacts of projects proposed in the Basin. The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses in EIRs, including criteria for determining a Project's consistency with an AQMP, which are found in Chapter 12 of the *CEQA Air Quality Handbook*. While the *Handbook* is currently under revision, Chapter 12 is not among the chapters, appendices, or tables that the SCAQMD has recommended to avoid using. The SCAQMD states that methodologies within the *Handbook* can still be used as long as documentation is provided regarding the source and applicability to a project. Thus, the Project's consistency with the 2022 AQMP was determined using the project consistency criteria defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's *CEQA Air Quality Handbook*. These indicators are discussed below. Additionally, the SCAQMD air quality significance thresholds reflect the most recent thresholds, which were updated in March 2023.

Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Regional Construction Emissions

Construction activities associated with the Project will result in emissions of VOCs, NO_x, SO_x, CO, PM₁₀, and PM_{2.5}. Construction-related emissions are expected from the following construction activities: demolition, site preparation, grading, building construction, architectural coating, and paving.

The construction analysis includes estimating the construction equipment that would be used during each construction activity, the hours of use for that construction equipment, the quantities of earth and debris to be moved, and the on-road vehicle trips (e.g., worker, soil-hauling, and vendor trips). The proposed earthwork for the Project includes 5,118 cubic yards (cy) of cut and 5,950 cy of fill. It was assumed that the cut would be reused as fill, leaving 832 cy of fill import required. CalEEMod defaults are assumed for the construction activities, off-road equipment, and on-road construction fleet mix and trip lengths. It is expected that construction would start in 2025 and take approximately 28 months, with an opening in 2028.

The most recent version of CalEEMod (Version 2022.1.0) was used to develop the construction equipment inventory and calculate the construction emissions. Table 5.3-6 lists the estimated construction equipment that would be used during Project construction as estimated by CalEEMod default values. The CalEEMod output is included as Attachment C to the Project's Air Quality Analysis.

Table 5.3-6 – Diesel Construction Equipment Used by Construction Phase

Construction Phase	Off-Road Equipment Type	Off-Road Equipment Unit Amount	Hours Used per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	1	8	33	0.73
	Excavators	3	8	36	0.38
	Rubber Tired Dozers	2	8	367	0.4
Site Preparation	Rubber Tired Dozers	3	8	367	0.4
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	1	8	36	0.38
	Graders	1	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.4
	Tractors/Loaders/Backhoes	3	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.2
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	37	0.48
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38

Source: Compiled by LSA using CalEEMod defaults (August 2023)

Fugitive Dust

Fugitive dust emissions are generally associated with land clearing and exposure of soils to the air and wind, as well as cut-and-fill grading operations. Dust generated during construction varies substantially on a project-by-project basis, depending on the level of activity, the specific operations, and weather conditions at the time of construction. The construction calculations prepared for this Project assumed that dust control measures (watering a minimum of two times daily consistent with SCAQMD Rule 403) would be employed to reduce emissions of fugitive dust during site grading. Furthermore, all construction would need to comply with SCAQMD Rule 403 regarding the emission of fugitive dust. Table 5.3-7 – Short-Term Regional Construction Emissions lists total construction emissions (i.e., fugitive dust emissions and construction equipment exhausts) that have incorporated the following Rule 403 measures that would be implemented to significantly reduce PM₁₀ emissions from construction:

- Water active sites at least twice daily (locations where grading is to occur shall be thoroughly watered prior to earthmoving).

- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 2 feet (0.6 meter) of freeboard (vertical space between the top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour or less.

These Rule 403 measures were incorporated in the CalEEMod analysis. The emissions rates in shown in Table 5.3-7 are from the CalEEMod output tables listed as “Mitigated Construction,” though the only measures that have been applied to the analysis are the required construction emissions control measures, or standard conditions. The emissions are also the combination of the on- and off-site emissions and the greater of summer and winter emissions. No exceedances of any criteria pollutants are expected. Standard measures are documented in the CalEEMod output in Attachment C of the Project’s Air Quality Analysis.

Architectural Coatings

Architectural coatings contain VOCs that are part of the O₃ precursors. Based on the Project, it is estimated that application of the architectural coatings for the proposed peak construction day would result in a peak of 11 pounds per day (lbs/day) of VOCs. Therefore, VOC emissions from architectural-coating application would not exceed the SCAQMD VOC construction threshold of 75 lbs/day.

Table 5.3-7 – Short-Term Regional Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOCs	NO _x	CO	SO _x	Fugitive PM ₁₀	Exhaust PM ₁₀	Fugitive PM _{2.5}	Exhaust PM _{2.5}
Demolition	1	28	20	<1	4	1	1	1
Site Preparation	1	40	30	<1	8	1	4	1
Grading	1	24	19	<1	3	1	1	1
Building Construction	2	21	34	<1	4	1	1	1
Architectural Coating	9	1	4	<1	1	<1	<1	<1
Paving	1	13	12	<1	<1	1	<1	1
Peak Daily	11	40	38	<1	10		5	
SCAQMD Threshold	75	100	550	150	150		55	
Exceeds Threshold?	No	No	No	No	No		No	
Source: Compiled by LSA (August 2023) lbs/day = pounds per day PM ₁₀ and PM _{2.5} fugitive emissions are from the CalEEMod output tables “Mitigated” results; the only “mitigation” measures applied in this modeling are required dust control measures per SCAQMD Rule 403. It was assumed the architectural coatings would be applied during the building construction phase.								

Localized Construction Emissions

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and CAAQS. Collectively, these are

referred to as Localized Significance Thresholds (LSTs). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

Table 5.3-8 – Construction Localized Impacts Analysis shows the portion of the construction emissions that would be produced on the Project site in comparison to the LSTs. As shown in Table 5.3-8, localized construction emissions would not exceed LSTs and therefore would not result in a locally significant air quality impact.

Table 5.3-8 – Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
On-Site Emissions	40	28	9	5
LST	249	1,556	20	7
Exceeds Threshold?	No	No	No	No

Source: Compiled by LSA (August 2023)
 Note: SRA-23 – Metropolitan Riverside County, 4-acre construction area, 115 feet from nearest sensitive receptors.
 SRA = Sensitive Receptor Area

The Project’s regional and localized construction-source emissions would not exceed applicable regional significance and LST thresholds.

Operational Emissions

Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity and natural gas) and area sources (e.g., architectural coatings and the use of landscape maintenance equipment) related to the Project.

PM₁₀ emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways. Entrainment of PM₁₀ occurs when vehicle tires pulverize small rocks and pavement, and the vehicle brakes generate airborne dust. The contribution of tire and brake wear is small compared to the other PM emission processes. Gasoline-powered engines have small rates of particulate matter emissions compared with diesel-powered vehicles. Based on the *project Vehicle Miles Traveled Analysis* (LSA 2023) prepared for the Project, the proposed Project would generate a total of 1,464 vehicle trips on a peak day (weekday), which was accounted for in the CalEEMod analysis.

Energy source emissions result from activities in buildings that use electricity and natural gas. The quantity of emissions is the product of usage intensity (i.e., the amount of electricity or natural gas) and the emission factor of the fuel source. Major sources of energy demand include building mechanical systems, such as heating and air conditioning, lighting, and plug-in electronics, such as computers. Greater building or appliance efficiency reduces the amount of energy for a given activity and thus lowers the resultant emissions. The emission factor is determined by the fuel source, with cleaner energy sources, like renewable energy, producing fewer emissions than

conventional sources. The Project would include the required solar panels with the capacity to generate approximately 1,275,500 kWh per year.

Typically, area source emissions consist of direct sources of air emissions at the Project site, including architectural coatings and the use of landscape maintenance equipment. Area source emissions associated with the Project would include emissions from the use of landscaping equipment and the use of consumer products.

Emission estimates for operation of the Project were calculated using CalEEMod and are shown in Table 5.3-9 – Project Operational Emissions, below. The peak daily emissions associated with Project operations are identified in Table 5.3-9 for VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}.

Table 5.3-9 – Project Operational Emissions (lbs/day)

	VOCs	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source Emissions	9	<1	20	<1	<1	<1
Energy Source Emissions	<1	1	<1	<1	<1	<1
Mobile Source Emissions	6	5	46	<1	10	3
Total Project Emissions	15	6	66	<1	10	3
SCAQMD Significance Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: Compiled by LSA (August 2023)
 lbs/day = pounds per day
 Note: CalEEMod only allows including the photovoltaic system (solar panels) as mitigation, even though the project is required to include solar. Thus, the results reported in this table are from the “mitigated” results from CalEEMod. These results account for the Project using energy from its solar panels.

The results shown in Table 5.3-9 indicate the Project would not exceed the significance criteria for any pollutant emissions; therefore, operation of the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in nonattainment under an applicable Federal or State AAQS.

As the Project’s regional and localized construction-source emissions and localized operational-source emissions would not exceed applicable regional significance or LST thresholds, the Project is determined to be consistent with Criterion 1.

Consistency with Criterion 2: The project will not exceed the assumptions in the AQMP based on the years of project build-out phase.

The 2022 AQMP builds upon measures already in place from previous AQMPs. As with the previous 2016 AQMP, the 2022 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under Federal law.

Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. The future growth projections are based on demographic growth forecasts for various socioeconomic categories, such as population, housing, and employment by industry. The demographic growth forecasts were developed by SCAG for their 2020 RTP/SCS and were also used in the 2022 AQMP. As the growth projections in the AQMP reflect the SCAG

growth projections from local general plans in the region, development consistent with the growth projections in City of Riverside General Plan are considered to be consistent with the AQMP.

The City of Riverside General Plan designates the Project site as Commercial. The Commercial designation provides for retail, sales, service, and office uses that serve multiple neighborhoods within the City. The Project consists of multifamily residential dwelling units. The Project's residential land use and development is not consistent with the land use designation stated in the General Plan. As such, the Project would include a General Plan Amendment (GPA) to change the land use designation from Commercial to Mixed-Use-Urban, which would allow the Project to be developed in an existing retail environment. This would help create a framework for an integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking.

While the Project would require a GPA for not being consistent with the site's original land use designation, because the Project construction and operational regional and localized emissions would not exceed the thresholds of significance, the Project would not cause an exceedance of an air quality violation. It should also be noted that the residential use proposed by the Project will generate less traffic and consequently fewer emissions than if the Project site were developed consistent with the commercial land use designation (retail, sales, service, and office uses), which would generate more trips and consequently more emissions than the Project. Rather, as noted, the Project would promote pedestrian connectivity and walkability, which would aid in reducing vehicle trip emissions in the area. Therefore, the Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase and is determined to be consistent with Criterion 2.

Conclusion

The Project would not result in or cause NAAQS or CAAQS violations. Although the Project would not be consistent with the current General Plan land use designation the Project would seek a GPA for land use designation consistency, and construction and operational-source emissions would not exceed the applicable SCAQMD regional and localized thresholds. As such, the Project is therefore considered to be consistent with the AQMP and any potential impacts would be **less than significant**.

Threshold B: *Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?*

The Basin is designated as nonattainment for O₃ and PM_{2.5} for Federal standards and nonattainment for O₃, PM₁₀, and PM_{2.5} for State standards. The SCAQMD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the

cumulative impact is considerable, then the project's impact on air quality would be considered significant.

As discussed under Threshold A, regarding construction emissions, the Project's Air Quality Analysis determined that the Project's daily regional construction emissions and localized emissions would not exceed the established thresholds of any criteria pollutant emissions thresholds established by SCAQMD. Additionally, regarding operational emissions, the Project's Air Quality Analysis determined that the Project would not exceed the significance criteria for any pollutant emissions. Therefore, as the Project would not exceed any of the applicable significance thresholds or significance criteria, the Project would not result in a cumulatively considerable net increase of any critical pollutant for which the Project region is in nonattainment under an applicable Federal or State AAQS. Potential impacts would be **less than significant**.

Threshold C: *Would the Project expose sensitive receptors to substantial pollutant concentrations?*

SCAQMD published its *Final Localized Significance Threshold Methodology* in June 2003 and updated it in July 2008, recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors. LSTs are based on the ambient concentrations of that pollutant within the project's Source Receptor Area (SRA) and the distance to the nearest sensitive receptor. The Project site is in the Metropolitan Riverside County area, or SRA 23, and the nearest sensitive receptors to the Project site are single-family residential units that are at least 115 feet to the south of the Project site boundary, across Mission Village Drive.

The SCAQMD provides LST screening tables for 25, 50, 100, 200, and 500-meter source-receptor distances. As noted, the nearest sensitive receptors are located approximately 115 feet (35 meters) from the Project site boundary. The Project site is 9.92 acres; however, the construction activities would only take place on portions of the Project site on any one (1) day. The SCAQMD recommends assuming that four (4) acres would be disturbed in any 1 day; therefore, LSTs for the 4 acre/35-meter combination were derived by interpolation in the Project's Air Quality Analysis. Table 5.3-10 – SCAQMD Localized Significance Thresholds shows the emissions thresholds that would apply to the Project based on project size and distance to the nearby receptors during Project construction and operation.

Table 5.3-10 – SCAQMD Localized Significance Thresholds

Emissions Source Category	Pollutant Emissions (lbs/day)			
	NO _x	CO	PM ₁₀	PM _{2.5}
Construction (4 acres, 115 feet distance)	249	1,556	20	7
Operations (4 acres, 115 feet distance)	249	1,556	5	2
Source: SCAQMD (2008) Note: The local Source Receptor Area (SRA) is 23 – Metropolitan Riverside County ac = acre ft = foot lbs/day = pounds per day				

As previously shown in Table 5.3-8 – Construction Localized Impacts Analysis, the Project would not exceed these applicable emissions thresholds based on project size and distance to the nearest sensitive receptors during construction and operation.

Health Risk Assessments (HRAs) include an evaluation of diesel particulate matter (DPM) emissions associated with a stationary source (combustion source for manufacturing) or mobile sources (such as heavy truck traffic associated with warehousing). Mobile HRAs are typically conducted to evaluate long-term exposure (e.g. 9 or 30 years) to DPM emissions associated with a project's long-term diesel truck travel (i.e. those traveling to and from warehouses) on nearby sensitive receptors (residences, schools, etc.). Heavy-duty off-road construction equipment (graders, excavators, dozers, scrapers, loaders, etc.) typically have diesel engines and emit DPM emissions. However, construction activity is typically short-term (1-2 years or less), as is anticipated for the proposed Mission Grove Apartments project, and does not constitute long-term exposure, typically used to generate risk estimates. As outlined above, construction emissions would not exceed SCAQMD thresholds established to protect public health and air quality. Therefore, the health risk associated with construction emissions would be less than significant for the surrounding sensitive uses.

Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations; potential impacts would be **less than significant**.

Threshold D: *Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Heavy-duty equipment in the project area during construction would emit odors, primarily from the equipment exhaust. However, construction-produced odors would cease after individual construction is completed. No other sources of objectionable odors have been identified for the proposed Project.

SCAQMD addresses odor criteria within the CEQA Handbook. The SCAQMD has not established a rule or standard regarding odor emissions; rather, the district has a nuisance rule: "Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact." Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed Project would not fall under any of these categories.

City regulations require trash storage areas to be in an enclosed area to limit air circulation from them and through adherence to City regulations, odors from trash storage areas would be minimal. The proposed Project's trash enclosures are planned with the following features:

- All trash/recycling enclosures will be located within vestibules in the residential buildings (there will not be any trash enclosures in exterior areas of the property);
- There will be one set of trash and recycling chutes per building (5 sets of trash/recycling chutes total for the property); and
- Each set of trash chutes will have ventilation to move the indoor air up to the roof.

With these measures, no sources of objectionable odors have been identified or are expected for the proposed Project. The Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, the proposed Project would not result in other emissions, such as those leading to odors, that would adversely affect a substantial number of people. Potential impacts would be **less than significant**.

Standard Regulatory Requirements/Best Available Control Measures

Although no Project-specific air quality mitigation measures were found to be required and were therefore not proposed, Standard Regulatory Requirements/Best Available Control Measures (BACMs) that are applicable to the Project include the following SCAQMD Rules: Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), and Rule 445 (Prohibits Wood Burning). Although these are already required, they are included herein for inclusion in the Mitigation Monitoring and Reporting Program (MMRP) and tracking of compliance.

BACM AQ-1: The contractor shall adhere to applicable measures contained in Table 1 of Rule 403 including, but not limited to:

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.

BACM AQ-2: The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 1113:

Only "Low-Volatile Organic Compounds (VOC)" paints (no more than 50 gram/liter of VOC) consistent with SCAQMD Rule 1113 shall be used.

BACM AQ-3: The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development.

5.3.6 Cumulative Environmental Effects

As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks). The Project area is designated as a non-attainment area for ozone and PM_{2.5}, and PM₁₀.

The SCAQMD recommends that project-specific air quality impacts be used to determine whether a project's emissions are cumulatively considerable. As discussed in Section 5.3.5, the Project-specific evaluation of emissions demonstrates that Project construction-source air pollutant emissions and Project operational-source emissions would not result in exceedances of criteria pollutant regional thresholds established by SCAQMD for any criteria pollutant. Accordingly, the Project would also not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment, and impacts would be less than significant, and no mitigation is required. Thus, cumulative impacts would be **less than significant**.

5.3.7 References

The following references were used in the preparation of this section of the DEIR:

Air Quality, GHG, Energy Analysis 2023	LSA Associates, Inc. <i>Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the Proposed Mission Grove Apartments Project in Riverside, California</i> . August 2023. (Appendix B)
SCAQMD 2022	South Coast Air Quality Management District. <i>2022 Air Quality Management Plan</i> . Adopted December 2022.
VMT Analysis 2023	LSA Associates, Inc. <i>Vehicle Miles Traveled Analysis</i> . April 2023. (Appendix I)

5.4 Biological Resources

This section analyzes potential impacts of the Project on sensitive biological resources. The analysis in this section is based on data and information in the April 2023 *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report* (LSA 2023), which is contained in Appendix C.

5.4.1 Setting

The Project site is located at the site of a former K-Mart retail store that closed in October 2020. The site is bound by Mission Grove Parkway on the east, Mission Village Drive on the south, and the Mission Grove Plaza shopping center on the west and north. The Project site is part of the Mission Grove Plaza Shopping Center, which is a paved commercial center with some ornamental trees and shrubs within the associated parking lot and around the perimeter of the shopping center.

A review of the Riverside Conservation Authority's (RCA) interactive geographical information systems (GIS) Multiple Species Habitat Conservation Plan (MSCHP) Information Map indicates that the Project site is not located within an MSHCP Criteria Cell, Cell Group, or within any MSHCP species survey areas.

Existing Biological Resource Setting

Local Topography and Climate

The existing grades range from approximately elevation 1,588 feet above mean sea level (msl) to the west to 1,598 feet above msl to the east (per the Geotechnical Investigation Report, contained in Appendix E). The shopping center is located within a relatively flat, paved commercial lot and is not located on any slopes or hills.

Riverside County features a somewhat cooler version of a Mediterranean climate, or semi-arid climate, with warm, sunny, dry summers and cool, rainy, mild winters. Relative to other areas in Southern California, winters are colder with frost and with chilly to cold mornings. The annual precipitation averages 12.0 inches per year with the wettest month being February and the driest months being June and July. The average maximum and minimum temperatures are 93- and 40-degrees Fahrenheit (° F) with August being the hottest month and December being the coldest.

Vegetation

Vegetation and land cover on the site primarily consist of developed land and ornamental vegetation. Developed land cover is mostly devoid of vegetation as it is either paved or contains areas with manmade structures. Ornamental areas within the project site are predominantly comprised of non-native trees such as eucalyptus (*Eucalyptus sp.*), Mexican fan palm (*Washingtonia robusta*), kurrajong (*Brachychiton populneus*), and others. The understory is comprised of bare ground and non-native noxious weedy species including common dandelion (*Taraxacum officinale*) and Bermuda grass (*Cynodon dactylon*). Special-status plants are not expected to occur due to the high level of development.

General Wildlife

Common bird species observed within the Project site included rock pigeon (*Columba livia*), northern mockingbird (*Mimus polyglottos*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), and American crow (*Corvus brachyrhynchos*), which are both fairly urbanized species often observed in similar developed areas. As the site is fully developed, contains an existing structure, and is located within an existing shopping center, the site does not provide much in the way of habitat that would attract other wildlife species.

Special-Status Species and Natural Communities

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, threatened, or endangered by the California Department of Fish and Wildlife (CDFW) under the California Endangered Species Act (CESA); animals designated as Species of Special Concern (SSC), Fully Protected (FP), and/or Watch List (WL); those species on the Special Vascular Plants, Bryophytes, and Lichens List and/or the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants; those plants contained on the CNPS California Rare Plant Rank (RPR). Only listed species and RPR Lists 1 and 2 are considered special-status species in this EIR, per the RPR code definitions:

- List 1A = Plants presumed extinct in California
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20-80 percent occurrences threatened)
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened, or no current threats known)
- List 2 = Rare, threatened or endangered in California, but more common elsewhere
- List 3 = Plants needing more information (most are species that are taxonomically unresolved; some species on this list meet the definitions of rarity under CNPS and CESA)
- List 4.1 = Plants of limited distribution (watch list), seriously endangered in California
- List 4.2 = Plants of limited distribution (watch list), fairly endangered in California (20-80 percent occurrences threatened)
- List 4.3 = Plants of limited distribution (watch list), not very endangered in California

The RPR also includes Lists 3 and 4. Per the CDFW, these plants typically do not warrant consideration under State CEQA Guidelines unless the specific circumstances relevant to local distributions make them of potential scientific interest. Similarly, local agencies may also consider

and list additional plants to be of “local concern” or “narrow endemic” because of local or regional scarcity, as determined by that agency (State CEQA Guidelines Section 15380).

CDFW’s QuickView Tool in its Biogeographic Information and Observation System (BIOS), the California Natural Diversity Database (CNDDDB) Rarefind 5, and the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California were queried for reported locations of special-status plant and wildlife species as well as special-status natural plant communities in the Riverside East USGS 7.5-minute quadrangle.

Neither query of the QuickView Tool in BIOS or the CNDDDB Rarefind 5 reported occurrences of special-status plant or wildlife species within the Project site or within the immediate vicinity of the Project site. Similarly, the query of the CNPS Electronic Inventory did not report known occurrences of rare or endangered native vascular plants within or around the Project site.

Critical Habitat

Under the Federal Endangered Species Act, “Critical Habitat” is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All Federal agencies are required to consult with the USFWS regarding activities they authorize, fund, or permit which may affect a Federally listed species or its designated Critical Habitat.

The Project site is not located within Federally designated Critical Habitat. The closest areas of Critical Habitat designation are located approximately 7 miles northwest of the site for Santa Ana sucker (*Catostomus santaanae*) and least Bell’s vireo (*Vireo bellii pusillus*); approximately 9.8 miles southwest of the site for coastal California gnatcatcher (*Polioptila californica californica*); and approximately 10 miles southeast of the site for spreading navarretia (*Navarretia fossalis*).

Special-status Plant Species

One special-status plant community was listed in the CNDDDB as occurring within the Riverside East USGS 7.5-minute quadrangle: Southern Alder Riparian Woodland. However, this special-status plant community was not observed within the boundaries of the Project site.

According to the CNDDDB and CNPS, 15 special-status plant species have been recorded in the Riverside East quadrangle. As previously mentioned in the Vegetation Section above, the Project site primarily consists of non-native ornamental vegetation within concrete planters within the associated parking lot as well as around the perimeter of the shopping center. As the site is paved and developed and dominated by non-native ornamental species, this has essentially eliminated the ability of the Project site to provide suitable habitat for special-status plant species.

Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, it has been determined that the Project site does not

provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the Project site.

Special-status Wildlife

Loggerhead shrike (*Lanius ludovicianus*) is considered a California Species of Special Concern (SSC) when nesting and has been reported within 1 mile of the site. Given the level of development in the surrounding area of the site and the level of development on the site itself, this species is not expected to occur. Furthermore, loggerhead shrike is covered and adequately conserved under the MSHCP. No other special-status species has been reported from the project site, and none was observed during the site visit. Given the habitat quality, none of these species has more than a low potential of being present.

Jurisdictional Features

There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The U.S Army Corps of Engineers (Corps) Regulatory Branch regulates discharge of dredge and/or fill materials into “waters of the United States” (WoUS) pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Water Quality Control Board (Regional Board) regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

There are no records of wetlands or potential jurisdictional drainage features existing within the Project site, and no potentially jurisdictional drainage features, wetlands, or riparian areas were observed on the Project site during the February 2023 survey.

Wildlife Movement Corridors

Wildlife movement includes seasonal migration along corridors and daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and areas between roosting and feeding areas for birds.

The project site does not contain any essential connectivity areas, natural landscape blocks, natural areas small or potential riparian connections, as documented in the California Essential Habitat Connectivity Project report.

The project site is entirely developed and bordered by existing paved roads and development on all four adjoining properties that restrict wildlife movement in the project vicinity. The majority of wildlife movement within the project site is anticipated to be limited to wildlife present on site or within the ornamental vegetation present within project site.

5.4.2 Related Regulations

5.4.2.1 Federal Regulations

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act of 1918 was originally enacted between the United States and Great Britain (acting on behalf of Canada) for the protection of migratory birds between the two countries. The MBTA has since been expanded to include Mexico, Japan, and Russia. Under MBTA provisions, it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds as defined by the Migratory Bird Treaty Act except as permitted by regulations issued by the USFWS. The term “take” is defined by the USFWS regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities.

5.4.2.2 State Regulations

California Endangered Species Act

California Fish and Game Code (CFGF), Chapter 1.5, Sections 2050-2116 (CESA) prohibits the take of any plant or animal listed or proposed for listed as rare (plants only), threatened, or endangered. In accordance with CESA, CDFW has jurisdiction over state-listed species (Fish and Game Code 2070). The CDFW regulates activities that may result in take of individuals (i.e., hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill). Habitat degradation or modification is not expressly included in the definition of take under CESA in the CFGF. 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.

California Fish and Game Code

The CDFW derives its authority from the CFGF. CESA (CFGF Section 2050 et. seq.) prohibits take of state-listed threatened or endangered species. Take of fully protected species is prohibited under CFGF Section 3511, 4700, 5050, and 5515. Section 86 of CFGF defines “take” as hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, capture, or kill. This definition does not include indirect harm by way of habitat modification.

CFGF Section 3503, 3503.5, and 3511 restrict the take, possession, and destruction of birds, nests, and eggs. Section 3503.5 of the CFGF protects all birds-of-prey and their eggs and nests against take, possession, or destruction. Fully protected birds may not be taken or possessed except under specific permit (Section 3511).

SSC is a category CDFW uses for those species considered to be indicators of regional habitat changes or considered to be potential future protected species. SSC species do not have any special legal status except that which may be afforded by the CFGF, as noted above. CDFW intends the SSC category as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands.

The CDFW also has authority to administer the Native Plant Protection Act (CFGF Section 1900 et seq.). The Native Plant Protection Act requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the Native Plant Protection Act, the owner of land where a rare or endangered native plant grows is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant(s).

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of the CDFW. Section 1600 et seq. of the CFGC (Lake and Streambed Alteration Agreements) gives CDFW regulatory authority over work in the bed, bank, and channel (which could extend to the 100-year flood plain), consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

5.4.2.3 Regional Regulations

Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on the conservation of species and their associated habitats in western Riverside County. The overall goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region; it allows Riverside County and its cities to better control local land use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal ESAs.

The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the FESA, as well as a Natural Communities Conservation Plan (NCCP) under the state NCCP Act of 2001. The MSHCP encompasses all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, San Jacinto, Menifee, Wildomar, Eastvale, and Jurupa Valley.

Rather than address sensitive species of an individual basis, the MSHCP provides for the collective conservation of the 146 covered species and their habitats. The MSHCP allows participating jurisdictions to authorize “take,” as defined under FESA, of plant and wildlife species identified within the MSHCP area. Under the MSHCP, the Wildlife Agencies (USFWS and CDFW) have granted “take authorization” for otherwise lawful actions, such as public and private development that may incidentally take or harm individual species or their habitat outside of the MSHCP conservation area, in exchange for the assembly and management of a coordination MSHCP conservation area, and as such, project applicants need not seek their own permits on a case-by-case basis from the USFWS and/or the CDFW.

The MSHCP is a “criteria-based plan” and does not rely on a hardline preserve map. Instead, within the MSHCP Plan Area, the MSHCP reserve will be assembled over time from a smaller subset of the Plan Area referred to as the Criteria Area. The Criteria Area consists of Criteria Cells or Cell Groupings, and flexible guidelines (criteria) for the assembly of conservation within the Criteria Cells or Cell Groupings. Criteria Cells and Cell Groupings also may be included within larger units known as Cores, Linkages, or Non-Contiguous Habitat Blocks.

In western Riverside County, many federal and state listed, or sensitive species and habitats are “covered species” under the MSHCP. In most instances the MSHCP requires no further surveys for most of the 146 covered species; however, Section 6 of the MSHCP states that additional surveys for 38 of these species is required if either the property occurs in a specific species survey

area (e.g., BUOW, Criteria Area Species Survey Area [CASSA]) or if potential habitat exists on the property (e.g., riparian birds or fairy shrimp). Further, the MSHCP includes policies for the review of projects in areas where habitat must be conserved (i.e., property within Criteria Cells) and policies for the protection of riparian habitats, vernal pools, and narrow endemic plants.

The City adopted the MSHCP on September 23, 2003 (Riverside Municipal Code, Chapter 16.72) and the federal and state Wildlife Agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the MSHCP will conserve approximately 500,000 acres of habitat into a reserve system, including land already in public or quasi-public ownership and approximately 153,000 acres of land in private ownership that will be purchased or conserved through other means such as land acquisition and conservation easements. The money for purchasing private land comes from development mitigation fees imposed on new development within the boundaries of the MSHCP, as well as state and federal funds.

As a signatory to the MSHCP, the City adopted Ordinance No. 6709 (which is codified as Chapter 16.72 of the Riverside Municipal Code) and established a Local Development Mitigation Fee (LDMF) to be used by the Western Riverside County Regional Conservation Authority (RCA) to implement the MSHCP. The Project will participate in the MSHCP through the payment of the LDMF at the time building permits are issued pursuant to the provisions of Ordinance No. 6709.

Stephens' Kangaroo Rat Habitat Conservation Plan

The City is located within the boundary of the adopted Habitat Conservation Plan for the endangered Stephens' kangaroo rat (SKRHCP) administered by the Riverside County Habitat Conservation Agency (RCHCA). The SKRHCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. The SKRHCP initially established Core Reserves for the conservation of key SKR populations. Outside of the Core Reserves, the SKRHCP established a fee assessment area by which individual projects are granted coverage under the HCP by payment of SKR fees. The MSHCP, through its goals for SKR, reaffirms the conservation goals of the SKRHCP, while expanding the coverage area outside of the original coverage boundaries of the SKRHCP. Neither the SKRHCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payments of SKR fees are sufficient to obtain take authorization for SKR. Project proponents are required to pay the SKR Preservation Fee in effect at the time a grading permit is issued which is collected per Riverside Municipal Code Section 16.40.040.

5.4.2.4 Local Regulations

Riverside General Plan

The City's General Plan Open Space and Conservation element in the General Plan 2025 (GP 2025) seek to preserve existing natural resources in the City. Objectives and policies that relate to biological resources and would apply to the Project include the following:

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Objective OS-5: Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy OS-5.2: Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements.

5.4.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to biological resources.

5.4.4 Project Design Considerations

The light poles and large trees on or adjacent to the project site may be used by hawks, ravens, or other large birds for nesting. The Project intends to protect in place and keep as part of the Project, the existing Mexican fan palm trees located along Mission Grove Parkway. The preservation of these trees will allow this potentially suitable nesting habitat to remain available for bird use.

5.4.5 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed Project would:

- (Threshold A) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service;
- (Threshold B) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (Threshold C) have a substantial adverse effect on Federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

- (Threshold D) interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- (Threshold E) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- (Threshold F) conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.4.6 Environmental Impacts

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

Special-Status Plant Species

According to the CNDDDB and CNPS, 15 special-status plant species have been recorded in the USGS Riverside East quadrangle. The Project site consists of an existing structure within a developed shopping center with associated paved parking. These existing site components have eliminated the ability of the Project site to provide suitable habitat for special-status plant species. Based on habitat requirements for specific special-status plant species and the availability and quality of habitats needed by each species, the Project site does not provide suitable habitat for any of the special-status plant species known to occur in the area and are presumed to be absent from the Project site. Therefore, as the Project site does not provide suitable habitat for special-status plant species and these species are considered absent from the Project site, development of the Project would not result in the displacement of any special-status plant species known to occur in the USGS Riverside East quadrangle.

Special-Status Wildlife Species

According to the CNDDDB, 29 special-status wildlife species have reported occurrences within the USGS Riverside East quadrangle. A review of the habitat requirements of each of the special-status wildlife species listed in the CNDDDB query results indicates the Project site does not contain nor would be able to provide potentially suitable habitat for any of these wildlife species. Although loggerhead shrike was reported within 1 mile of the site, due to the level of development in the surrounding area of the site and the level of development on the site itself, the species is not expected to occur. Given the habitat quality, none of these species has more than a low potential of being present. Therefore, as the Project site does not contain nor would be able to provide suitable habitat for special-status wildlife species, and as these species are considered to have no more than a low potential of occurring within the Project site, development of the Project would not displace any special-status wildlife species known to occur in the USGS Riverside East Quadrangle.

Protected Nesting Birds

Most birds and their active nests are protected from “take” (meaning destruction, pursuit, possession, etc.) under the Migratory Bird Treaty Act and/or Sections 3503 through 3801 of the California Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young, may constitute violations of one or both of these laws. The light poles and large trees on or adjacent to the project site may be used by hawks, ravens, or other large birds for nesting. Trees, shrubs, and other vegetation may provide nest sites for smaller birds, and burrowing owls may nest in ground squirrel burrows, pipes, or similar features.

Therefore, to minimize or avoid potential impacts to migratory birds and raptors, the Project would implement mitigation measure **MM BIO-1**, which would require any landscape vegetation removal to occur outside of the nesting bird season, which is typically February 1st to August 31st, if feasible. If vegetation removal must occur during nesting season, pre-construction nesting surveys would be conducted by a qualified biologist within three (3) days prior to vegetation removal activities to ensure no active nests are present. If active nests are present, a protective avoidance buffer will be established until the young have fledged or the qualified biologist has determined the nest to be inactive. The size of the buffer will be determined by a qualified biologist. Vegetation removal would resume once nesting activity is complete.

With the implementation of **MM BIO-1**, potential impacts to nesting birds would be **less than significant**.

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

The Project site consists of an existing structure with associated paved surface parking within a developed commercial shopping center. The Project site does not support any discernible drainage courses, inundated areas, or wetland vegetation that would be considered riparian/riverine habitat under Section 6.1.2 of the MSHCP. The Project site does not contain any special-status or sensitive natural communities, nor does the Project site contain any federally designated Critical Habitat. **No impacts** to sensitive natural communities or habitats would occur as a result of the Project.

Threshold C: *Would the Project have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The Project site assessment indicated that there are no records of wetlands or potential jurisdictional drainage features existing within the Project site and no potentially jurisdictional drainage features, wetlands, or riparian areas were observed on site during the February 2023 survey. Existing conditions and results indicate the site is entirely developed, with no ephemeral drainage features or culverts observed and no riparian vegetation is present on the Project site.

Based on these findings, the Project would not have any adverse effect on Federally protected wetlands and would not result in direct or indirect impacts to any delineated jurisdictional waters, including wetlands. **No impacts** to wetlands would occur as a result of the Project.

Threshold D: *Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites?*

Wildlife movement includes seasonal migration along corridors and daily movements for foraging. Migration corridors may include areas of unobstructed movement of deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and areas between roosting and feeding areas for birds.

The Project site does not contain any essential connectivity areas, natural landscape blocks, natural areas, or potential riparian connections. The Project site is developed and bordered by existing paved roads and development on all adjoining properties that restrict wildlife movement in the Project vicinity. The majority of wildlife movement within the Project site is anticipated to be limited to wildlife present on site or within the ornamental vegetation present within the Project site. The Project would not substantially limit wildlife movement. **No impacts** to established wildlife corridors or native wildlife nursery sites would occur as a result of the Project.

Threshold E: *Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The City's General Plan Open Space and Conservation element in the General Plan 2025 (GP 2025) seeks to preserve existing natural resources and open space in the City. The Project will not conflict with Objective OS-1, Policies OS-1.1 and 1.5 as the site does not contain open space or natural habitat and would be consistent with Policy OS-1.6 as the proposed new development is effectively integrated with existing convenient street and pedestrian connections as well as visual connections. The Project will not conflict with Objective OS-5, Policy OS-5.2 as it will comply with all applicable requirements of the MSHCP, including payment of the MSHCP fee.

The City does not have a tree preservation ordinance, but it has an adopted *Urban Forestry Policy Manual* to establish guidelines for planting, pruning, preservation, and removal of all trees in City rights-of-ways (PW). The City Public Works Department is responsible for the maintenance of all street trees planted by the Project within City right-of-way in accordance with the *Urban Forestry Policy Manual* (PW, p. 14). The Project does not propose the removal of any existing trees within public rights-of-way. As discussed, the Project intends to protect in place the existing Mexican fan palm trees located along Mission Grove Parkway south and keep as part of the Project. **No impacts** from conflict with any local policies or ordinances protecting biological resources would occur as a result of the Project.

Threshold F: *Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the MSHCP Plan Area. The site is not located in a Criteria Cell. The MSHCP requires that projects comply with its Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). The Project's consistency with each of these sections is discussed below.

Section 6.1.2 Protection of Species within Riparian/Riverine Areas and Vernal Pools – The Project site is developed and does not contain riparian/riverine areas, vernal pools, or suitable habitat for sensitive species associated with these habitats.

Section 6.1.3 Protection of Narrow Endemic Plant Species – The Project site is not within a Narrow Endemic Plant Species survey area and the Project site does not support suitable habitat for any MSHCP narrow endemic plant species.

Section 6.1.4 Guidelines Pertaining to the Urban Wildlands Interface – The Project site is not adjacent to conserved lands or lands in a Criteria Area described for conservation. Therefore, the Urban Wildlands Interface Guidelines do not apply to this project.

Section 6.3.2 Additional Survey Needs and Procedures – The Project site is not within an MSHCP mapped survey area for Criteria Area Plant Species, amphibians, small mammals, or burrowing owl (*Athene cunicularia*).

Appendix C Standard Best Management Practices – The Project site is not adjacent to conserved lands or lands in a Criteria Area described for conservation. Therefore, the Standard Best Management Practices do not apply to this project.

Section 7.5.3 Construction Guidelines – The Project site is not within the Criteria Area or PQP lands. Therefore, the Construction Guidelines do not apply to this project.

Stephens Kangaroo Rat Habitat Conservation Plan

The Project is within the SKR HCP fee area. However, the Project is within an existing urban development built environment with no suitable habitat for the species. Despite not having any suitable habitat for this species, the Project is required to pay the SKR mitigation fee as it is located in the fee area of this HCP.

The Project site is not located within any other Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. The Project site is located in a developed, highly urbanized area and would not impact any sensitive habitat or special-status species. **No impact** would occur.

5.4.7 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4).

MM BIO-1: To avoid and/or minimize potential impacts to migratory birds and raptors, landscape vegetation removal will take place outside of the bird nesting season of February 1 through August 31. If vegetation removal must take place during nesting season, a pre-construction nesting survey shall be conducted by a qualified biologist (i.e., a biologist experienced with performing nesting bird presence/absence surveys and experienced with identifying signs of active nesting) within three (3) days prior to vegetation removal activities to ensure no active nests are present. If active nests are present, a protective avoidance buffer (a no work zone buffer around the tree containing the active nest as identified by the qualified biologist) will be established until the young have fledged or the nest is determined to be inactive by the qualified biologist. The design of the avoidance buffer shall be reviewed and approved by a qualified biologist in conjunction with the City. The size of the protective buffer will be determined by the qualified biologist depending on the nesting species. Vegetation removal may resume once nesting activity is complete.

5.4.8 Cumulative Environmental Effects

This cumulative impact analysis considers development of the Project in conjunction with other development projects in the geographic area based on a summary of projections approach resulting from full General Plan buildout in the City.

The Project would not contribute to or cause significant cumulative impacts to biological resources. The Project includes the development of apartments within an already developed commercial shopping center, located in a highly urbanized portion of the City. The Project site does not contain any sensitive habitat, nor is the site suitable to support any sensitive or special-status wildlife and plant species. The Project site would utilize the developed infrastructure of the commercial shopping center and would not require construction or development within areas containing sensitive biological resources. Therefore, cumulative impacts to biological resources as a result of the Project would be **less than significant**.

5.4.9 References

The following references were used in the preparation of this section of the EIR:

CNDDDB	California Natural Diversity Database, RareFind 5. https://wildlife.ca.gov/Data/CNDDDB/Maps-and-Data (Accessed November 2022).
CNPS	California Native Plant Society Inventory of Rare Plants. https://rareplants.cnps.org (Accessed November 2022).

LSA 2023	LSA Associates, Inc., <i>Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis and Biology Report, Mission Grove Project, Riverside, Riverside County, California</i> . April 2023. (Appendix C)
PW	City of Riverside Public Works Department, <i>Urban Forestry Policy Manual</i> , August 2015. (Available at https://www.riversideca.gov/publicworks/trees/pdf/UrbanForestry-TOC.pdf , accessed January 2021).
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan. https://rctlma.org/Portals/0/mshcp/volume1/index.html (Accessed June 2023).

5.5 Cultural Resources

This section evaluates the Project's potential impacts to historical resources, unique archaeological resources, and disturbing human remains.

The following discussion is based on the *Cultural Resources Assessment* prepared by LSA in April 2023. This report is included as Appendix D of this EIR.

5.5.1 Setting

Natural Setting

Climate and Watershed

The project region is characterized by a temperate climate, with dry, hot summers and moderate winters. Rainfall ranges from 12 to 16 inches annually. Precipitation usually occurs in the form of winter rain, with warm monsoonal showers in summer. Two ephemeral drainages transect the project, and the nearest natural reliable source of water is the Santa Ana River, which drains southwest approximately 9 miles west of the project.

Biology

At an average elevation of approximately 1,600 feet, the project is within the Lower Sonoran Life Zone of California, which ranges from below sea level to 3,500 feet above sea level. Project area vegetation included Cuba bean, cheeseweed mallow, fiddleneck, ground wreath, mustard, Russian thistle, star thistle, telegraph weed, xeric grasses, eucalyptus, olive, pepper and tamarisk trees. Extensive fauna are known locally, including many endemic species of reptiles, birds, and insects.

Geology

The project area is located at the northern end of the Peninsular Ranges Geomorphic Province that extends from the Transverse Ranges to the tip of Baja California and includes the Los Angeles Basin. This region is characterized by a series of mountain ranges separated by northwest-trending valleys subparallel to faults branching from the San Andreas Fault. The geology of this province is similar to that of the Sierra Nevada, with numerous rock outcroppings useful to the Native Americans for resource milling, shelter, and ceremonial art.

Cultural Setting

Chronologies of prehistoric cultural change in Southern California have been attempted numerous times, and several are reviewed in Moratto. No single description is universally accepted as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

Currently, two primary regional culture chronology syntheses are commonly referenced in the archaeological literature. The first (Wallace 1955) describes four cultural horizons or time periods: Horizon I – Early Man (9000–6000 BC), Horizon II – Milling Stone Assemblages (6000–3000 BC), Horizon III – Intermediate Cultures (3000 BC–AD 500), and Horizon IV – Late Prehistoric Cultures (AD 500–historic contact). This chronology was refined using absolute chronological dates obtained after 1955.

The second cultural chronology is based broadly on Southern California prehistoric cultures and was also revised. Warren's (1984) chronology includes five periods in prehistory: Lake Mojave (7000–5000 BC), Pinto (5000–2000 BC), Gypsum (2000 BC–AD 500), Saratoga Springs (AD 500–1200), and Protohistoric (AD 1200–historic contact). Changes in settlement pattern and subsistence focus are viewed as cultural adaptations to a changing environment, which begins with gradual environmental warming in the late Pleistocene, continues with the desiccation of the desert lakes, followed by a brief return to pluvial conditions, and concludes with a general warming and drying trend, with periodic reversals that continue to the present.

Ethnographic Overview

The project area is near the intersection of the traditional cultural territories of the Cahuilla, Gabrielino, and Luiseño. Tribal territories were somewhat fluid and changed over time. The first written accounts of these Southern California tribes are attributed to the mission fathers, and later documentation was by others as indicated below.

Cahuilla

The territory of the Cahuilla ranged from the San Bernardino Mountains south to Borrego Springs and the Chocolate Mountains, from Orocopia Mountain to the east, to the San Jacinto Plain and Palomar Mountain to the west. Cahuilla territory lies within the geographic center of Southern California and encompassed diverse environments ranging from inland river valleys and foothills to mountains and desert.

Cahuilla villages, generally located near water sources within canyons or near alluvial fans, comprised groups of related individuals, generally from a single lineage, and the territory around the village was owned by the villagers. Like other Native American groups in Southern California, the Cahuilla were semi-nomadic peoples leaving their villages and utilizing temporary campsites to exploit seasonably available plant and animal resources.

Cahuilla subsistence was based primarily on acorns, honey mesquite, screw beans, piñon nuts, and cactus fruit, supplemented by a variety of wild fruits and berries, tubers, roots, and greens. Hunting deer, rabbit, antelope, bighorn sheep, reptiles, small rodents, quail, doves, ducks, and reptiles by means of bows, throwing sticks, traps, and communal drives is documented.

From the 1870s to the early 1890s, Cahuilla displaced from Rancho San Bernardino occupied a village along Spring Brook on the northwest slope of Little Rubidoux Mountain, which became known as the Spring Rancheria (Site 33-00678). The Rancheria Cahuilla worked in the Riverside

area as agricultural and water system maintenance workers, as well as housekeepers. The settlement was abandoned in the 1890s during an economic downturn.

Gabrielino (Gabrieleño)

The territory of the Gabrielino included portions of Los Angeles, Orange, and San Bernardino Counties during ethnohistoric times, and also extended inland into northwestern Riverside County. It encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys, foothills and mountains.

The Gabrielino caught and collected seasonally available food resources, and led a semi-sedentary lifestyle, living in permanent communities along inland watercourses and coastal estuaries. Individuals from these villages took advantage of the varied resources available. Seasonally, as foods became available, native groups moved to temporary camps to collect plant foods such as acorns, buckwheat, chía, berries, and fruits, and to conduct communal rabbit and deer hunts. They also established seasonal camps along the coast and near bays and estuaries to gather shellfish and hunt waterfowl.

The Gabrielino lived in small communities, which were the focus of family life. Patrilineally linked, extended families occupied each village. Both clans and villages were apparently exogamous, marrying individuals from outside the clan or village. Gabrielino villages were politically independent and were administered by a chief, who inherited his position from his father.

Luisseño

Prior to the Spanish occupation of California, the territory of the Luisseño extended along the coast from Agua Hedionda Creek to the south, Aliso Creek to the northwest, and the Elsinore Valley and Palomar Mountain to the east. These territorial boundaries were somewhat fluid and changed through time. They encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys and foothills, and mountain groves of oaks and evergreens. The Luisseño were first encountered by the Spanish missionaries in the late 18th century.

The Luisseño lived in small communities, which were the focus of family life. Patrilineally linked, extended families occupied each village. Luisseño villages were politically independent and were administered by a chief who inherited his position from his father. Luisseño villages generally were located in valley bottoms, along streams, or along coastal strands near mountain ranges sheltered in coves or canyons, near a water source, and in a location that was easily defended.

The Luisseño took advantage of the varied resources available. Luisseño subsistence was based primarily on seeds (e.g., acorns, grass seed, manzanita, sunflower, sage, chía, and pine nuts) that were dried and ground to be cooked into a mush. Their diet also included game animals (e.g., deer, rabbit, jackrabbit, wood rat, mice, antelope, and many types of birds). They established seasonal camps along the coast and near bays and estuaries to gather shellfish and hunt waterfowl; and they utilized fire for crop management and engaged in communal rabbit drives.



Historic Overview

In California, the historic era is generally divided into three periods: the Spanish Period (1769 to 1821), the Mexican Period (1821 to 1848), and the American Period (1848 to present). Since there were no resources identified, the historic overview will focus on the County and local community during the American Period/20th century.

Riverside County

The Southern Pacific Railroad completed its line from Los Angeles through the San Geronio Pass in 1876 bringing settlers into southwestern San Bernardino County, creating a boom of agricultural and land development during the 1880s. Although the towns of San Bernardino and Riverside (established in 1851 and 1870, respectively) both benefitted from the boom, by the last decade of the 19th century, social, political, and economic frictions developed between the two communities; Riverside was Republican and temperance minded, while San Bernardino was predominantly Democratic, had no prohibition on saloons, and was secessionist during the Civil War. Both towns were also vying for settlers and spheres of influence in an era in which some communities such as Grapeland (in what is today Fontana) and Sunnyvale (in Moreno Valley) were either stagnating or being abandoned. After litigation alleging preferential use of tax revenues by San Bernardino, Riverside residents joined (then) San Diego County residents in the Temecula and San Jacinto Valleys and the desert region (who disliked the great distance to their county seat) successfully petitioning the State legislature to form Riverside County in 1893. Transportation, agriculture, and the control of water continued to be central themes in the settlement, development, and growth of Riverside County.

The County thrived on its agricultural economy until the end of World War II, after which there was a gradual transition toward manufacturing, construction, commerce, transportation, and ultimately suburban development.

City of Riverside

Riverside began as a colony created by John W. North, a real estate speculator from upstate New York, and James Greaves, his associate and fellow speculator. North and Greaves formed the Southern California Colony Association, which attracted settlers from eastern and Midwestern cities eager to live in a warmer climate on inexpensive land. They created the Mile Square in 1870, a plot of land where colonists would first settle. In 1875, the Riverside Land and Irrigating Company succeeded the Southern California Colony Association and that same year, the City of Riverside incorporated. During the Southern California land boom of the 1870s and 1880s, Riverside grew rapidly. The introduction of the navel orange in the mid-1870s gave the community's economy an important boost and led to the spread of citrus cultivation throughout Southern California with Riverside at the forefront of the industry. Riverside continued to prosper after Southern California's boom of the 1880s subsided and its thriving citriculture fostered the development of related industries such as fruit packing and packing equipment. These were

followed by the establishment of unrelated industries such as aluminum, aerospace, and paper products, which sustained the City's prosperity during the 20th century. After World War II, residential construction displaced citrus groves and the economic base was transformed by the emergence modern industrial and commercial development.

5.5.2 Related Regulations`

5.5.2.1 Federal Regulations

National Register of Historic Places

Cultural resources are considered during federal undertakings chiefly under Section 106 of the National Historic Preservation Act of 1966 (as amended) through one of its implementing regulations, 36 Code of Federal Regulations (CFR) 800 (Protection of Historic Properties), as well as the National Environmental Policy Act. Properties of traditional religious and cultural importance to Native Americans are considered under Section 101(d)(6)(A) of the National Historic Preservation Act. Other federal laws include the Archaeological and Historic Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 of the National Historic Preservation Act (16 United States Code 470f) requires federal agencies to take into account the effects of their undertakings on any district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (NRHP), and to give the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected cultural resource is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Significant cultural resources are those listed in or eligible for listing in the NRHP per the criteria listed below (36 CFR 60.4).

Certain properties are usually not considered for eligibility for the NRHP. These include ordinary cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or use for religious purposes, moved or reconstructed structures, properties primarily commemorative in nature, or properties that have become significant within the last 50 years. These types of properties can qualify if they are an integral part of a district that does meet the criteria, or if they fall within certain specific categories relating to architecture or association with historically significant people or events. The vast majority of archaeological sites that qualify for listing do so under Criterion D, Research Potential.

5.5.2.2 State Regulations

California Register of Historic Resources



The California Register of Historical Resources (CRHR) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The CRHR helps government agencies identify, evaluate, and protect California's historical resources, and indicates properties to be protected from substantial adverse change (California Public Resources Code [PRC], Section 5024.1(a)). The CRHR is administered through the State Office of Historic Preservation (OHP) that is part of the California State Parks system.

A historical resource is one listed in or determined to be eligible for listing in the 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 (State CEQA Guidelines, Section 15064.5[a][1-3]). A resource shall be considered *historically significant* if it:

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
4. Has yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting one or more of the above criteria, the CRHR requires sufficient time to have passed to allow a "scholarly perspective on the events or individuals associated with the resource." Fifty years is a general estimate of the time needed to understand the historical importance of a resource, according to the state Office of Historic Preservation. The CRHR also requires a resource to possess integrity, defined as "the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association." Archaeological resources can sometimes qualify as "historical resources" (State CEQA Guidelines, Section 15064.5[c][1]).

According to CEQA, all buildings constructed over 50 years ago, which also possess architectural or historical significance may be considered potential historic resources. Most resources must meet the 50-year threshold for historic significance, but resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance.

If a project can be demonstrated to 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 that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a], [b], and [c]).

PRC 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, the probability is high 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
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person

The state administers two other programs: California Historical Landmarks and California Points of Historical Interest. California Historical Landmarks are buildings, sites, features, or events of statewide significance with anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. California Points of Historical Interest are buildings, sites, features, or events of local (County or City) significance with anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value.

Public Resources Codes Governing Human Remains

The disposition of human remains is governed by Health and Safety Code Section 7050.5 and PRC Sections 5097.94 and 5097.98. It falls within the jurisdiction of the Native American Heritage Commission (NAHC). If human remains are discovered, the county coroner must be notified within 48 hours and there no further disturbance to the site where the remains were found should occur. If the remains are determined by the coroner to be Native American, the coroner is responsible to contact the NAHC within 24 hours. Pursuant to PRC Section 5097.98, the NAHC will immediately notify those persons it believes to be most likely descended from the deceased Native Americans, so they can inspect the burial site and make recommendations for treatment or disposal.

5.5.2.3 Local Regulations

Riverside Municipal Code, Title 20

The City's historical preservation program is among the most active in the state. Riverside adopted Title 20 of the Riverside Municipal Code (RMC), otherwise known as the "preservation ordinance," and created the Cultural Heritage Board in 1969. This ordinance forms the primary body of local historical preservation law. The California Office of Historic Preservation designated Riverside as a Certified Local Government; a distinction that ensures the City's preservation program meets all federal and state standards.

RMC Title 20 establishes procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historical/cultural resource, and outlines



the criteria for Cultural Heritage Landmarks (RMC, Title 20, Section 20.50.010[U]), Structures or Resources of Merit (RMC, Title 20, Section 20.50.010[FF]), and Historic Districts (RMC, Title 20, Section 20.50.010[O]). A cultural resource may be eligible for one of the three City designations:

Cultural Heritage Landmark Designation Criteria

“Landmark” means any improvement or natural feature that is an exceptional example of a historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains a high degree of integrity, and meets one or more of the following criteria:

1. Exemplifies or reflects special elements of the City’s cultural, social, economic, political, aesthetic, engineering, architectural, or natural history
2. Is identified with persons or events significant in local, state or national history
3. Embodies distinctive characteristics of a style, type, period or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship
4. Represents the work of a notable builder, designer, or architect, or important creative individual
5. Embodies elements that possess high artistic values or represents a significant structural or architectural achievement or innovation
6. Reflects significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning, or cultural landscape
7. Is one of the last remaining examples in the City, region, state, or nation possessing distinguishing characteristics of an architectural or historical type of specimen
8. Has yielded or may likely to yield, information important in history or prehistory

Resource or Structure of Merit Criteria

“Resource or Structure of Merit” means any improvement or natural feature that contributes to the broader understanding of the historical, archaeological, cultural, architectural, community, aesthetic or artistic heritage of the City, retains sufficient integrity, and:

1. Has a unique location or singular physical characteristics or is a view or vista representing an established and familiar visual feature of a neighborhood community or of the City
2. Is an example of a type of building which was once common but is now rare in its neighborhood, community, or area
3. Is connected with a business or use which was once common but is now rare
4. A Cultural Resource that could be eligible under Landmark Criteria no longer exhibiting a high level of integrity, however, retaining sufficient integrity to convey significance under one or more of the Landmark Criteria
5. Has yielded or may be likely to yield, information important in history or prehistory

6. An improvement or resource that no longer exhibits the high degree of integrity sufficient for Landmark designation, yet still retains sufficient integrity under one or more of the Landmark criteria to convey cultural resource significance as a Structure of Merit

Historic District

A “Historic District” contains either:

1. A concentration, linkage, or continuity of cultural resources, where at least fifty percent of the structures or elements retain significant history integrity (a “geographic Historic District”)
2. A thematically-related grouping of cultural resources that contribute to each other and are unified aesthetically by plan or physical development, and which have been designated or determined eligible for designation as a historic district by the Historic Preservation Officer, Board, or City Council, or is listed in the National Register of Historic Places or the California Register of Historical Resources, or is a California Historical Landmark or a California Point of Historical Interest (a “thematic Historic District”)

In addition to either number 1 or 2 above, the area must also:

1. Exemplify or reflect special elements of the City’s cultural, social, economic, political, aesthetic, engineering, architectural, or natural history
2. Identify with persons or events significant in local, state, or national history
3. Embody distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship
4. Represent the work of notable builders, designers, or architects
5. Embody a collection of elements of architectural design, detail, materials, or craftsmanship that represents a significant structural or architectural achievement or innovation
6. Reflect significant geographical patterns, including those associated with different eras of settlement and growth, particular transportation modes, or distinctive examples of park or community planning
7. Convey a sense of historic and architectural cohesiveness through its design, setting, materials, workmanship or association
8. Yield or may be likely to yield, information important in history or prehistory

City of Riverside General Plan 2025

The Historic Preservation Element of the General Plan 2025 contains policies related to the historic and prehistoric cultural resources in the City. The policies are used in conjunction with present and future goals of land use planning for the preservation of cultural resources. The Historic Preservation Element contains information pertaining to the City’s historic context, which identifies themes important in the development of the City and can be used to identify historic resources that reflect those themes. The Historic Preservation Element also discusses available

federal, state, and local incentives for historic preservation. Objectives and policies from the Historic Preservation Element that are relevant to the project include:

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

Policy HP-1.3: The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and Federal cultural resources protection and management laws in its planning and project review process.

Policy HP-1.4: The City shall protect natural resources such as geological features, heritage trees, and landscapes in the planning and development review process and in park and open space planning.

Policy HP-1.6: The City shall use historic preservation as a tool for "smart growth" and mixed-use development.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Policy HP-2.2: The City shall continually update its identification and designation of cultural resources that are eligible for listing in local, state and national registers based upon the 50-year age guideline for potential historic designation eligibility.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Policy HP-5.1: The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.

Policy HP-5.2: The City shall use its design and plot plan review processes to encourage the compatibility of street design, public improvements, and utility infrastructure with cultural resources and historic districts.

5.5.3 Project Design Considerations

The Project does not include specific design considerations related to reducing potential impacts to cultural resources as no existing resources have been identified within the Project site (described in further detail below). Nonetheless, appropriate mitigation measures have been

recommended and will be implemented as part of the Project to ensure any potential impacts to previously unidentified cultural resources would be minimized and/or avoided. Mitigation measures MM CUL-1 through MM CUL-4 are described below.

5.5.4 Methodology

The analysis of cultural resources impacts is based on empirical research presented in the Cultural Resources Assessment prepared for the Project. The full report is included as Appendix D of this EIR. Beyond those described in Section 5.5.2, Related Regulations, the methodologies and significance thresholds employed for the cultural resources impact analyses follow.

Cultural Resources Records Search

On May 24, 2022, a records search was conducted at the Eastern Information Center. The objectives of this data review were to (1) establish the status and extent of previously recorded sites, surveys and excavations within the project area and to (2) note what types of resources might be expected to occur within the proposed project based on the existing data from known cultural resources sites located within a 1-mile radius.

The record search indicated there have been 49 previous studies within one (1) mile of the Project site. One of the previous studies included the entirety of the Project area. While the records search indicated no resources are within the Project area, the Project area is bracketed by 129 sites, including 124 prehistoric sites, two (2) multicomponent sites, and three (3) historic period archaeological sites. The nearest resource is located approximately 230 feet west of the Project area.

Native American Scoping

In accordance with the City requirement for discretionary tribal notification (“scoping”), LSA requested a review of the Sacred Lands File and a list of Native American contacts from the Native American Heritage Commission (NAHC) for the project. The results of a Sacred Lands File search were obtained from the NAHC on June 16, 2022, which reported negative results. A list of Native American contacts recommended for notification was also received from the NAHC; LSA contacted all individuals on the list.

The results of an SLF search with negative results was obtained from the NAHC on June 16, 2022, along with a list of Native American contacts recommended for notification (see attached Native American scoping record, Appendix B). LSA contacted all individuals on the list June 16 and July 1, 2022. Responses were received from four tribes:

- The Quechan Tribe of the Fort Yuma Reservation (Ms. McCormick) responded on June 20, 2022, indicating the tribe has no comment on this project, defers to the more local tribes, and supports their decisions with regard to the project.

- Pechanga Band of Indians (Paul Macarro, Cultural Coordinator) responded on June 23, 2022, indicating the project site is within ancestral territory, in the vicinity of multiple previously recorded impacted sites, nearby ancestral remains, a blue-line drainage, and that sensitivity for subsurface resources is extremely high. The tribe requests notification once the project begins the entitlement process, if it has not already; copies of all applicable archaeological reports, site records, proposed grading plans and environmental documents (e.g., Mitigated Negative Declaration/Environmental Impact Report); government-to-government consultation with the Lead Agency; and monitoring by a Riverside County-qualified archaeologist and a professional Pechanga Tribal Monitor during earthmoving activities.
- The Agua Caliente Band of Cahuilla Indians (Arysa Gonzalez Romero, Cultural Resources Analyst) responded on July 6, 2022, indicating the project area is within the tribe's traditional use area and requested copies of any cultural resource documentation (report and site records) generated in connection with this project, a map that clearly delineates the project area, and a cultural resources inventory of the project area (survey) by a qualified archaeologist prior to any development activities.
- Augustine Band of Cahuilla Indians (Victoria Martin, Tribal Secretary) responded on July 6, 2022, indicating the tribe is unaware of specific cultural resources that may be affected by the proposed project and requested immediate notification in the event any cultural resources are discovered.

No response was received from any of the other individuals contacted. Please see the attached record of the scoping and related correspondence.

Archaeological Field Survey

On January 27, 2023, LSA personnel conducted an archaeological field survey of the unpaved portions of the project area and landscaping on the southern and eastern edges of the project area. The purpose of this survey was to identify and document, prior to the beginning of ground-disturbing activities, any cultural resources and thus also to identify any area(s) that might be sensitive for buried cultural resources.

The entirety of the Project site has been subject to grading activities and construction, which have completely altered the native landscape. The survey revealed that the project area has sustained severe disturbance from development. Visibility was effectively nil, with the surface completely obscured by the commercial building, parking lot, and landscaping. Native soils were alluvium. No native soil surface remains, and no cultural resources were identified.

5.5.5 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance

thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. The Environmental Checklist for the Project indicates that impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed project would:

- (Threshold A) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5;
- (Threshold B) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;
- (Threshold C) Disturb any human remains, including those interred outside of dedicated cemeteries.

5.5.6 Environmental Impacts

Threshold A: *Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5 of the CEQA Guidelines?*

As discussed above, no historic or archaeological resources have been documented within or adjacent to the Project site. The proposed Project site is completely developed with a 104,231-square-foot, vacant retail building and an associated surface parking lot. The vacant retail building is a former K-Mart retail store that was constructed in 1991 and was closed in 2020. As the building has no historical significance and is only 32 years old, it does not meet any of the criteria to be considered a Landmark or a Resource or Structure of Merit. Therefore, the proposed Project would have **no impact** on a historical resource.

Threshold B: *Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5 of the CEQA Guidelines?*

Per the findings of the Project’s Cultural Resource Assessment (2023), no known archaeological resources occur within or adjacent to the Project site and the proposed project area is within an already graded and in a fully developed area. However, it is surrounded by 129 resources within 1 mile of the site (consisting of granitic milling features, lithic scatter, ancillary buildings, building foundations, privies, and various prehistoric resources unlisted in the record search), and the only previous survey of the project area was conducted almost 40 years ago. The previous survey was not specific to the project area but of the surrounding 637 acres. Considering the surrounding recorded resources that encircle the Project site there is a moderate to high likelihood to the unanticipated discovery of cultural resources during the construction process below previously disturbed depths. Therefore, based on the available information, the City may consider the project area to have moderate to high sensitivity for potential impacts to cultural resources.

Though the Project site is considered to be potentially sensitive for buried cultural resources, with the implementation of recommended mitigation measures (see below, Mitigation Measures MM CUL-1 through MM CUL-4), potential Project impacts to archaeological resources would be less than significant. In order to identify any unknown cultural resources, archaeological and

paleontological monitoring will be performed for any ground-breaking activities (MM CUL-2). Additionally, if any cultural resources are inadvertently discovered, the detailed provisions for the treatment and disposition of the resources in MM CUL-3 will be followed. These mitigation measures will ensure that any inadvertently discovered cultural resources are avoided and/or preserved. Therefore, potential Project impacts to archaeological resources would be **less than significant with implementation of mitigation measures MM CUL-1 through MM CUL-4**.

Threshold C: *Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?*

The Project's Cultural Resource Assessment did not report the presence or discovery of human remains. However, construction could have the potential to disturb or destroy previously undiscovered, buried Native American human remains as well as other human remains, including those interred outside of formal cemeteries. All parties shall be consistent with Public Resources Code §5097.98, sites containing human remains must be identified and treated in a sensitive manner. In the event that Native American human remains or other human remains are inadvertently discovered during Project-related construction activities, the implementation of the City's standard condition of approval (as outlined below), in accordance with State Law, would reduce potential Project-related impacts to **less than significant**.

5.5.7 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4).

MM CUL-1: Prior to grading permit issuance, if there are any changes to project site design and/or proposed grades, the Applicant and the City shall contact consulting tribes to provide an electronic copy of the revised plans for review. Additional consultation shall occur between the City, developer/applicant, and consulting tribes to discuss any proposed changes and review any new impacts and/or potential avoidance/preservation of the cultural resources on the project site. The City and the developer/applicant shall make all attempts to avoid and/or preserve in place as many cultural and paleontological resources as possible that are located on the project site if the site design and/or proposed grades should be revised. In the event of inadvertent discoveries of archaeological resources, work shall temporarily halt until agreements are executed with consulting tribe, to provide tribal monitoring for ground disturbing activities.

MM CUL-2: Archaeological and Paleontological Monitoring: At least 30 days prior to application for a grading permit and before any grading, excavation and/or ground disturbing activities take place, the developer/applicant shall retain a Secretary of Interior Standards qualified archaeological monitor to monitor all ground-disturbing activities in an effort to identify any unknown archaeological resources.

1. The project archaeologist, in consultation with consulting tribes, the Developer, and the City, shall develop an Archaeological Monitoring Plan to address the details, timing, and responsibility of all archaeological and cultural activities that will occur on the project site. Details in the plan shall include:
 - a. Project grading and development scheduling;
 - b. The development of a rotating or simultaneous schedule in coordination with the developer/applicant and the project archaeologist for designated Native American Tribal Monitors from the consulting tribes during grading, excavation, and ground-disturbing activities on the site, including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with all project archaeologists;
 - c. The protocols and stipulations that the Applicant, tribes, and project archaeologist/paleontologist will follow in the event of inadvertent cultural resources discoveries, including any newly discovered cultural resource deposits, or nonrenewable paleontological resources that shall be subject to a cultural resources evaluation;
 - d. Treatment and final disposition of any cultural and paleontological resources, sacred sites, and human remains if discovered on the project site; and
 - e. The scheduling and timing of the Cultural Sensitivity Training noted in mitigation measure MM-CUL-4.

MM CUL-3: Treatment and Disposition of Cultural Resources: In the event that Native American cultural resources are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

1. **Consulting Tribes Notified:** within 24 hours of discovery, the consulting tribe(s) shall be notified via email and phone. Consulting tribe(s) will be allowed access to the discovery, in order to assist with the significance evaluation.
2. **Temporary Curation and Storage:** During the course of construction, all discovered resources shall be temporarily curated in a secure location on site or at the offices of the project archaeologist. The removal of any artifacts from the project site will need to be thoroughly inventoried with tribal monitor oversight of the process; and
3. **Treatment and Final Disposition:** The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to cultural resources. The Applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Riverside Community and Economic Development Department with evidence of same:

- a. Accommodate the process for on-site reburial of the discovered items with the consulting Native American tribes or bands. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed;
- b. A curation agreement with an appropriate qualified repository within Riverside County that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation;
- c. If more than one Native American tribe or band is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated at the Western Science Center or Riverside Metropolitan Museum by default; and
- d. At the completion of grading, excavation, and ground-disturbing activities on the site, a Phase IV Monitoring Report shall be submitted to the City documenting monitoring activities conducted by the project archaeologist and Native Tribal Monitors within 60 days of completion of grading. This report shall document the impacts to the known resources on the property; describe how each mitigation measure was fulfilled; document the type of cultural resources recovered and the disposition of such resources; provide evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting; and, in a confidential appendix include the daily/weekly monitoring notes from the archaeologist. All reports produced will be submitted to the city of Riverside, Eastern Information Center, and interested tribes.

MM CUL-4: Cultural Sensitivity Training: The Secretary of Interior Standards County certified archaeologist and Native American monitors shall attend the pre-grading meeting with the developer/permit holder's contractors to provide Cultural Sensitivity Training for all construction personnel. This shall include the procedures to be followed during ground disturbance in sensitive areas and protocols that apply in the event that unanticipated resources are discovered. Only construction personnel who have received this training can conduct construction and disturbance activities in sensitive areas. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

A Standard Condition of Approval will include the following – Consistent with State Law:

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all

activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Applicant shall comply with the state relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC to determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98. **No photographs are to be taken except by the coroner, with written approval by the consulting Tribe(s).**

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.5.8 Cumulative Environmental Effects

The Project, in conjunction with other planned and pending projects in the Project vicinity, would cumulatively increase the potential to encounter sensitive cultural and archaeological resources. There would be cumulatively considerable impacts to cultural resources if the project level impacts were significant for any of the cumulative projects. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects consisting of residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public).

In the event that cultural and/or archaeological resources are discovered, each individual project would be required to comply with the applicable regulatory requirements and mitigate any potential impacts to resources on the individual project site. Potential impacts of the Project would

be reduced to a less than significant level due to implementation of mitigation measures **MM CUL-1** through **MM CUL-4** that would protect cultural and archaeological resources and state law, California Health and Safety Code Section 7050.5(b), that would protect human remains. Compliance with CEQA requirements, including the implementation of recommendations provided in project-specific cultural resource studies, on all new development would ensure that, cumulative impacts to cultural resources would be **less than significant with mitigation** and would not be cumulatively considerable.

5.5.9 References

The following references were used in the preparation of this section of the EIR:

LSA 2023	LSA Associates, Inc., <i>Cultural Resources Assessment, Anton Mission Grove Project</i> , April 2023. (Appendix D)
GP 2025	City of Riverside General Plan 2025. Riverside, CA. November 2007. Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023.

5.6 Energy

The focus of this section is to analyze potential impacts related to Energy. The analysis in this section is based on data and information in the *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Mission Grove Apartments Project* prepared by LSA Associates. (LSA 2023; Appendix B)

5.6.1 Setting

This section provides an overview of the existing energy conditions in the Project area and region.

Existing Energy Setting

Energy use can affect air quality and other natural resources adversely. Energy is primarily categorized in three areas: electricity used in buildings and cities for lighting and other services; natural gas used for building heating, cooking, and other industrial processes; and fuels used for transportation. Fossil fuels used for any of these types of energy must be burned to create electricity that powers homes and commercial/industrial buildings, to create heat, and to power vehicles. The burning or combusting of fuels releases pollutants and greenhouse gas (GHG) emissions. Many factors affect the level of impact from fuels. When used in transportation, the impact from energy corresponds to the fuel efficiency of cars, trucks, and public transportation; the mode of travel such as auto, carpool, and public transit; miles traveled by these modes; and the type of fuel used. Construction and routine operation and maintenance of transportation infrastructure also consume energy as do residential, commercial, and industrial land uses. This typically occurs through the use of natural gas for heating, cooking, and industrial processes along with the use of electricity.

California Energy Use Overview

The most recent data for California's estimated energy use, Energy Information Administration's (EIA) California State Profile and Energy Estimates in 2020 (EIA 2023), included:

- Approximately 7,881 trillion British Thermal Units (BTU) of energy;
- Approximately 683 million barrels of petroleum;
- Approximately 2,137 billion cubic feet of natural gas; and
- Approximately 1 million short tons of coal were consumed.

The most recent data provided by the United States Energy Information Administration (EIA) for energy use in California by demand sector is from 2020 and is reported as follows:

- Approximately 34.0 percent transportation;
- Approximately 24.6 percent industrial;
- Approximately 19.6 percent commercial; and
- Approximately 21.8 percent residential.

In 2021, the total electric generation for California was 277,764 gigawatt hours (GWh), which is 2 percent, or 5,188 GWh more than 2020. Renewable energy generation increased 3.5 percent in 2021 from 2020 and renewable energy accounted 0.51 percent more of the total system mix than in 2020. Table 5.6-1 provides total system electricity generation for California in 2021. (CEC 2023)

Table 5.6-1 – California 2021 Total System Electric Generation

Fuel Type	California In-State Generation (GWh)	Percent of California In-State Generation	Northwest Imports (GWh)	Southwest Imports (GWh)	California Energy Mix (GWh)	Total California Power Mix
Coal	303	0.2%	181	7,788	8,272	3.0%
Natural Gas	97,431	50.2%	45	7,880	105,356	37.9%
Oil	37	0.0%	-	-	37	0.0%
Other	382	0.2%	68	15	465	0.2%
Nuclear	16,477	8.5%	524	8,756	25,758	9.3%
Large Hydro	12,036	6.2%	12,042	1,578	25,656	9.2%
Unspecified	-	0.0%	8,156	10,731	18,887	6.8%
Total Thermal and Non-Renewables	126,666	65.2%	21,017	36,748	184,431	66.4%
Biomass	5,381	2.8%	864	26	6,271	2.3%
Geothermal	11,116	5.7%	192	1,906	13,214	4.8%
Small Hydro	2,531	1.3%	304	1	2,835	1.0%
Solar	33,260	17.1%	220	5,979	39,458	14.2%
Wind	15,173	7.8%	9,976	6,405	31,555	11.4%
Total Renewables	67,461	34.8%	11,555	14,317	93,333	33.6%
Total System Energy	194,127	100.0%	32,572	51,064	277,764	100.0%

A summary of, and context for, energy consumption and energy demand within the State is presented in “U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts” excerpted below:

- In 2021, California was the seventh-largest producer of crude oil among the 50 states, and, as of January 2021, it ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and the second-largest consumer of motor gasoline among the 50 states and the State accounted for 15 percent of the nation’s jet fuel consumption and 10 percent of motor gasoline consumption in 2020.
- In 2019, California was the second-largest total energy consumer among the states, but its per capita energy consumption was less than in all other states except for Rhode Island, due in part to its mild climate and its energy efficiency programs.

- In 2021, California was the nation’s top producer of electricity from solar, geothermal, and biomass energy. The State was fourth in the nation in conventional hydroelectric power generation, down from second in 2019, in part because of drought and increased water demand.
- In 2021, California was the fourth-largest electricity producer in the nation, but the State was also the nation’s second-largest consumer of electricity. In 2020, the State received about 30% of its electricity supply from generating facilities outside of California, including imports from Mexico. (EIA 2022)

Electricity

Electricity will be provided to the Project by Riverside Public Utilities (RPU). RPU derives electricity from varied sources including natural gas, coal, nuclear, biomass, geothermal, solar, wind, and hydroelectric. Table 5.6-2 identifies RPU’s specific proportional shares of electricity sources in 2022. As indicated in Table 5.6-2, the 2022 RPU Power Mix has renewable energy at 45.4 percent of the overall energy resources. Power content mixes are generally released in July each year.

Table 5.6-2 – RPU 2022 Power Content Mix

Energy Resources	2022 RPU Power Mix
Eligible Renewable ¹	45.4%
<i>Biomass & Biowaste</i>	0.0%
<i>Geothermal</i>	33.4%
<i>Eligible Hydroelectric</i>	0.0%
<i>Solar</i>	10.5%
<i>Wind</i>	1.5%
Coal	19.4%
Large Hydroelectric	1.2%
Natural Gas	4.5%
Nuclear	4.7%
Other	0.0%
Unspecified Sources of Power ²	24.8%
Total	100%
¹ The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology. ² Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.	

Natural Gas

The following summary of natural gas resources and service providers, delivery systems, and associated regulation is excerpted from information provided by the California Public Utilities Commission (CPUC).

“The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.

The vast majority of California’s natural gas customers are residential and small commercial customers, referred to as “core” customers, who accounted for approximately 32 percent of the natural gas delivered by California utilities in 2012. Large consumers, like electric generators and industrial customers, referred to as “noncore” customers, accounted for approximately 68 percent of the natural gas delivered by California utilities in 2012.

The CPUC regulates the California utilities’ natural gas rates and natural gas services, including in-State transportation over the utilities’ transmission and distribution pipeline systems, storage, procurement, metering and billing. Most of the natural gas used in California comes from out-of-State natural gas basins. In 2012, California customers received 35 percent of their natural gas supply from basins located in the Southwest, 16 percent from Canada, 40 percent from the Rocky Mountains, and 9 percent from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.

Natural gas from out-of-State production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines that deliver out-of-State natural gas to California consumers are the Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Questar Southern Trails and Mojave Pipeline. Another pipeline, the North Baja – Baja Norte Pipeline, takes gas off the El Paso Pipeline at the California/Arizona border, and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, the CPUC often participates in FERC regulatory proceedings to represent the interests of California natural gas consumers.

Most of the natural gas transported via the interstate pipelines, as well as some of the California-produced natural gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipeline systems (commonly referred to as California’s “backbone” natural gas pipeline system). Natural gas on the utilities’ backbone pipeline systems is then delivered into the local transmission and distribution pipeline systems, or

to natural gas storage fields. Some large noncore customers take natural gas directly off the high-pressure backbone pipeline systems, while core customers and other noncore customers take natural gas off the utilities' distribution pipeline systems. The CPUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82 percent of the total amount of natural gas delivered to California's gas consumers in 2012.

SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, and currently receive all of their natural gas from the SoCalGas system (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area). Some other municipal wholesale customers are the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.

Some of the natural gas delivered to California customers may be delivered directly to them without being transported over the regulated utility systems. For example, the Kern River/Mojave pipeline system can deliver natural gas directly to some large customers, "bypassing" the utilities' systems. Much of California-produced natural gas is also delivered directly to large consumers.

PG&E and SoCalGas own and operate several natural gas storage fields that are located in northern and southern California. These storage fields, and four independently owned storage utilities – Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage – help meet peak seasonal natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently.

California's regulated utilities do not own any natural gas production facilities. All of the natural gas sold by these utilities must be purchased from suppliers and/or marketers. The price of natural gas sold by suppliers and marketers was deregulated by the FERC in the mid-1980's and is determined by "market forces." However, the CPUC decides whether California's utilities have taken reasonable steps in order to minimize the cost of natural gas purchased on behalf of their core customers."

As indicated in the preceding discussions, natural gas is available from a variety of in-State and out-of-State sources and is provided throughout the State in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

The Project's residential units will not use natural gas; natural gas connections for the Project would only be implemented for some Project common use areas/amenities.

Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. In March 2019, the Department of Motor Vehicles (DMV) identified 36.4 million registered vehicles in California, and those vehicles (as

noted previously) consume an estimated 17.8 billion gallons of fuel each year. Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 394,383 land miles, more than 27.5 million passenger vehicles and light trucks, and almost 8.1 million medium- and heavy-duty vehicles. While gasoline consumption has been declining since 2008, it is still by far the dominant fuel. Petroleum comprises about 91 percent of all transportation energy use, excluding fuel consumed for aviation and most marine vessels. Nearly 17.8 billion gallons of on-highway fuel are burned each year, including 14.6 billion gallons of gasoline (including ethanol) and 3.2 billion gallons of diesel fuel (including biodiesel and renewable diesel). In 2019, Californians also used 194 million cubic feet of natural gas as a transportation fuel, or the equivalent of 183 billion gallons of gasoline.

5.6.2 Related Regulations

Federal and State agencies regulate energy use and consumption through various means and programs. On the Federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency (USEPA) are three Federal agencies with substantial influence over energy policies and programs. On the State level, the CPUC and the California Energy Commission (CEC) are two agencies with authority over different aspects of energy. Relevant Federal and State energy-related laws and plans are summarized below.

5.6.2.1 Federal Regulations

Energy Policy Act of 2005

The Energy Policy Act of 2005 seeks to reduce reliance on nonrenewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Energy Policy Act, consumers and businesses can obtain Federal tax credits for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 aims to move the United States toward greater energy independence and security; increase the production of clean renewable fuels; protect consumers; increase the efficiency of products, buildings, and vehicles; promote greenhouse gas (GHG) research; improve the energy efficiency of the Federal government; and improve vehicle fuel economy.

5.6.2.2 State Regulations

2022 Building Energy Efficiency Standards

The Building Energy Efficiency Standards (Energy Code) were first adopted by the California Energy Commission (CEC) and have been updated periodically since then, as directed by the statute. The CEC's statute created separate authority and specific direction regarding what the standards are to address, development criteria, and provided implementation tools, aids, and technical assistance. (CECa 2023)

The Energy Code contains energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the CEC to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space. For this reason, the Energy Code includes both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference Appendices are adopted along with the Energy Code that contain data and other information that helps builders comply.

The Energy Code is conceptually divided into three sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the Energy Code is tailored to local conditions and provides flexibility in how energy efficiency in buildings can be achieved. The third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that provide a recipe or a checklist compliance approach.

Title 24, Part 6

Title 24, Part 6 of the Energy Code provides the Building Energy Efficiency Standards for Residential and Non-Residential Buildings. (CECa 2023) Per Table 100.0-A – Application of Standards, the following sections of building energy efficiency standards would apply to multifamily residential buildings such as the Project:

Section 110.2 – Mandatory Requirements for Space-Conditioning Equipment

Section 110.3 – Mandatory Requirements for Service Water-Heating Systems and Equipment

Section 110.4 – Mandatory Requirements for Pool and Spa Systems and Equipment

Section 110.5 – Natural Gas Central Furnaces, Cooking Equipment, Pool and Spa Heaters, and Fireplaces: Pilot Lights Prohibited

Section 110.6 – Mandatory Requirements for Fenestration Products and Exterior Doors

Section 110.7 – Mandatory Requirements to Limit Air Leakage

Section 110.8 – Mandatory Requirements for Insulation, Roofing Products, and Radian Barriers

Section 110.9 – Mandatory Requirements for Lighting Controls

Section 110.10 – Mandatory Requirements for Solar Readiness

Section 110.11 – Mandatory Requirements for Electrical Power Distribution System

Section 160.0 – General; Multifamily Buildings – Mandatory Requirements

Multifamily buildings shall comply with the applicable requirements of Sections 160.1 through 160.9. Sections 160.1 through 160.9 apply to dwelling units and common use areas in multifamily buildings. The requirements of Sections 160.1 through 160.9 apply to newly constructed buildings. (CECa 2023)

Section 160.1 – Mandatory Requirements for Building Envelopes

Section 160.2 – Mandatory Requirements for Ventilation and Indoor Air Quality

Section 160.3 – Mandatory Requirements for Space Conditioning Systems in Multifamily Buildings

Section 160.4 – Mandatory Requirements for Water Heating Systems

Section 160.5 – Mandatory Lighting Requirements for Indoor and Outdoor Spaces

Section 160.6 – Mandatory Requirements for Electric Power Distribution Systems

Section 160.7 – Mandatory Requirements for Covered Processes

Section 160.8 – Mandatory Requirements for Solar Ready Buildings

Section 160.9 – Mandatory Requirements for Electric Ready Buildings

California Green Building Standards

Title 24, Part 11

The California Green Building Standards Code, which is Part 11 of the California Code of Regulations, is commonly referred to as the CALGreen Code. The State updates this code every three (3) years. The first edition of the CALGreen Code was released in 2008 and contained only voluntary standards. The 2019 CALGreen Code was updated in 2019, became effective on January 1, 2020, and applied to non-residential and residential developments. The 2022 CALGreen Code went into effect on January 1, 2023. The CALGreen Code contains requirements for construction site selection, stormwater control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. The CALGreen Code provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. The CALGreen Code also requires building commissioning, which is a process for the verification that all building systems, such as heating and cooling equipment and lighting systems, function at their maximum efficiency.

Chapter 4 of Title 24, Part 11 provides the Residential Mandatory Measures, including those regarding energy efficiency.

California Energy Commission

The CEC is the State's primary energy policy and planning agency and it plays a critical role in creating a clean and modern energy system. State Bill (SB) 1389 (Chapter 568, Statutes of 2022) requires the CEC to prepare an Integrated Energy Policy Report biennially at a minimum. The report should include a description of the international energy market prospects and an evaluation of its export promotion activities.

SB 1389

In 2002, the Legislature passed SB 1389, which required the CEC to develop an integrated energy plan every two (2) years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental costs.

Integrated Energy Policy Report

As described, SB 1389 requires the CEC to prepare a biennial integrated energy report. The report contains an integrated assessment of major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors. The report provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety. (CECa 2023)

The CEC adopted the 2021 Integrated Energy Policy Report (IEPR) on February 16, 2022. The 2021 IEPR addresses the following four major topics and includes an analysis of the benefits of transitioning to a clean transportation system:

1. Energy reliability over the next five (5) years;
2. Natural gas outlook and assessments;
3. Building decarbonization and energy efficiency; and
4. Energy demand.

To this end, the 2021 IEPR has four volumes and an appendix consisting of: (1) a report on actions needed to reduce the GHGs related to buildings in which Californians live and work, with an emphasis on energy efficiency and reducing GHGs from the industrial and agricultural sectors; (2) a report on actions needed to increase the reliability and resiliency of California's energy system; (3) an assessment of the evolving role of gas in California's energy system, both the importance in near-term reliability and the need for the system to evolve as California works to achieve carbon neutrality by 2045; (4) an assessment of California's energy demand outlook, including a forecast to 2035 and long-term energy demand scenarios to 2050; and (5) an evaluation of the benefits of California's Clean Transportation Program. (LSA 2023)

Assembly Bill 2076

Assembly Bill (AB) 2076 (passed in 2000, Shelley, Chapter 936, Statutes of 2000) directs CARB and the CEC to develop and adopt recommendations for the Governor and the Legislature on a strategy to reduce California's dependence on petroleum.

5.6.2.3 Regional Regulations

There are no regional regulations that relate to energy and this Project.

5.6.2.4 Local Regulations**City of Riverside General Plan 2025**

The City's General Plan 2025 contains objectives and policies that seek to reduce energy use in the City and to provide renewable energy sources. The Open Space and Conservation Element and Public Facilities and Infrastructure Element contain energy conservation items. Objectives and policies that relate to the Project include:

OPEN SPACE AND CONSERVATION ELEMENT

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).

Policy OS-8.6: Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.

Policy OS-8.7: Encourage mixed-use development as a means of reducing the need for auto travel.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of nonrenewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternatives to nonrenewable energy resources.

Policy OS-8.12: Require bicycle parking in new nonresidential development.

PUBLIC FACILITIES AND INFRASTRUCTURE ELEMENT

Objective PF-6: Provide affordable, reliable, and, to the extent practical, environmentally sensitive energy resources to residents and businesses.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standard guidelines.

Policy PF-6.5: Promote green building design.

Riverside Restorative Growthprint Climate Action Plan

The City of Riverside collaborated with the Western Riverside Council of Governments (WRCOG) on a Subregional Climate Action Plan (CAP). The Riverside Restorative Growthprint Climate Action Plan (RRG CAP) builds on the WRCOG Subregional CAP commitments and provides the City GHG reduction goals beyond 2020 to 2035. The RRG CAP contains measures that promote energy efficiency and renewable energy for municipal operations and the community.

Riverside Public Utilities Integrated Resource Plan

Riverside Public Utilities' (RPU) 2018 Integrated Resource Plan (IRP) provides an impact analysis of Riverside's acquisition of new power resources, specifically towards meeting the State's aggressive carbon reduction goals, along with the effect these resources will have on the utility's future projected cost of service.

Both current and proposed supply-side and demand-side resources are examined in detail towards the goal of continuing to provide the highest quality electric services at the lowest possible rates to benefit the local community, while adhering to a diverse set of State and regional legislative/regulatory mandates. Additionally, the 2018 IRP examines a number of related longer range planning activities, including energy storage, rate design, transportation electrification, distributed energy sources, and RPU's current and future planned engagement with disadvantaged communities.

Both intermediate term (5-year forward) and longer term (20-year forward) resource portfolio and energy market issues are reviewed and analyzed in the 2018 IRP, along with the related longer range planning activities mentioned above.

5.6.3 Project Design Considerations

The Project would adhere to applicable California Code Title 24, Part 6 energy efficiency standards as described in Section 5.6.2.2 above.

5.6.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- (Threshold B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

In addition, Appendix F of the State CEQA Guidelines states that the means of achieving the goal of energy conservation includes the following:

- (Threshold C)
 - Decreasing overall per capita energy consumption;
 - Decreasing reliance on fossil fuels such as coal, natural gas and oil; and
 - Increasing reliance on renewable energy sources.

5.6.5 Environmental Impacts

Threshold A: *Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The Project would increase the demand for electricity, natural gas, and gasoline compared to the existing condition of the site. The discussion and analysis below is based on data included in the Project’s California Emissions Estimator Model (CalEEMod) output, which is included as Attachment C of the Project’s Energy Analysis memorandum. (LSA 2023) Under CEQA, a project would result in a potentially significant environmental impact if the project employed wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Thus, the following analyzes the Project’s projected construction and operational energy use to evaluate the Project’s consumption of energy resources.

Construction Energy Use

The anticipated construction schedule assumes that the Project would be built over approximately 28 months. The Project would require demolition, site preparation, grading, building construction, architectural coating, and paving during construction.

Construction of the Project would require energy for the manufacture and transportation of building materials and for preparation of the site for grading activities and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Table 5.6-3 shows the diesel fuel usage based on CalEEMod modeling assumptions.

Table 5.6-3 – Construction Fuel Usage

Phase Name	Fuel Used (gal)
Demolition	4,091
Site Preparation	1,950
Grading	3,978
Building Construction & Architectural Coatings	2,993
Paving	1,894
Total Construction Fuel Used	14,906
Sources: Compiled by LSA. CalEEMod modeling and EMFAC2021 (August 2023)	

In 2019, vehicles in California consumed approximately 3.8 billion gallons of diesel fuel. (LSA 2023) Therefore, diesel demand generated by construction of the proposed Project would be a minimal fraction of diesel fuel consumption in California and, by extension, Riverside County.

Construction activities are not anticipated to result in an inefficient use of energy because gasoline and diesel fuel would be supplied by construction contractors who would conserve the use of their supplies to minimize their costs on the Project. Additionally, the Project would consist of an infill redevelopment project that would not require construction methods that would result in energy use that would exceed that of standard construction practices.

Energy usage on the Project site during construction would be temporary in nature and would be relatively small in comparison to the State's available energy sources. Therefore, construction energy impacts would be less than significant and no mitigation would be required.

Operational Energy Use

Energy use includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage for heating of common areas/amenities, while indirect sources of emissions include electricity generated by off-site power plants. The Project would incorporate all-electric appliances within the residential units; the units would not include any natural gas connections or use propane or other fossil fuels. Use of natural gas connections would be limited to some Project common use areas/amenities.

Natural gas use in CalEEMod is measured in units of a thousand British thermal units (kBtu) per year; however, the Project's Energy Analysis converts the results to natural gas in units of therms

to be consistent with State natural gas usage data. Electricity use in CalEEMod is measured in kilowatt hours (kWh) per year, the same as State electricity usage data.

CalEEMod divides building electricity use into uses that are subject to Title 24 standards and those that are not. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24 (e.g., space heating, space cooling, water heating, and ventilation). Non-Title 24 uses include all other end uses (e.g., appliances, electronics, and other miscellaneous plug-in uses). Because some lighting is not considered as part of the building envelope energy budget, CalEEMod considers lighting as a separate electricity use category.

For natural gas, uses are likewise categorized as Title 24 or non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include appliances.

Table 5.6-4 below provides the estimated potential increased electricity, gasoline, and diesel demand associated with the Project. The electricity rates are from the CalEEMod analysis, while the gasoline and diesel rates are based on the traffic analysis in conjunction with U.S. Department of Transportation (USDOT) fuel efficiency data.

Table 5.6-4 – Estimated Annual Energy Use of the Project

Land Use	Electricity (kWh/yr)	Natural Gas Use (kBtu/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
Residential	688,228	473,806	176,738	126,865
Source: Compiled by LSA (August 2023) gal/yr = gallons per year kWh/yr = kilowatt-hours per year				

As shown in Table 5.6-4, the estimated annual electricity demand associated with the Project is 688,228 kWh per year, and the proposed the photovoltaic system (i.e., solar panels) for the project has capacity to generate up to 1,275,500 kWh per year. (LSA 2023) In 2021, the total electricity consumption for both residential and non-residential sectors for all California counties was approximately 277,764,000,000 kWh, of which the residential sector of Riverside County consumed approximately 16,767,235,877 kWh. (CECb 2023) Therefore, the electricity demand associated with the Project, not including the amount generated and offset by solar energy, would be approximately less than 0.01 percent of Riverside County’s total electricity demand.

Table 5.6-4 additionally shows that the estimated potential increased natural gas demand associated with the Project is 4,473,806 kBtu per year, or 49,738 therms. (LSA 2023) In 2021, California’s total natural gas consumption was 1,192,270,564 therms, while Riverside County consumed 430.8 million therms. (430,843,598 therms; CECc 2023) Therefore, the natural gas demand associated with the Project would be approximately 0.01 percent of Riverside County’s total natural gas demand and would be a minimal increase in the County’s natural gas consumption.

Furthermore, the Project would result in energy usage associated with gasoline and diesel to fuel Project-related trips. The average fuel economy for light-duty vehicles (automobiles, pickups,

vans, and sport utility vehicles) in the United States has steadily increased, from about 14.9 mpg in 1980 to 22.9 mpg in 2020. (LSA 2023) The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2022. (LSA 2023)

Using the USEPA gasoline fuel economy estimates for 2020, the California diesel fuel economy estimates for 2021, and the traffic data from the Project traffic analyses, the Project would result in the annual consumption of 176,738 gallons of gasoline and 126,865 gallons of diesel fuel. In 2019, vehicles in California consumed approximately 15.6 billion gallons of gasoline and 3.8 billion gallons of diesel fuel. (LSA 2023) Therefore, gasoline and diesel demand generated by vehicle trips associated with the Project would be a minimal fraction of gasoline and diesel fuel consumption in California and, by extension, in Riverside County.

In addition, vehicles associated with trips to and from the Project site would be subject to fuel economy and efficiency standards, which are applicable throughout the State. These statistics do not include the increasing use of electric vehicles. As such, the fuel efficiency of vehicles associated with Project operations would increase throughout the life of the Project. Therefore, implementation of the Project would not result in a substantial increase in transportation-related energy uses.

As supported by the preceding analyses, Project operations would not result in the inefficient, wasteful, or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project does not require upgrades to off-site RPU transmission facilities and does not cause or result in the need for additional energy producing facilities off-site. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State. Potential impacts would be **less than significant**.

Threshold B: *Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The Project's consistency with the applicable state and local plans is discussed below.

Consistency with 2021 IEPR

As indicated above, energy usage on the Project site during construction would be temporary in nature. In addition, energy usage associated with operation of the Project would be relatively small in comparison to the State's available energy sources and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level and because the Project's total impacts to regional energy supplies would be minor, the Project would not conflict with California's energy conservation plans as described in the CEC's 2021 IEPR. In addition, the Project would comply with applicable 2022 Title 24 and CALGreen standards, which would ensure the Project would not otherwise interfere with, nor obstruct implementation of the goals presented in the 2021 IEPR.

Consistency with 2018 IRP

Electricity would be provided to the Project by RPU. RPU's 2018 IRP builds on existing State programs and policies. As such, the Project is consistent with, and would not otherwise interfere with, nor obstruct, implementation of the goals presented in the 2018 IRP.

Additionally, the Project will comply with the applicable Title 24 standards which would ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary. As such, development of the Project would support the goals presented in the 2018 IRP.

Consistency with RRG CAP

The Project would implement energy-saving features and operational programs, consistent with the reduction measures set forth in the RRG CAP. For example, RRG-CAP Section 4.3 – Energy Efficiency provides a number of energy efficiency related measures that would result in emission reductions within Riverside County. Among the measures is R1-EE1: California Building Code Title 24. As previously discussed, the Project would be required to comply with all applicable Title 24 Building Code standards for multifamily residential buildings, such as providing EV charging stations and implementing solar panels. The Project's inclusion of solar panels would additionally include the implementation of RRG-CAP measure R2-CE1 – Clean Energy, which states that installing solar photovoltaic panels on residential building rooftops is an effective way to produce renewable energy on site.

Therefore, the Project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and potential impacts would be **less than significant**.

Threshold C: *Would the Project achieve the goal of energy conservation by the following:*

- *Decreasing overall per capita energy consumption;*
- *Decreasing reliance on fossil fuels such as coal, natural gas and oil; and*
- *Increasing reliance on renewable energy sources?*

As previously stated, the proposed Project is subject to California Building Code requirements. New buildings must achieve compliance with 2022 Building and Energy Efficiency Standards and the 2022 California Green Building Standards requirements.

Per Section 4.106.4.2 of the 2022 Title 24, Part 11 CALGreen standards, new multifamily dwellings such as the Project and new residential parking facilities must comply with 2022 CALGreen standards to facilitate future installation and use of EV chargers and electric vehicle supply equipment (EVSE). Additionally, the Project would comply with the 2023 California Building Code and utilize all-electric appliances within the Project's residential units. The residential units would not use natural gas connections, propane, or other fossil fuels; rather, natural gas connections would only be used for common space areas/amenities. In addition, the Project would implement photovoltaic solar power.

On this basis, the Project would decrease overall per capita energy consumption; decrease reliance on fossil fuels such as coal, natural gas, and oil; and increase reliance on renewable energy sources. Therefore, potential impacts would be **less than significant**.

5.6.6 Proposed Mitigation Measures

The Project does not exceed any of the energy thresholds of significance and potential Project-related impacts would be less than significant. Therefore, no energy-related mitigation measures have been proposed for the Project.

5.6.7 Cumulative Environmental Effects

As described, no mitigation measures have been proposed for the Project as the Project would not exceed energy thresholds of significance. Energy consumed by the Project is calculated to be comparable to, or less than, energy consumed by other residential, commercial, and recreational uses of similar scale and intensity that are constructed and operating in the State. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems; thus, the Project would not cause or result in the need for additional energy producing or transmission facilities. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within the State of California and does not conflict with or obstruct applicable State or local plans for renewable energy or energy efficiency. Potential impacts to energy from the proposed Project would be **less than significant** and no mitigation is required.

As discussed in Chapter 4 Environmental Setting of this EIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks). Each of the proposed developments would increase the consumption of energy and energy demand in the region. Energy consumption by the cumulative projects would be regulated by Energy Efficiency Standards embodied in Title 24 of the California Building Code, which apply to new construction of both residential and non-residential buildings, and indirect energy reduction measures from GHG reduction policies. Therefore, the cumulative projects would not result in the wasteful use of energy.

The City of Riverside has a number of green power projects that would reduce overall energy consumption in the City. The City is funding various solar projects throughout the City that will reduce energy use from current users and from ongoing, cumulative projects in the City. Additionally, RPU has a number of incentive programs for residences and businesses to reduce their electricity consumption which will result in cumulatively reducing GHG emissions from energy use.

Further, the cumulative projects in the area would consume a fraction of the energy supplies provided by RPU and have an insignificant demand on the State's overall energy supply.

Therefore, RPU would have adequate supplies and the cumulative projects would not place a significant demand on the suppliers. Potential cumulative impacts would be **less than significant**.

5.6.8 References

The following references were used in the preparation of this section of the DEIR:

CEC 2023	California Energy Commission. <i>2021 Total System Electric Generation</i> . Accessed January 2023.
CECa 2023	California Energy Commission. <i>2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings: For the 2022 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations in Part 1</i> . Accessed January 2023.
CECb 2023	California Energy Commission. <i>Electricity Consumption by County</i> . Accessed January 2023.
CECc 2023	California Energy Commission. <i>Gas Consumption by County</i> . Accessed August 2023.
EIA 2023	U.S. Energy Information Administration. <i>State Profile and Energy Estimates</i> . Accessed January 2023.
LSA 2023	LSA Associates, Inc. <i>Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the Proposed Mission Grove Apartments Project</i> . August 2023. (Appendix B)

5.7 GEOLOGY AND SOILS

This section analyzes the Project's potential impacts related to geology and soils. The analysis in this section is based, in part, on the June 2022 *Due Diligence Geotechnical Investigation Report* and the March 2023 *Grading Plan Review and Geotechnical Update*, both prepared by Geocon West, Inc. (included as Appendix E) and the *Cultural Resources Assessment* prepared by LSA April 2023 (included as Appendix D).

5.7.1 Setting

Geology and Soils

The subject site is located within a seismically active region near the margin between the North American and Pacific tectonic plates. The property is located within the Peninsular Ranges Geomorphic Province which is bounded on the north by the Cucamonga and Sierra Madre faults along the Transverse Ranges, the east by the San Jacinto Fault and the Colorado Desert Geomorphic Province. The Peninsular Ranges extend west off the coast of California and south to the tip of Baja California. Specifically, the site is located on a Perris Erosion Surface in the Woodcrest area of Riverside. The major faults within the region that are closest to the Project site include the San Jacinto Valley (Casa Loma and Claremont branches) and San Bernardino segments of the San Jacinto fault, and the Glen Ivy and Wildomar segments of the Elsinore fault. The Project site itself is set in an area of Cretaceous-aged, Val Verde Tonalite occurring at the near surface. (Geocon 2022)

The property consists of a former K-mart store with asphalt drive aisles and parking spaces, landscaped medians, and landscaped lawn areas between the former K-mart and the roadways to the east and south. The subject site is bounded on the north and west by the active Mission Grove Shopping Center, on the east by Mission Grove Parkway, and on the south by Mission Village Drive. Aerial photographs taken in 1974 show a gently sloping erosion plain was present at the site prior to development (which occurred in 1991). The existing elevations range from approximately 1,588 feet above mean sea level (msl) to the west to 1,598 feet above msl to the east. (Geocon 2022)

Geologic and Soils Conditions

Field investigations were conducted in May 2022 and included the drilling of seven geotechnical borings to depths between 15 feet, 2 inches, and 26 feet, 3 inches and six percolation test borings to depths between 2 and 4½ feet below the existing ground surface. The purpose was to observe the subsurface geological and groundwater conditions at the site, and to collect undisturbed and disturbed samples for laboratory testing. Work included performing percolation tests at the proposed infiltration basin locations as indicated by the project civil engineer. Laboratory tests were performed on select soil samples obtained to evaluate the physical and chemical soil properties for use in engineering analysis. (Geocon 2022)

Site geologic materials encountered consist of asphalt pavement over aggregate base and previously placed artificial fill to depths of 0 to 2½ feet overlying quartz diorite bedrock. Subsurface soils present on the Project site have been categorized into three (3) units; the soil and geologic units encountered at the site are discussed below.

1. Unit 1, Asphaltic Concrete Pavement and Aggregate Base: Asphalt and aggregate base were measured at thicknesses of 3 to 6 inches of asphalt over 4 to 8 inches of aggregate base.
2. Unit 2, Previously Placed Fill: Previously placed fill was encountered to depths of 0 to 2.5 feet. The fill, as encountered, consists of poorly graded to silty sand which is brown to red brown, moist, and medium dense. Deeper fill is likely present beneath the building due to the common practice of over excavating bedrock to create a fill pad on which to perform construction of buildings. This fill was likely placed during grading for the shopping center.
3. Unit 3, Quartz Diorite (qdi): Quartz diorite was encountered below the pavement sections and previously placed fill and underlies the site at depth. The bedrock consists of white and black granitic rock with oxidized zones of brown. It excavated as well-graded sand. The rock is moderately strong and highly to moderately weathered and moist to wet. Refusal was not encountered during drilling to depths of up to 26 feet 3 inches. However, core stones and zones of hard rock are common in granitic bedrock and construction operations may need to implement breaking and industry standard methods for difficult excavations. (Geocon 2022 and 2023)

Groundwater

Perched groundwater was encountered at depths ranging from 11.5 to 16.5 feet throughout the Project site. The perched water is likely the result of surficial infiltration in the vicinity of the site moving through the subsurface above the impenetrable bedrock below. The California Department of Water Resources does not show any wells located within several miles of the Project site. (Geocon 2022)

Geologic Hazards

Faulting and Surface Rupture

The numerous faults in southern California include active, potentially active, and inactive faults. The criteria for these major groups are based on criteria developed by the California Geological Survey (CGS) for the Alquist-Priolo Earthquake Fault Zone Program. By definition, an active fault is one that has had surface displacement within Holocene time (about the last 11,700 years). A potentially active fault has demonstrated surface displacement during Quaternary time (approximately the last 1.6 million years) but has had no known Holocene movement. Faults that have not moved in the last 1.6 million years are considered inactive. (Geocon 2022)

The site is not within a currently established State of California Alquist-Priolo Earthquake Fault Zone or a Riverside County Fault Hazard Zone for surface fault rupture hazards. No active or potentially active faults with the potential for surface fault rupture are known to pass directly beneath the site. (Geocon 2022)

The closest surface traces of an active faults to the site are the Glen Ivy North branch of the Elsinore Fault Zone and the San Jacinto Valley segment of the San Jacinto Fault, both located 12 miles from the site to the southwest and northeast, respectively. (Geocon 2022)

As with all of Southern California, the Project site is located in a seismically active area and is at risk for moderate-to-severe ground shaking in response to large-magnitude earthquakes during the lifetime of the planned development.

Liquefaction

Liquefaction is a phenomenon in which loose, saturated, relatively cohesionless soil deposits lose shear strength during strong ground motions. Primary factors controlling liquefaction include intensity and duration of ground motion, gradation characteristics of the subsurface soils, in-situ stress conditions, and the depth to groundwater. Liquefaction is typified by a loss of shear strength in the liquefied layers due to rapid increases in pore water pressure generated by earthquake accelerations. Seismically induced “dry-sand” settlement may occur whether the potential for liquefaction exists or not.

Liquefaction typically occurs in areas where the soils below the water table are composed of poorly consolidated, fine to medium-grained, primarily sandy soil. In addition to the requisite soil conditions, the ground acceleration and duration of the earthquake must also be of a sufficient level to induce liquefaction.

The site is underlain at shallow depths by granitic bedrock; therefore, the potential for liquefaction induced settlement or seismic “dry-sand” settlement to occur beneath the site is considered low. (Geocon 2022)

Expansive Soil

The onsite soils encountered include sands and decomposed granitic rock. Clay develops as granitic rock weathers; therefore, we would also expect some clay to be present within the soils at the site. Laboratory testing result indicates a sample of the near surface soil exhibits a “very low” expansion potential (expansion index [EI] of 20 or less) with test results showing an expansion index of 0. (Geocon 2022)

Landslide

Landslide describes downslope displacement of a mass of rock, soil, and/or debris by sliding, flowing, or falling. Such mass earth movements may be greater than about 10 feet thick and larger than 300 feet across. Landslides typically may include cohesive block glides and disrupted slumps that are formed by translation or rotation of the slope materials along one or more slip surfaces. These mass displacements can also include more narrowly confined modes such as rock topples, ‘mud flows,’ and ‘debris flows.’ The causes of classic landslides start with a preexisting condition - characteristically, a plane of weak soil or rock - inherent within the rock or soil mass. Thereafter, movement may be precipitated by earthquakes, wet weather, and changes to the structure or loading conditions on a slope (e.g., by erosion, cutting, filling, release of water from broken pipes, etc.).

Landslides are not mapped on or near the site. Due to the relatively level topography at the site, landslides are not present at the property or at a location that landslides could impact the subject site. (Geocon 2022)

Hydrocompression

Hydrocompression is the tendency of unsaturated soil structure to collapse upon wetting resulting in the overall settlement of the affected soil and overlying foundations or improvements supported thereon. Potentially compressible soils underlying the site are typically removed and recompacted

during remedial site grading. However, if compressible soil is left in-place, a potential for settlement due to hydrocompression of the soil exists.

Remedial grading will remove and reprocess the site soils resulting in compacted fill overlying granitic bedrock. Therefore, hydrocompression is not a design consideration for this site. (Geocon 2022)

Paleontological Resources

Paleontological resources are the fossilized remains or impressions of plants and animals, including vertebrates (animals with backbones; mammals, birds, fish, etc.), invertebrates (animals without backbones; starfish, clams, coral, etc.), and microscopic plants and animals (microfossils). They are valuable, non-renewable, scientific resources used to document the existence of extinct life forms and to reconstruct the environments in which they lived. Fossils can be used to determine the relative ages of the depositional layers in which they occur and of the geologic events that created those deposits. The age, abundance, and distribution of fossils depend on the geologic formation in which they occur and the topography of the area in which they are exposed. The geologic environments within which the plants or animals became fossilized usually were quite different from the present environments in which the geologic formations now exist.

The City of Riverside General Plan 2025 Program Environmental Impact Report (GP 2025 PEIR), Section 5-5 Cultural Resources, identifies two areas within the GP planning area that are considered places of paleontological importance, along the banks of the Santa Ana River (near the historic Campbell's Sand Pit) and Mockingbird Canyon Reservoir. The Project site is over 5 miles away from both of these areas. The Project site was previously disturbed from grading activities for development of the site in 1991 to construct the shopping center.

5.7.2 Related Regulations

5.7.2.1 Federal Regulations

International Building Code

The International Building Code (IBC) is published by the International Code Council. The scope of this code covers major aspects of construction and design of structures and buildings. The IBC has replaced the Uniform Building Code as the basis for the California Building Code and contains provisions for structural engineering design. The 2021 IBC addresses the design and installation of structures and building systems through requirements that emphasize performance. The IBC includes codes governing structural as well as fire and life safety provisions covering seismic, wind, accessibility, egress, occupancy, and roofs.

Earthquake Hazards Reduction Act

U.S. Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description

of agency responsibilities, program goals, and objectives to focus on minimizing loss from earthquakes after they occur. The National Earthquake Hazards Reduction Program promotes the adoption of earthquake hazard reduction activities by all scales of government and works to develop national building standards and model codes for use by engineers, architects, and all others involved in the planning and construction of buildings and infrastructure.

5.7.2.2 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Alquist-Priolo Act; Public Resources Code Section 2621-2630) was passed into law following the destructive February 9, 1971 San Fernando earthquake that had a magnitude of 6.6. The Alquist-Priolo Act provides a mechanism for reducing losses from surface fault rupture on a statewide basis. The intent of the Alquist-Priolo Act is to ensure public safety by prohibiting the siting of most structures from human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. Generally, siting of structures for human occupancy must be set back from the fault by approximately 50 feet. Therefore, if a project site is located in an Earthquake Fault Zone, the City must withhold development permits for sites within the fault zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting.

Seismic Safety Act

The California Seismic Safety Commission was established by the Seismic Safety Act in 1975 with the intent of providing oversight, review, and recommendations to the Governor and State Legislature regarding seismic issues. The Commission's name was changed to Alfred E. Alquist Seismic Safety Commission in 2006. Since then, the Commission has prepared several documents based on recorded earthquakes, such as the 1994 Northridge earthquake, 1933 Long Beach earthquake, and the 1971 Sylmar earthquake. Some of these documents are listed as follows:

- Research and Implementation Plan for Earthquake Risk Reduction in California 1995 to 2000, report dated December 1994
- Seismic Safety in California's Schools, 2004, "Findings and Recommendations on Seismic Safety Policies and Requirements for Public, Private, and Charter Schools," report dated December 1994
- Findings and Recommendations on Hospital Seismic Safety, report dated November 2001
- Commercial Property Owner's Guide to Earthquakes Safety, report dated October 2006
- California Earthquake Loss Reduction Plan 2007–2011, report dated July 2007

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 was enacted, in part, to address seismic hazards not included in the Alquist-Priolo Act, including strong ground shaking, landslides, and liquefaction. Under this Act, the State Geologist is assigned the responsibility of identifying and mapping seismic hazards. The California Geological Survey (CGS) Special Publication 117A, adopted in 1997, and Revised and Re-adopted in 2008 by the State Mining and Geology Board, constitutes

guidelines for evaluating seismic hazards other than surface faulting, and for recommending mitigation measures as required by Public Resources Code Section 2695(a). In accordance with the mapping criteria, the CGS seismic hazard zone maps identify areas with the potential for a ground shaking event that corresponds to 10 percent probability of exceedance in 50 years.

The purpose of the Seismic Hazards Mapping Act is to reduce the threat to public health and safety and to minimize the loss of life and property by identifying and mitigating seismic hazards. Cities, counties, and State agencies are directed to use seismic hazard zone maps developed by CGS in their land-use planning and permitting processes. The Seismic Hazards Mapping Act requires site-specific geotechnical investigations prior to permitting most urban development projects in seismic hazard zones.

California Building Code

The California Building Code (CBC), Title 24, Part 2, provides building codes and standards for the design and construction of structures in California. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress facilities, and general stability by controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of building and structures. The CBC contains specific requirements for seismic safety, excavation, foundations, retaining walls, and site demolition. It also regulates grading activities, including drainage and erosion control. Chapter 16 of the CBC contains definitions of seismic sources and the procedure used to calculate seismic forces on structures.

The CBC is updated every three years by order of the legislature, with supplements published in intervening years. State Law mandates that local government enforce the CBC. In addition, a city and/or county may establish more restrictive building standards reasonably necessary because of local climatic, geological, or topographical conditions.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act, as codified in California Civil Code Section 1103-1103.14, requires real estate sellers and brokers to prepare Natural Hazards Disclosure Statements upon transfer of real property if such property is located within a number of Federally or State-mapped natural hazard areas. Hazard areas covered under the disclosure form include special flood hazard areas, areas of potential flooding due to dam failure inundation, fire hazard severity zones, wildland areas, earthquake fault zones, and seismic hazard zones. The natural hazard areas most relevant to geology and soils are earthquake fault zones and seismic hazard zones. As discussed above, the Project site is not located within an earthquake fault zone.

National Pollutant Discharge Elimination System

The Federal government administers the National Pollutant Discharge Elimination System (NPDES) permit program, which regulates discharges into surface waters under the Clean Water Act (CWA). The primary regulatory control relevant to the protection of water quality is the NPDES permit administered by the State Water Resources Control Board, which establishes requirements prescribing the quality of point sources of discharge and water quality objectives. These objectives are established based on the designated beneficial uses (e.g. water supply,

recreation, and habitat) for a particular surface waterbody. The NPDES permits are issued to point source dischargers of pollutants to surface waters pursuant to Water Code Chapter 5.5, which implements the Federal CWA. Examples include, but are not limited to, public wastewater treatment facilities, industries, power plants, and groundwater cleanup programs discharging to surface waters (State Water Resources Control, Title 23, Chapter 9, Section 2200). The Regional Water Quality Control Board (RWQCB) establishes and regulates discharge limits under the NPDES permits.

Construction projects which disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). In order to obtain coverage under the Construction General Permit, a project-specific Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP outlines Best Management Practices to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

Public Resources Code

PRC Section 5097.5 addresses Paleontological Resources, stating that:

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.

In this PRC section, “public lands” means those owned by or under the jurisdiction of the state or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with PRC 5097.5 for activities that include construction, maintenance, and permit actions (e.g., encroachment permits) undertaken by others.

5.7.2.3 Regional Regulations

Santa Ana Regional Water Quality Control Board

The City of Riverside is located within the Santa Ana River Basin which is under the jurisdiction of RWQCB Region 8, the Santa Ana Regional Water Quality Control Board (SARWQCB). The SARWQCB provides permits for projects that may affect surface waters and groundwater locally and is responsible for preparing the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The Basin Plan serves as the basis for the SARWQCB’s regulatory programs and incorporates an implementation plan to ensure water quality objectives are met.

5.7.2.4 Local Regulations

Riverside General Plan



The Public Safety Element of the City's General Plan 2025 contains objectives and policies that seek to reduce hazards that pose a risk to residents, including geologic hazards (City of Riverside 2007). The project would be subject to the following objectives and policies:

Objective PS-1: Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards.

Policy PS-1.1: Ensure that all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements.

Objective PS-9: Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.

Policy PS-9.8: Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary development projects.

Riverside Municipal Code

Title 14- Public Utilities

The Riverside Municipal Code (RMC) contains a number of ordinances relevant to geology and soils. Title 14 addresses the City's public utilities infrastructure. Section 14.08.030 requires anyone desiring to obtain a building permit for a new house or structure to connect to the public sewer system when the property on which such house or structure is situated is not more than 160 feet from the public sewer and the right-of-way admits such connection, or if the house or structure is located within an area where the use of a septic tank poses a potential contamination risk to the City's drinking water wells in the area, as specified by resolution of City Council.

Title 17-Grading Code

Title 17 of the RMC contains the City's grading ordinance, which establishes procedures for grading plan approval, issuance of grading permits, and subsequent inspection and enforcement protocols.

With a few exceptions detailed in Section 17.12.010, the grading ordinance prohibits grading on any lot, parcel, or tract of land without issuance of a grading permit from the City's Public Works Director. Materials required as part of a grading permit application include grading plans, interim erosion control plans, and a preliminary soils report prepared by a geotechnical engineer. Pursuant to Section 17.16.010(B), recommendations specified in the preliminary soils report must be incorporated into the design of the grading plan. Additionally, the grading permit application incorporates the requirements of the NPDES Construction General Permit, such as preparation of a SWPPP, and requires documentation of water quality best management practices required under the Riverside County Drainage Area Management Plan.

Section 17.28.010 contains minimum grading standards and general requirements, including standards for cuts, fills, retaining walls, setbacks, drainage and terracing, and excavation blasting. Additionally, the grading ordinance establishes supplementary regulations for grading in hillsides

and arroyos. The Project site is not located in a hillside or arroyo grading area, as delineated in Exhibits A-F of the grading ordinance.

5.7.3 Project Design Considerations

Project design considerations are outlined in the 2022 geotechnical investigation reports prepared by Geocon West, Inc. (included as Appendix E). All recommendations in the Geotechnical Investigation Report will be City issued project conditions of approval, and include excavation, grading, backfill, seismic design criteria, foundations, retaining walls, elevator design, swimming pool design, lateral loading, and pavement recommendations.

5.7.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) expose people or structures to 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;
- (Threshold B) result in substantial soil erosion or the loss of topsoil;
- (Threshold C) be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- (Threshold D) be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- (Threshold E) have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;
- (Threshold F) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.7.5 Environmental Impacts

Threshold A: *Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42; ii) strong seismic ground shaking; iii) seismic-related ground failure, including liquefaction; and/or iv) landslides?*

i) Faulting and Surface Rupture

Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the surface. The Project site does not lie within or adjacent to an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during site evaluations. Additionally, per the City's General Plan 2025 PEIR there are no faults lines or fault zones within the City of Riverside boundaries. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. The closest known active faults are associated with the San Bernardino Valley section of the San Jacinto Fault, located approximately 12 miles northeast of the Project site, and the Glen Ivy section of the Elsinore Fault Zone, located approximately 12 miles southwest of the Project site. Thus, the potential for damage due to fault rupture is considered remote. Even so, the Project is required to comply with the building design standards of the California Building Code (CBC) for construction of new buildings related to seismicity. Therefore, the potential hazards associated with fault rupture are considered **less than significant**.

ii) Strong Seismic Ground Shaking

The Project site is located within the seismically active region of Southern California and may be subject to ground-shaking events. While no known active faults traverse the City, several faults in the region have the potential to produce seismic impacts within the City. As mentioned above, the two significant faults that are closest to the Project site are the Jacinto and Lake Elsinore Faults.

Also, the Project will be designed to resist seismic impacts in accordance with the applicable Municipal Code Title 16-Buildings and Construction standards. Such building code compliance is required for development of all structures in the City. Project plans will be reviewed during the plan check process to confirm seismic safety measures and the structural engineer's seismic design considerations are incorporated. Moreover, there is nothing unique about the Project site that would require additional measures beyond compliance with the adopted building code and the structural engineer's seismic design considerations. Therefore, potential impacts associated with seismic ground shaking will be **less than significant**.

iii) Seismic-Related Ground Failure, Including Liquefaction

The entire Project site is underlain by Cretaceous-aged Val Verde Tonalite, a type of plutonic rock. The site is underlain at shallow depths by granitic bedrock; therefore, the potential for liquefaction induced settlement or seismic "dry-sand" settlement to occur beneath the site is considered low. Further, per the City's General Plan 2025 PEIR the Project site is not in an area

mapped as a liquefaction zone. Therefore, potential impacts associated with seismic ground failure, including liquefaction, would be **less than significant**.

iv) Landslides

Seismically induced landslides and other slope failures are common occurrences during or soon after earthquakes. The susceptibility of a geologic unit to landslides is dependent upon various factors, primarily: 1) the presence and orientation of weak structures, such as fractures, faults, and joints; 2) the height and steepness of the pertinent natural or cut slope; 3) the presence and quality of groundwater; and 4) the occurrence of strong seismic shaking.

Strong ground shaking can also worsen existing unstable slope conditions. Per the City's General Plan 2025 PEIR, the Project site is located in an area with 0-10% slopes. The Project site has relatively flat topography as it was graded and developed as a commercial retail store with associated parking. Furthermore, as discussed in threshold A i) and ii) above, there are no active faults on the Project site and the possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. The closest known active fault is the San Jacinto Fault approximately 12 miles northeast from the Project site.

As outlined in the geotechnical report prepared for the project, landslides are not mapped on or near the site and due to the relatively level topography at the site landslides are not present at the property or at a location that could impact the project site. Potential impacts associated with seismically induced landslides would be **less than significant**.

Threshold B: *Would the Project result in substantial soil erosion or the loss of topsoil?*

In order to obtain coverage under the NPDES Construction General Permit, a Project-specific SWPPP must be prepared. The SWPPP would outline Best Management Practices, including erosion control measures during construction, for the proposed Project. The stormwater management measures identified in the SWPPP will be implemented to effectively control erosion and sedimentation for the duration of construction.

As outlined in the WQMP, the proposed Project includes four biotreatment basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems which have been incorporated into the site design to fully address storm water runoff volumes. As outlined in the WQMP, the volume and time of concentration of storm water runoff for the post-development condition is not different from the pre-development condition. Therefore, the proposed project will not result in an increase to the rate or amount of surface runoff from the site, and in turn would not result in substantial erosion or siltation off-site. Potential impacts associated with soil erosion and loss of topsoil would be **less than significant**.

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

As outlined in the geotechnical report, the Project site is not susceptible to liquefaction and has a low risk of landslides. The site is underlain at shallow depths by granitic bedrock; therefore, the

potential for liquefaction induced settlement or seismic “dry-sand” settlement to occur beneath the site is considered low.

As outlined in the geotechnical study for the project, hydrocompression is the tendency of unsaturated soil structure to collapse upon wetting resulting in the overall settlement of the affected soil and overlying foundations or improvements supported thereon. Potentially compressible soils underlying the site are typically removed and recompacted during remedial site grading. However, if compressible soil is left in-place, a potential for settlement due to hydrocompression of the soil exists. For the proposed Project, remedial grading would remove and reprocess the site soils, resulting in compacted fill overlying granitic bedrock. Therefore, hydrocompression is not a design consideration for this site, and potential impacts from subsidence and settlement would be **less than significant**.

Threshold D: *Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?*

As outlined in the geotechnical report, expansive soils are clayey soils characterized by their ability to undergo significant volume changes (shrinking or swelling) due to variations in moisture content, the magnitude of which is related to both clay content and plasticity index. These volume changes can be damaging to structures. Nationally, the annual value of real estate damage caused by expansive soils is exceeded only by that caused by termites. The onsite soils encountered include sands and decomposed granitic rock. Clay develops as granitic rock weathers; therefore, some clay would be expected to be present within the soils at the site. Laboratory testing result indicates a sample of the near surface soil exhibits a “very low” expansion potential (expansion index [EI] of 20 or less) with test results showing an expansion index of 0. Potential impacts associated with expansive soils would be **less than significant**.

Threshold E: *Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?*

Western Municipal Water District (WMWD) disposes of waste water for the Project site and surrounding area, and has supplied a Will Serve letter to the Project Applicant. The proposed Project will be served by sewer infrastructure and will not utilize or require septic tanks or alternative waste water disposal systems. Therefore, the proposed Project will have **no impact**.

Threshold F: *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

The Project site is not located in a paleontological sensitivity area (Riverside County GIS data). Due to extent of prior disturbances at the Project site and onsite undocumented fill, the Project site is not anticipated to have sensitive paleontological resources or unique geological features that would be destroyed with project implementation. Project related ground disturbance is not likely to impact significant paleontological resources. Mitigation is not recommended unless a fossil is encountered during grading and other construction activities. If an unanticipated on-site fossil is encountered during construction, implementation of mitigation measure **MM GEO-1** is required to ensure potential impacts will be **less than significant with mitigation**.

5.7.6 Proposed Mitigation Measures

A EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Implementation of the Project requires implementation of the following mitigation measure to ensure potential impacts related to paleontological resources are reduced to less than significant levels.

MM GEO-1: If one or more fossils are discovered during construction, all ground disturbing activities within 50 feet of the area of the find shall be ceased and the applicant shall retain a paleontologist who meets the Society of Vertebrate Paleontology (SVP) qualifications standards for the Project Paleontologist to oversee the documentation of the extent and potential significance of the finds as well as recovery efforts. Ground-disturbing activities may resume in the area of the finds at the discretion of the Project Paleontologist. If the fossils are significant per the SVP's 2010 criteria, then paleontological monitoring shall be conducted on an as-needed basis for further ground-disturbing activities in the Project area.

5.7.7 Cumulative Environmental Effects

As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks). These planned and pending projects would increase structural development near the Project site, in turn exposing new residents and property to potential risks from seismic hazards or soil instability in the area. Like the Project, all new planned and pending development in the City and adjacent jurisdictions would be subject to current seismic and erosion control standards. Although new development would be exposed to existing geologic and seismic hazards, it would not increase the potential for such hazards to occur. Geologic hazards are site-specific, and individual developments would not create additive impacts that would affect geologic conditions on other sites. Therefore, development of individual projects would not exacerbate existing geologic conditions, and cumulative impacts would be **less than significant**.

Cumulative projects within the City have the potential to impact paleontological resources, the City's General Plan and General Plan EIR incorporate policies and programs to protect and/or document these resources as part of the City's development review process and mitigation measures that require preparation of technical studies, and the presence of monitors if necessary. Therefore, the General Plan EIR concluded that with adherence to and implementation of General Plan policies, mitigation measures, and standard Federal, State, and City regulations, cumulative impacts to historical resources, archaeological resources, and paleontological resources would be less than significant with mitigation. With implementation of mitigation measure **MM GEO-1** the potential for the Project to contribute to a cumulative impact is reduced to **less than significant levels with mitigation**.

5.7.8 References

The following references were used in the preparation of this section of the EIR:

Geocon 2022	Geocon West, Inc. <i>Due Diligence Geotechnical Investigation Report: Mission Grove Redevelopment 375 East Alessandro Boulevard Riverside, California</i> . June 13, 2022 (Appendix E).
Geocon 2023	Geocon West, Inc. <i>Grading Plan Review and Geotechnical Update: Mission Grove Redevelopment 375 East Alessandro Boulevard Riverside, California</i> . March 20, 2023 (Appendix E).
GP 2025	City of Riverside, <i>General Plan 2025</i> , certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR) (SCH# 2004021108)</i> , certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 15, 2023)
LSA 2023	LSA, <i>Cultural Resources Assessment, Anton Mission Grove Project, Riverside, Riverside County, California</i> . April 2023. (Appendix D)
MGSP	City of Riverside, <i>Mission Grove Specific Plan</i> . September 16, 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed September 2023)
EQ Zapp	EQ Zapp: California Earthquake Hazards Zone Application, https://maps.conservation.ca.gov/cgs/EQZApp/app/ (Accessed November 2022)
Southern California Earthquake Data Center	Southern California Earthquake Data Center. 2020. Significant Earthquakes and Faults. [website]: https://scedc.caltech.edu/significant/index.html . (Accessed November 2022)
Riverside County data GIS	County of Riverside Land Information System. n.d. Map My County; Paleontological Sensitivity: https://gis1.countyofriverside.us/Html5Viewer/?viewer=MMC_Public (Accessed January 2024)

5.8 Greenhouse Gas Emissions

Based upon Appendix G of the CEQA Guidelines, this section evaluates the Project's impacts related to greenhouse gas (GHG) emissions. The analysis in this section is based on data and information in the August 2023 *Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the Proposed Mission Grove Apartments Project* prepared by LSA Associates, Inc. (LSA) for the Project (Appendix B of this DEIR).

5.8.1 Setting

5.8.1.1 Climate Change and Greenhouse Gases

Global Climate Change

Earth's natural warming process is known as the "greenhouse effect." This greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass allows solar radiation (sunlight) into Earth's atmosphere but prevents radiated heat from escaping, thus warming Earth's atmosphere. GHGs keep the average surface temperature of the Earth to approximately 60 degrees Fahrenheit (°F). However, excessive concentrations of GHGs in the atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.

Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect. While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change (GCC) is evidenced in changes to global temperature rise, warming oceans, shrinking ice sheets, glacial retreat, decreased snow cover, sea level rise, declining Arctic sea ice, extreme weather events, and ocean acidification.

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. While climate change may increase the concentration of ground-level ozone, the magnitude of the effect, and therefore, its indirect effects, are uncertain. If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would exacerbate air quality. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus reducing the pollution associated with wildfires. GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere.

Greenhouse Gases

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural GHG effect, the earth's average temperature would be approximately 61° Fahrenheit cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered

to be the cause for the observed increase in the earth's temperature. Gases that demonstrate these heat-trapping properties are discussed in Table 5.8-1.

Table 5.8-1 – Greenhouse Gases

H₂O	
Description	<p>H₂O is the most abundant, important, and variable GHG in the atmosphere. H₂O vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. A climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which H₂O is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more H₂O is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more H₂O when it is warmer), leading to more H₂O vapor in the atmosphere. As a GHG, the higher concentration of H₂O vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more H₂O vapor and so on and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when H₂O vapor increases in the atmosphere, more of it will eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up).</p> <p>The main source of H₂O vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other H₂O bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.</p> <p>There are no known direct health effects related to H₂O vapor at this time. It should be noted however that when some pollutants react with H₂O vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through H₂O vapor.</p>
Source	
Health Effects	
CO₂	
Description	<p>CO₂ is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO₂ concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30 percent. Left unchecked, the concentration of CO₂ in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.</p> <p>CO₂ is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO₂ is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.</p> <p>Outdoor levels of CO₂ are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO₂ can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO₂ in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15 minute period.</p>
Source	
Health Effects	
CH₄	

Greenhouse Gas Emissions

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Description	CH ₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO ₂ and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.
Source	CH ₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH ₄ . Other anthropogenic sources include fossil-fuel combustion and biomass burning.
Health Effects	CH ₄ is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to high levels of CH ₄ can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.
N₂O	
Description	N ₂ O, also known as laughing gas, is a colorless GHG. Concentrations of N ₂ O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).
Source	N ₂ O is produced by microbial processes in soil and H ₂ O, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N ₂ O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction.
Health Effects	N ₂ O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).
Chlorofluorocarbons (CFCs)	
Description	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH ₄ or ethane (C ₂ H ₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).
Source	CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.
Health Effects	In confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	
Description	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF ₃), HFC-134a (CH ₂ FCF), and HFC-152a (CH ₃ CF ₂). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant.
Source	HFCs are manmade for applications such as automobile air conditioners and refrigerants.
Health Effects	No health effects are known to result from exposure to HFCs.
PFCs	

Mission Grove Apartments Project DEIR

Greenhouse Gas Emissions

Description	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF ₄) and hexafluoroethane (C ₂ F ₆). The EPA estimates that concentrations of CF ₄ in the atmosphere are over 70 parts per trillion (ppt).
Source	The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.
Health Effects	No health effects are known to result from exposure to PFCs.
SF₆	
Description	SF ₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The EPA indicates that concentrations in the 1990s were about 4 ppt.
Source	SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Health Effects	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.
Nitrogen Trifluoride (NF₃)	
Description	NF ₃ is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF ₃ has a 100-year GWP of 17,200.
Source	NF ₃ is used in industrial processes and is produced in the manufacturing of semiconductors, LCD (Liquid Crystal Display) panels, types of solar panels, and chemical lasers.
Health Effects	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis.

The potential health effects related directly to the emissions of CO₂, CH₄, and N₂O as they relate to development projects such as the Project are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Scientists also purport that higher ambient temperatures would decrease disease survival rates among humans who contract the diseases and result in more widespread disease. Climate change will likely cause shifts in weather patterns, potentially resulting in devastating droughts and food shortages in some areas.

Global Warming Potential

GHGs have varying global warming potential (GWP) values. The GWP of a GHG indicates the amount of warming a gas causes over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO₂ is utilized as the reference gas for GWP, and thus has a GWP of one (1). Carbon dioxide equivalent (CO₂e) is a term used for describing the different GHGs in a common unit. CO₂e signifies the amount of CO₂ which would have the equivalent GWP.

The atmospheric lifetime and GWP of selected GHGs are summarized in Table 5.8-2. As shown, GWPs for the Second Assessment Report (SAR), the Intergovernmental Panel on Climate Change (IPCC)'s scientific and socio-economic assessment on climate change, range from one (1) for CO₂ to 23,900 for SF₆ and GWPs for the IPCC's 5th Assessment Report range from 1 for CO₂ to 23,500 for SF₆.

Table 5.8-2 – Global Warming Potential and Atmospheric Lifetimes of Select Gases

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		SAR	5 th Assessment Report
CO ₂	See*	1	1
CH ₄	12 .4	21	28
N ₂ O	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
SF ₆	3,200	23,900	23,500

*As per Appendix 8.A. of the IPCC's 5th Assessment Report, no single lifetime can be given.
Source: Table 2.14 of the IPCC Fourth Assessment Report, 2007

GHG Emissions Inventories

Global

Worldwide anthropogenic (human) GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2017. Based on the latest available data, the sum of these emissions totaled approximately 29,216,501 Gg CO₂e, as summarized in Table 5.8-3.

Table 5.8-3 – Top GHG Producing Countries and the European Union

Emitting Countries	GHG Emissions¹ (Gg CO₂e)
China	11,991,710 ²
United States	6,456,718
European Union (28-member countries)	4,323,163
India	3,079,810 ²
Russian Federation	2,155,470
Japan	1,289,630
Total	29,216,501

Gg = gigagram
¹The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2017 data, the United Nations Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," was used.
²The most recent GHG emissions for China and India are from 2014.

State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the U.S. emissions inventory total. The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2018 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2016 GHG emissions period, California emitted an average 429.4 million metric tons of CO₂e (MMTCO₂e) per year including emissions resulting from imported electrical power in 2015.

Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35 percent under the lower warming range to 75 to 85 percent under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios report indicates that large wildfires could become up to 55 percent more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90 degrees Fahrenheit (°F) in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase

projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply needed. Although higher CO₂ levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while

range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the State. In contrast, wildfires in northern California could increase by up to 90 percent due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the State. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century as a result of increasing temperatures. The productivity of the State's forests has the potential to decrease as a result of GCC.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the State's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

5.8.2 Related Regulations

The following regulations address both climate change and GHG emissions.

5.8.2.1 International Regulations

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

Intergovernmental Panel on Climate Change (IPCC)

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations' Framework Convention on Climate Change ('Convention')

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG

emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at an average of five percent against 1990 levels over the five-year period 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of “common but differentiated responsibilities.”

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2° Celsius above pre-industrial levels, subject to a review in 2015. The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

On September 23, 2014 more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the United Nations. At the Summit, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Parties to the United Nations’ Framework Convention on Climate Change reached a landmark agreement on December 12, 2015 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts and undergo international review.

The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st session of the Convention Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2 degrees Celsius, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make “nationally determined contributions” (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and “progress made in implementing and achieving” their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they will “represent a progression” beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing \$100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address “loss and damage” resulting from climate change, which explicitly will not “involve or provide a basis for any liability or compensation;”
- Require parties engaging in international emissions trading to avoid “double counting;” and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country’s NDC.

On June 2, 2017, former President Donald Trump announced his intention to withdraw from the Paris Agreement. While the withdrawal was effective on November 4, 2020, President Joe Biden officially rejoined the Paris Agreement on February 19, 2021.

5.8.2.2 Federal Regulations

Prior to the last decade, there have been no concrete Federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the Federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the Supreme Court found that four GHGs, including CO₂, are air pollutants subject to regulation under Section 202(a)(1) of the Federal Clean Air Act (CAA). The Court held that the USEPA Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six (6) key well-mixed GHGs – CO₂, CH₄, N₂O, HFCs, PFCs, and sulfur hexafluoride – in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles” below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling that upheld the USEPA Administrator’s findings.

Clean Vehicles

On September 15, 2011, the USEPA and the United States Department of Transportation (USDOT) issued the final rule for the first national standards to improve the fuel efficiency of medium- and heavy-duty trucks and buses, model years 2014 to 2018. For combination tractors, the agencies proposed engine and vehicle standards that would achieve up to a 20 percent reduction from model year 2014 in fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies proposed separate gasoline and diesel truck standards, which would achieve up to a 10 percent reduction from model year 2014 for gasoline vehicles and a 15 percent reduction for diesel vehicles (12 and 17 percent, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction from model year 2014 in fuel consumption. On October 25, 2016, the USEPA and the USDOT issued Phase 2 of the national standards to improve fuel efficiency standards for medium- and heavy-duty trucks and buses for model years 2021 to 2027 to achieve vehicle fuel savings as high as 25 percent, depending on the vehicle category.

On August 2, 2018, the previous USEPA Administration released a notice of proposed rulemaking, The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks (SAFE Vehicles Rule) to amend the Corporate Average Fuel Economy (CAFE) and GHG emission standards established in 2012 for model years 2021 through 2026. The SAFE Vehicle Rule would decrease fuel economy and would withdraw the California Waiver for the California Advanced Clean Car program, Zero Emissions Vehicle mandate, and GHG emission standards for model years 2021 through 2026.

The current USEPA administration withdrew portions of the SAFE Rule, concluding that the SAFE Rule overstepped the agency’s legal authority and finalized updated CAFE Standards for model years 2024 through 2026. The final rule establishes standards that would require an industry-wide fleet average of approximately 49 miles per gallon (mpg) for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024 and 2025, and 10 percent annually for model years 2026. The agency projects the final standards will save consumers nearly \$1,400 in total fuel expenses over the lifetimes of vehicles produced in these model years and avoid the consumption of about 234 billion gallons of gas between model

years 2030 to 2050. The National Highway Traffic Safety Administration also projects that the standards will cut GHGs from the atmosphere, reduce air pollution, and reduce the country's dependence on oil.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 aims to move the United States toward greater energy independence and security; increase the production of clean renewable fuels; protect consumers; increase the efficiency of products, buildings and vehicles; promote GHG research; improve the energy efficiency of the federal government; and improve vehicle fuel economy.

Mandatory Reporting of GHGs

The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the USEPA issued the Final Mandatory Reporting of GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more of GHG emissions are required to submit annual reports to the USEPA.

New Source Review

The USEPA issued a final rule on May 13, 2010, that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the USEPA states:

"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."

The USEPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This

includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the USEPA proposed new performance standards for emissions of CO₂ for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of CO₂ per megawatt-hour, based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016 the U.S. Supreme Court issued a stay of this regulation pending litigation. Additionally, the current USEPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO₂ standards.

Cap-and-Trade

Cap-and-trade refers to a policy tool where emissions are limited to a certain amount and can be traded or provides flexibility on how the emitter can comply. Successful examples in the U.S. include the Acid Rain Program and the Nitrous Oxide (NO_x) Budget Trading Program and Clean Air Interstate Rule in the northeast. There is no Federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap-and-trade.

The Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO₂ emissions from power plants, auctions CO₂ emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015.

SmartWay Program

The SmartWay Program is a public-private initiative between the USEPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other Federal and State agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (USEPA 2014):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.

2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all Heavy Duty (HD) trucks will have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10 percent or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the USEPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions and fuel economy testing, demonstration projects and technical literature review. As a result, the USEPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel will eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

5.8.2.3 State Regulations

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark

Assembly Bill (AB) 32 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32

The California State Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. “GHGs” as defined under AB 32 include CO₂, CH₄, N₂O, HFCs, PFCs, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The CARB is the State agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.”

CARB Scoping Plan

CARB adopted the Scoping plan to achieve the goals of AB 32, with the most recent plan update being the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan). The 2022 Scoping Plan lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279. The actions and outcomes in the plan would achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon. (CARB 2022a)

Senate Bill 32

On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the State to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80 percent below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

Cap-and-Trade Program

The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program will help put California

on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. (See Title 17 of the CCR §§ 95800 to 96023). The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program’s duration.

Covered entities that emit more than 25,000 MTCO₂e per year must comply with the Cap-and-Trade Program. Triggering of the 25,000 MTCO₂e per year “inclusion threshold” is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or “MRR”).

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender “compliance instruments” (30) for each MTCO₂e of GHG they emit. There also are requirements to surrender compliance instruments covering 30 percent of the prior year’s compliance obligation by November of each year. For example, in November 2014, a covered entity was required to submit compliance instruments to cover 30 percent of its 2013 GHG emissions.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 statewide emission limit will not be exceeded. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the First Update:

“The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative.”

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. Thus, the Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate:

“The Cap-and-Trade Program establishes an overall limit on GHG emissions from most of the California economy—the “capped sectors.” Within the capped sectors, some of the reductions are being accomplished through direct regulations, such as improved building and appliance efficiency standards, the [Low Carbon Fuel Standard] LCFS, and the 33 percent [Renewables Portfolio Standard] RPS. Whatever additional reductions are needed to bring emissions within the cap is accomplished through price incentives posed by emissions allowance prices. Together, direct regulation and price incentives assure that emissions are brought down cost-effectively to the level of the overall cap. The Cap-and-Trade Regulation provides assurance that California’s 2020 limit will be met because the regulation sets a firm limit on 85 percent of California’s GHG emissions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site specific or project-level, GHG emissions reductions. Also, due to the regulatory architecture adopted by CARB in AB 32, the reductions attributed to the Cap-and-Trade Program can change over time depending on the State’s emissions forecasts and the effectiveness of direct regulatory measures.”

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85 percent of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported. The point of regulation for transportation fuels is when they are “supplied” (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle miles traveled (VMT) are covered by the Cap-and-Trade Program. In addition, the Scoping Plan differentiates between “capped” and “uncapped” strategies. “Capped” strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the Program will help ensure

that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. “Uncapped” strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.

SB 375 – The Sustainable Communities and Climate Protection Act of 2008

Passing the Senate on August 30, 2008, Senate Bill (SB) 375 was signed by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: it (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans (RTP) for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

AB 1493 Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the USEPA’s denial of an implementation waiver. The USEPA subsequently granted the requested waiver in 2009, which was upheld by the U.S. District Court for the District of Columbia in 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near-term (2009–2012) standards will result in about a 22 percent reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to

boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.

SB 350 – Clean Energy and Pollution Reduction Act of 2015

In October 2015, the legislature approved, and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum statewide were removed from the Bill because of opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 45 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order B-55-18 and SB 100

Executive Order B-55-18 and SB 100. SB 100 and Executive Order B-55-18 were signed by Governor Edmund G. Brown Jr. on September 10, 2018. Under the existing RPS, 25 percent of retail sales are required to be from renewable sources by December 31, 2016, 33 percent by December 31, 2020, 40 percent by December 31, 2024, 45 percent by December 31, 2027, and

50 percent by December 31, 2030. SB 100 raises California's RPS requirement to 50 percent renewable resources target by December 31, 2026, and to achieve a 60 percent target by December 31, 2030. SB 100 also 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 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, and 60 percent by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the State of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

Executive Order S-3-05

Former Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

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

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07 – Low Carbon Fuel Standard (LCFS)

The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to CARB for consideration as an "early action" item under AB 32. The CARB adopted the LCFS on April 23, 2009.

The LCFS was challenged in the U.S. District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012, pending final ruling on appeal, allowing CARB to continue to implement and enforce the regulation. The Ninth

Circuit Court's decision, filed September 18, 2013, vacated the preliminary injunction. In essence, the court held that LCFS adopted by CARB were not in conflict with Federal law. On August 8, 2013, the Fifth District Court of Appeal (California) ruled CARB failed to comply with CEQA and the Administrative Procedure Act (APA) when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal reversed the trial court's judgment and directed issuance of a writ of mandate setting aside Resolution 09-31 and two executive orders of CARB approving LCFS regulations promulgated to reduce GHG emissions. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while CARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015 the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

Executive Order S-13-08

Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the Order, the 2009 California Climate Adaptation Strategy (CNRA 2009) was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15

On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MMTCO_{2e}. The Order also requires the State's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable for local governments and the private sector. SB 32 is an extension of AB 32 and requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05,

which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Standards

CCR, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. 23 categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards and California Green Building Standards

CCR Title 24 Part 6: California's Energy Efficiency Standards (Energy Code) for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

The CEC adopted the 2022 Energy Code on August 11, 2021. The 2022 Energy Code includes encouraging efficient electric heat pumps, establishing electric-ready requirements for new homes, expanding solar photovoltaic and battery storage standards, and strengthening ventilation standards. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011, and is administered by the California Building Standards Commission (CBSC). CALGreen is updated on a regular basis, with the most recently approved update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023. The State Building Code provides the minimum standard that buildings must meet in order to be certified for occupancy, which is generally enforced by the local building official. 2022 CALGreen standards are applicable to the Project and require:

- Electric vehicle (EV) charging for new construction. For multifamily development projects with 20 or more dwelling units, hotels, and motels with 20 or more sleeping units or guest rooms (4.106.4.2.2):

- Ten (10) percent of the total number of parking spaces on a building site, provided for all types of parking facilities, shall be EV charging spaces capable of supporting future Level 2 electric vehicle charging station (EVSE).
- 25 percent of the total number of parking spaces shall be equipped with low power Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per dwelling unit when more than one parking space is provided for use by a single dwelling unit.
- Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE. Where common use parking is provided, at least one EV charger shall be located in the common use parking area and shall be available for use by all residents or guests.
- Construction waste management: Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with either (CalGreen) Section 4.408.2, 4.408.3, or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance (4.408.1).
- Recycling by occupants: Where five (5) or more multifamily dwelling units are constructed on a building site, provide easily accessible area(s) that serve(s) all building on the site and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive (4.410.2)
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
 - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (4.303.1.1)
 - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush (4.303.1.2)
 - Showerheads. Single showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute and 80 psi (4.303.1.3). When a shower is served by more than one showerhead, the combined flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (4.303.1.3.2).
 - Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons per minute at 20 psi (4.303.1.4.1). The maximum flow rate of lavatory faucets installed in common and public use areas

(outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi.

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

Phase 1 and 2 Heavy-Duty (HD) Vehicle GHG Standards

CARB has adopted a new regulation for GHG emissions from HD trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the USEPA rule for new trucks and engines nationally. Existing HD vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the USEPA adopted their new rule for HD trucks and engines. The EPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year (MY) 2014 with stringency levels increasing through MY 2018. The rule organizes truck compliance into three groupings, which include a) HD pickups and vans; b) vocational vehicles; and c) combination tractors. The USEPA rule does not regulate trailers.

CARB staff has worked jointly with the USEPA and the NHTSA on the next phase of Federal GHG emission standards for MD and HD vehicles, called Federal Phase 2. The Federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year HD vehicles, including trailers. But as discussed above, the USEPA and NHTSA have proposed to roll back GHG and fuel economy standards for cars and light-duty trucks, which suggests a similar rollback of Phase 2 standards for MD and HD vehicles may be pursued.

SB 97 and State CEQA Guidelines

In August 2007, the Legislature adopted SB 97, requiring the Office of Planning and Research (OPR) to prepare and transmit new CEQA guidelines for the mitigation of GHG emissions or the effects of GHG emissions to the California Natural Resources Agency. OPR submitted its proposed guidelines to the Secretary for Natural Resources on April 13, 2009, and the *State*

CEQA Guidelines amendments were adopted on December 30, 2009 and became effective on March 18, 2010.

The *State CEQA Guidelines* amendments do not specify a threshold of significance for GHG emissions or prescribe assessment methodologies or specific mitigation measures. Instead, the amendments encourage lead agencies to consider many factors in performing a CEQA analysis but rely on the lead agencies in making their own significance determinations based upon substantial evidence. The *State CEQA Guidelines* amendments also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

The *State CEQA Guidelines* amendments require a lead agency to make a good-faith effort based on the extent possible on scientific and factual data to describe, calculate or estimate the amount of GHG emissions resulting from a project. The *State CEQA Guidelines* amendments give discretion to the lead agency whether to (1) use a model or methodology to quantify GHG emissions resulting from a project and which model or methodology to use and/or (2) rely on a qualitative analysis or performance-based standards. The California Natural Resources Agency is required to periodically update the guidelines to incorporate new information or criteria established by CARB pursuant to AB 32.

5.8.2.4 Regional Regulations

The Project is within the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

South Coast Air Quality Management District

SCAQMD is the agency responsible for air quality planning and regulation in the Basin. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the Basin. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
 - Residential and Commercial land use: 3,000 MTCO₂e per year
 - Industrial land use: 10,000 MTCO₂e per year
 - Based on land use type: residential: 3,500 MTCO₂e per year; commercial: 1,400 MTCO₂e per year; or mixed use: 3,000 MTCO₂e per year
- Tier 4 has the following options:
 - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
 - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO₂e/SP/year for projects and 6.6 MTCO₂e/SP/year for plans;
 - Option 3, 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans.
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO₂ concentrations at 450 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. The project is not anticipated to be subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

5.8.2.5 Local Regulations

City of Riverside General Plan 2025

The Air Quality, Land Use and Urban Design, and Open Space and Conservation elements of the General Plan 2025 contain policies intended to reduce GHG emissions. Many of the policies described in Section 5.3 Air Quality, Section 5.6 Energy Conservation, and Section 5.11 Land Use and Planning of this DEIR would apply to reducing GHG emissions. Additional policies that may be applicable to the Project include:

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

Policy AQ-5.1: Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Policy AQ-5.3: Continue and expand use of renewable energy sources such as wind, solar, water, landfill gas, and geothermal sources.

Policy AQ-5.6: Support the use of automated equipment for conditional facilities to control heating and air conditioning.

Policy AQ-5.8: Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.

Objective AQ-8: Make sustainability and global warming education a priority for the City's effort to protect public health and achieve State and Federal clean air standards.

Policy AQ 8.17: Develop measures that a minimum of 40 percent of the waste from all construction sites throughout Riverside be recycled by the end of 2008.

Restorative Growthprint Plan

The Riverside Restorative Growthprint (RRG) combines two plans: the Economic Prosperity Action Plan (RRG-EPAP) and the Climate Action Plan (RRG-CAP), which work in conjunction to spur entrepreneurship and smart growth while advancing the City's GHG emission reduction goals. The RRG includes actions to reduce GHG emissions that align with the City's planning priorities and its vision of a future "green" economy based on sustainable businesses. The RRG-EPAP identifies the measures and strategies in the RRG-CAP with the greatest potential to drive local economic prosperity through clean-tech investment, entrepreneurship, and expansion of local green businesses.

In 2014, Riverside was one of 12 cities that collaborated with the Western Riverside Council of Governments on a *Subregional Climate Action Plan* (Subregional CAP) that included 36 measures to guide Riverside's GHG reduction efforts through 2020. The RRG-CAP expands upon the Subregional CAP and provides a path for the City to achieve deep reductions in GHG emissions through 2035, while the RRG-EPAP provides a framework for smart growth and low-carbon economic development. The RRG-CAP prioritizes the implementation of policies that enable the City to fulfill the requirements of AB 32 and SB 375. The following measures from the RRG-CAP are applicable to the Project.

Measure SR-2: 2013 California Building Energy Efficiency Standards (Title 24, Part 6) Mandatory energy efficiency standards for buildings.

Measure SR-12: Electric Vehicle Plan and Infrastructure – Facilitate electric vehicle use by providing necessary infrastructure.

Measure SR-13: Construction & Demolition Waste Diversion - Meet mandatory requirement to divert 90% of C&D waste from landfills by 2035.

Measure E-2: Shade Trees – Strategically plant trees at new residential developments to reduce the urban heat island effect.

Measure T-2: Bicycle Parking – Provide additional options for bicycle parking.

Measure T-6: Density – Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.

Measure T-19: Alternative Fuel & Vehicle Technology and Infrastructure – Promote the use of alternative fueled vehicles such as those powered by electric, natural gas, biodiesel, and fuel cells by Riverside residents and workers.

Measure W-1: Water Conservation and Efficiency – Reduce per capita water use by 20% by 2020. While the goal date has passed, the goal to minimize water use by implementing conservation measures and higher efficiency is still applicable.

5.8.3 Project Design Considerations

The Project would adhere to applicable 2022 CalGreen building code standards as described in Section 5.8.2.3 above as they relate to reducing GHG emissions.

5.8.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment;
- (Threshold B) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.8.5 Environmental Impacts

Threshold A: *Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Construction and operation of the Project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the Project's operation.

Construction Activities

Construction activities associated with the Project would produce combustion emissions from various sources. During construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO₂, CH₄, and N₂O. Furthermore, CH₄ is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

The SCAQMD does not provide a separate GHG significance threshold for construction emissions; rather, their guidance specifies that construction emissions should be amortized over 30 years (a typical project lifetime), added to the project operational emissions, and that total compared to the GHG significance threshold. The City has not adopted its own numeric threshold of significance for determining impacts with respect to GHG emissions. A screening threshold of 3,000 MTCO₂e per year to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by the City and numerous cities in the Basin and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial projects, as described in the SCAQMD's *Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans* ("SCAQMD Interim GHG Threshold"). The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required.

Construction GHG emissions were estimated using the California Emissions Estimator Model (CalEEMod) and the results are presented in Table 5.8-4 – Construction GHG Emissions below.

Table 5.8-4 – Construction GHG Emissions

Construction Phase	Total Emissions per Phase (MT)			Total Emissions per Phase (MT CO ₂ e)
	CO ₂	CH ₄	N ₂ O	
Demolition	263	<1	<1	269
Site Preparation	25	<1	<1	25
Grading	32	<1	<1	32
Building Construction (2025, 2026, 2027)	1,453	<1	<1	1,475
Architectural Coating (2026, 2027)	86	<1	<1	88
Paving	15	<1	<1	15
Total Emissions for the Entire Construction Process				1,904
Total Construction Emissions Amortized over 30 Years				63
Source: Compiled by LSA (August 2023)				
CH ₄ = methane MTCO ₂ e = metric tons of carbon dioxide equivalent				
CO ₂ = carbon dioxide MT = metric tons				
N ₂ O = nitrous oxide				

Operational GHG Emissions

The 2022 Scoping Plan Update reflects recent legislation that extends and expands upon earlier scoping plans by setting a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. 2022 Scoping Plan Appendix D – Local Actions, outlines approaches that lead agencies may consider for evaluating alignment of proposed plans and residential and mixed-use development projects with the State’s climate goals. (CARB 2022b) While the approaches are recommendations and not requirements, Appendix D of the 2022 Scoping Plan notes that the State currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State’s GHG and regional air quality goals. The Appendix further states:

These project attributes are intended as a guide to help local jurisdictions qualitatively identify those residential and mixed-use projects that are **clearly** [emphasis from 2022 Scoping Plan Appendix D] consistent with the State’s climate goals, since these attributes address the largest sources of operational emissions for residential projects. In general, residential and mixed-use development projects that incorporate **all** of these key project attributes are aligned with the State’s priority GHG reduction strategies for local climate action as shown in Table 1 [of 2022 Scoping Plan Appendix D] and with the State’s climate and housing goals. As such, they are considered to be consistent with the Scoping Plan or other plans, policies, or regulations adopted for the purposes of reducing GHGs; therefore, the GHG emissions associated with such projects may result in less-than-significant GHG impact under CEQA. Lead agencies may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State’s climate goals. (CARB 2022b)

Pursuant to 15604.4 of the CEQA Guidelines, a lead agency may rely on qualitative analysis or performance-based standards to determine the significance of impacts from GHG emissions. As such, and per the CARB guidance provided in the above excerpt from 2022 Scoping Plan Appendix D, the Project’s consistency with Appendix D Section 3.2.1 – Project Attributes for Residential and Mixed-Use Projects to Qualitatively Determine Consistency with the Scoping Plan, is discussed below.

Table 5.8-6 analyzes the Project’s consistency with key residential and mixed-use project attributes that reduce GHGs as identified in Table 3 of 2022 Scoping Plan Appendix D.

Table 5.8-6 – Project Consistency with Key Residential and Mixed-Use Project Attributes that Reduce GHGs

Priority Areas	Key Project Attribute	Project Consistency
Transportation and Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	Consistent; as discussed in Section 5.8.2.3, the Project would be required to comply with all applicable 2022 Title 24 Chapter 11/CalGreen Building Standards, including providing

		<p>EV charging infrastructure. It should be noted that the current EV charging voluntary standards as listed in Section A4.106.8.2.1 for multifamily development projects are the same as those standards listed in Chapter 4 – Residential Mandatory Measures of the 2022 Title 24 CalGreen Standards. Therefore, in complying with the Title 24 mandatory EV charging standards for multifamily developments, the Project would also be complying with the voluntary standards.</p>
<p>Vehicle Miles Traveled (VMT) Reduction</p>	<p>Is located on infill sites that are surrounded by urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).</p>	<p>Consistent; as discussed in Project Description section of this DEIR, the Project would be constructed on and within a developed, paved commercial shopping center. The Project site is surrounded by other urban uses and served by existing utilities.</p>
	<p>Does not result in the loss or conversion of natural and working lands.</p>	<p>Consistent; as described, the Project site would be constructed within a developed, paved commercial shopping center. Thus, construction of the Project would not result in the loss or conversion of natural and working lands.</p>
	<p>Consists of transport-supportive densities (minimum of 20 residential dwelling units per acre), or Is in proximity to existing transport stops (within a half mile), or Satisfies more detailed and stringent criteria specified in the region’s sustainable community strategies (SCS).</p>	<p>Consistent; as described in the Project Description section of this DEIR, the Project would include a density of 40 residential dwelling units per acre. Additionally, the Project would be located in close proximity/walking distance (less than a half-mile) to existing public transit stops. Further, as discussed in Table 5.8-8 below, the Project would comply with applicable 2020-2045 RTP/SCS strategies.</p>
	<p>Reduces parking requirements by: Eliminating parking requirements or including maximum parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or</p>	<p>Consistent; as described in the Project Description section of this DEIR, the Project includes a 15% parking reduction request.</p>

	<p>Providing residential parking supply at a ratio of less than one parking space per dwelling unit; or For multifamily residential development, requiring parking costs be unbundled from costs to rent or own a residential unit.</p>	
	<p>At least 20% of units included are affordable to lower-income residents.</p>	<p>Substantially Not Consistent. Although the Project does not propose “low-income housing” under HCD’s definition, the Project’s units will be substantially more affordable as compared to the cost of obtaining housing in the surrounding single-family residential neighborhoods. Thus, the Project will provide a more affordable option for lower-income residents.</p>
	<p>Results in no net loss of existing affordable units.</p>	<p>Consistent; as described in the Project Description section of this DEIR, the Project does not include the removal of affordable units.</p>
<p>Building Decarbonization</p>	<p>Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking.¹</p>	<p>Substantially consistent. The Project will be highly electrified, with natural gas use limited only to amenities and not within the individual apartment units. Additionally, the Project will provide solar panels to generate approximately 1,275,500 kWh per year. It should be noted that neither the 2023 California Building Code nor the City’s Decarbonization Ordinance require all-electric appliances for 4-story buildings, such as the Project. In addition, CARB’s scoping plan appears to</p>

¹ As identified in Table 2 of CARB’s 2022 Scoping Plan Appendix D, the recommendation to use all-electric appliances in new residential construction begins in 2026. However, this is partially based on the assumption that electricity will become increasingly “green,” with SB 100 increasing the State’s Renewable Energy Portfolio stringency to require 60 percent renewables by 2030, and for California to provide 100 percent of its retail sales of electricity from renewable and zero-carbon resources by 2045. (CARB’s Scoping Plan, p. 199.) Currently, the general power mix of Riverside Public Utilities is 45.4% Eligible Renewable, with the remainder of the electricity profile coming from other uses, such as coal and natural gas. (RPU 2022 Power Content Label) Thus, CARB’s Scoping Plan assumption that using 100% electrical appliances results in lesser GHG emissions is not fully consistent with RPU’s electricity mix.

		recommend electrical appliances for new residential builds but only beginning in 2026.
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City of Riverside RRG CAP

The RRG CAP includes individual measures that would reduce GHG emissions in the City. Consistency with these measures are discussed in Table 5.8-7 below.

Table 5.8-7 – RRG CAP Project Consistency

Measure	Description	Project Consistency
State and Regulatory Measures		
SR-1 Renewable Portfolio Standards	Utilities must secure 33% of their power from renewable sources by 2020.	Not Applicable. Establishes the minimum statewide renewable energy mix. Note: Per the RPU 2022 Power Content Mix, 45.4% was from Eligible Renewable sources (e.g., wind, solar, geothermal), which exceeds the 33% RRG CAP goal.
SR-12 2013 California Building Energy Efficiency Standards (Title 24, Part 6)	Mandatory energy efficiency standards for buildings.	Consistent. The Project will include a variety of building, water, and solid waste efficiencies consistent with current Title 24 requirements.
SR-3 HERO Residential Program	Financing for homeowners to make energy efficient, renewable energy, and water conservation improvements.	Not applicable. This objective is aimed at government agencies, not private developers.
SR-4 HERO Commercial Program	Financing for business owners to make energy efficient, renewable energy, and water conservation improvements.	Not applicable. This objective is aimed at government agencies, not private developers.
SR-6 Pavley & Low Carbon Fuel Standard	Requirements for vehicles to use cleaner fuels.	Not applicable. This objective is aimed at government agencies, not private developers. Nonetheless, vehicle efficiencies increase overtime in accordance with updates to clean vehicle and fuel standards.
SR-7 Metrolink Expansions	Additional Metrolink transit service provided to Western Riverside County.	Not applicable. The Project is a multi-family residential apartment development. As such, this measure is not within the purview of this Project.

Measure	Description	Project Consistency
SR-8 Express Lanes	Additional express lanes added along major freeways in Western Riverside County.	Not applicable. The Project is a multi-family residential apartment development. As such, this measure is not within the purview of this Project.
SR-9 Congestion Pricing	Expansion of the toll lanes along the State Route 91 (SR-91).	Not applicable. This objective is aimed at government agencies, not private developers.
SR-10 Telecommuting	Work arrangement in which employees do not commute to a central place of work.	Not applicable. The Project is a multi-family residential apartment development. As such, this measure is not within the purview of this Project.
SR-11 Goods Movement	Efficient movement of goods through inland Southern California.	Not applicable. The Project is a multi-family residential apartment development. As such, this measure is not within the purview of this Project.
SR-12 Electric Vehicle Plan and Infrastructure	Facilitate electric vehicle use by providing necessary infrastructure.	Consistent. The Project would include pre-wired electric vehicle charging spaces, as required by CALGreen Code.
SR-13 Construction and Demolition Waste Diversion	Meet mandatory requirement to divert 50% of C&D waste from landfills by 2020 and exceed requirement by diverting 75% of C&D waste from landfills by 2035.	Consistent. The Project will be required to recycle a minimum of 65 percent from construction activities and operations per State and City requirements.
Local Reduction Measures		
E-1 Traffic and Street Lights	Replace traffic and streetlights with high-efficiency bulbs.	Not applicable. This objective is aimed at government agencies, not private developers. Nonetheless, the project would comply with applicable energy efficiency requirements related to lighting detailed in the Green Building Standards Code (Title 24, California Code of Regulations).
E-2 Shade Trees	Strategically plant trees at new residential developments to reduce the urban heat island effect.	Consistent. The Project landscaping includes trees throughout the development in the common open spaces.
E-3 Local Utility Programs - Electricity	Financing and incentives for business and homeowners to make energy efficient, renewable energy, and	Not applicable. This objective is aimed at government agencies, not private developers. Nonetheless, the project would comply with applicable energy efficiency requirements related to

Measure	Description	Project Consistency
	water conservation improvements.	lighting detailed in the Green Building Standards Code (Title 24, California Code of Regulations).
E-4 Renewable Energy Production on Public Property	Large scale renewable energy installation on publicly-owned property and in public rights of way.	Not applicable. This objective is aimed at government agencies, not private developers.
E5 University of California, Riverside (UCR) Carbon Neutral Program	Collaborate with UCR to achieve a carbon neutral campus.	Not applicable. This objective is aimed at government agencies and the University of California, Riverside, not private developers.
T-1 Bicycle Infrastructure Improvements	Expand on-street and off-street bicycle infrastructure, including bicycle lanes and bicycle trails.	Not applicable. This objective is aimed at government agencies, not private developers, as bicycle lanes and trails are located in public right-of-ways. The Project does not conflict with any existing or proposed bicycle facilities.
T-2 Bicycle Parking	Provide additional options for bicycle parking.	Consistent. The Project would comply with the Riverside Municipal Code (RMC) Chapter 10.64 regarding bicycle accommodations.
T-3 End of Trip Facilities	Encourage use of non-motorized transportation modes by providing appropriate facilities and amenities for commuters.	Consistent. The Project would comply with RMC Chapter 10.64 regarding bicycle accommodations. Additionally, the Project would be located in close proximity (i.e., walking distance) to several public transportation bus stops, including the Mission Grove NS Mission Village stop and the Alessandro FS Mission Grove Parkway stop.
T-4 Promotional Transportation Demand Management	Encourage Transportation Demand Management (TDM) strategies.	Not applicable. This objective is aimed at large employment centers with 100 or more employees. The Project is a multifamily residential apartment development. As such, this measure is not within the purview of this Project.
T-5 Traffic Signal Coordination	Incorporate technology to synchronize and coordinate traffic signals along local arterials.	Not applicable. This objective is aimed at government agencies, not private developers.
T-6 Density	Improve jobs-housing balance and reduce vehicle miles traveled by increasing household and employment densities.	Consistent. The Project proposes a multifamily residential apartment development on a previously commercial-zoned site. As such, the proposed residential use will generate less traffic than a project conforming to the commercial land use designation. Additionally, the Project would increase household density with 40 DUs per acre

Measure	Description	Project Consistency
		and is located in proximity to an approved commercial use which would also help to reduce vehicle miles traveled by local residents.
T-7 Mixed-Used Development	Provide a variety of development types and uses.	Consistent. The project is a multifamily residential apartment development located in proximity to an approved commercial use which would help to reduce vehicle miles traveled by local residents.
T-8 Pedestrian Only Areas	Encourage walking by providing pedestrian-only community areas.	Consistent. The Mission Grove Apartments provides a pedestrian network along streets and on-site internal pedestrian walkways. Sidewalks are required on all arterial and collector streets. Additionally, the Project apartment complex would be located in close proximity to the adjacent shopping center as well as within walkable distance to nearby existing retail, commercial, and dining uses. The site is designed to facilitate pedestrian access from the multi-family units to the adjacent shopping center, with clear pedestrian paths of travel and protected walkways.
T-9 Limited Parking T-7 Mixed-Used Development	Reduce requirements for vehicle parking in new development projects.	Consistent. The Project would provide the minimum parking required to comply with applicable City parking requirements. A 15% parking reduction request is included to allow shared parking with the adjacent retail building.
T-10 Bus Rapid Transit Services	Implement bus rapid transit service in the subregion to provide alternative transportation options.	Not applicable. This objective is aimed at government agencies, not private developers.
T-11 Voluntary Transportation Demand Management	Encourage employers to create TDM programs for their employees.	Not applicable. This objective is aimed at large employment centers with 100 or more employees. The Project is a multifamily residential apartment development. As such, this measure is not within the purview of this Project.
T-12 Accelerated Bike Plan Implementation	Accelerate the implementation of all or specified components of a jurisdiction's adopted bike plan.	Not applicable. This objective is aimed at government agencies, not private developers. However, the proposed Project would not obstruct the implementation of the adopted bike plan.

Mission Grove Apartments Project DEIR

Greenhouse Gas Emissions

Measure	Description	Project Consistency
T-13 Fixed Guideway Transit	By 2020, complete feasibility study and by 2025 introduce a fixed-route transit service in the jurisdiction.	Not applicable. This objective is aimed at government agencies, not private developers.
T-14 Neighborhood Electric Vehicle Programs	Implement development requirements to accommodate Neighborhood Electric Vehicles and supporting infrastructure.	Not applicable. This objective is aimed at government agencies, not private developers.
T-15 Subsidized Transit	Increase access to transit by providing free or reduced passes.	Not applicable. This objective is aimed at large employment centers with 100 or more employees. The Project is a multifamily residential apartment development. As such, this measure is not within the purview of this Project.
T-16 Bike Share Program	Create nodes offering bike sharing at key locations throughout the City.	Not applicable. This objective is aimed at government agencies, not private developers.
T-17 Car Share Program	Offer Riverside residents the opportunity to use car sharing to satisfy short-term mobility needs.	Consistent. While the Project would not provide dedicated parking spaces for ride-sharing, the Project would not inhibit or prevent residents from ride-sharing. There would be adequate parking for ride-sharing vehicles and they would not impose any issues blocking circulation.
T-18 SB 743 as Alternative to LOS	Use SB 743 to incentivize development in the downtown and other areas served by transit.	Not applicable. This objective is aimed at government agencies, not private developers.
W-1 Water Conservation and Efficiency	Reduce per capita water use by 20% by 2020.	Consistent. The proposed Project would be required to be consistent with applicable water efficiency requirements detailed in the Green Building Standards Code (Title 24, California Code of Regulations). As such, the Project would be equipped with low-flow plumbing fixtures that reduce water use.
SW-1 Yard Waste Collection	Provide green waste collection bins community-wide.	Consistent. The Project would comply with applicable solid waste requirements, including providing green waste collection bins to residents.
SW-2 Food Scrap and Paper Diversion	Divert food and paper waste from landfills by	Consistent. The Project would be required to participate in applicable

Measure	Description	Project Consistency
	implementing commercial and residential collection programs.	waste diversion programs. The Project would also be subject to all applicable State and City requirements for solid waste reduction.

Additionally, the Project has been analyzed for consistency with the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) of the Southern California Association of Governments (SCAG). As part of the state’s mandate to reduce per-capita GHG emissions from automobiles and light trucks, the RTP/SCS presents strategies and tools that are consistent with local jurisdictions’ land use policies and incorporate best practices for achieving the state-mandated reductions in GHG emissions at the regional level through reduced per-capita vehicle miles traveled (VMT). The strategies are intended to be supportive of implementing the regional SCS. Several strategies are directly tied to supporting related GHG reductions while others support the broader goals of the RTP/SCS. The Project has been analyzed for consistency with applicable RTP/SCS strategies as they related to reducing GHG emissions in Table 5.8-7 below.

Table 5.8-8 – Project Consistency with Applicable RTP/SCS GHG Emissions Reduction Strategies

RTP/SCS Strategy	Project Consistency
Focus Growth Near Destinations & Mobility Options	
Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities, and connectivity in existing neighborhoods.	Consistent. The Project would include the redevelopment of underutilized, previously developed land within an existing urbanized area. Development of the Project within this location would help to increase connectivity by providing future Project residents with walkable accessibility to currently existing retail, dining, and commercial businesses within the immediate vicinity of the Project site, as well as walkable accessibility to nearby existing public transit bus stop locations.
Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)	Consistent. The Project would be developed within an existing shopping center lot, which would provide walkable accessibility to existing commercial and retail uses adjacent to the Project, such as grocery stores, dining, banks, and fitness center uses. Locating the Project closely to these existing destinations would aid in reducing reliance on and number of solo car trips.
Leverage Technology Innovations	
Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing, and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging, and parking/drop-off space	Consistent. The Project would be required to comply with applicable Title 24 standards for the provision of electric vehicle (EV) charging stations. Additionally, the Project would be located in close proximity/walkable distance to existing adjacent retail, dining, and commercial uses, which would aid in reducing vehicle emissions.
Promote a Green Region	

<p>Support local policies for renewable energy production, reduction of heat islands, and carbon sequestration</p>	<p>Consistent. The Project would be required to comply with applicable Title 24 standards for implementing solar ready infrastructure for multifamily residential buildings. The project would include solar panels with the capacity to generate approximately 1,275,500 kWh per year.</p>
<p>Promote more resource efficient development focused on conservation, recycling, and reclamation</p>	<p>Consistent. The Project would be required to comply with applicable Title 24 standards for recycling and/or salvaging for reuse a minimum of 65% of nonhazardous construction and demolition waste. Additionally, the Project would comply with applicable Title 24 standards for multifamily residential buildings for the provision of on-site areas for the depositing, storage, and collection of nonhazardous materials for recycling.</p>
<p>Reduce consumption of resource areas, including agricultural land</p>	<p>Consistent. The Project would consist of an infill redevelopment project on an underutilized, vacant, previously developed site rather than development on resource areas, such as agricultural land.</p>

As summarized by Tables 5.8-6, 5.8-7, and 5.8-8, while some measures are not directly applicable, the Project will not conflict with the provisions of the 2022 Scoping Plan, the City RRG CAP, or the RTP/SCS or conflict with their implementation and in fact supports several of the action categories. Thus, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions and potential impacts would be **less than significant**.

5.8.6 Proposed Mitigation Measures

As the Project does not exceed any of the GHG significance thresholds, no GHG-related mitigation measures have been proposed for the Project.

5.8.7 Cumulative Environmental Effects

As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and County would include residential development, warehouses, commercial, office, mixed use, and public facilities (parks). Each of the proposed developments would generate GHG emissions from vehicle trips, electrical and water use, and other sources. The analysis of GHG emissions is cumulative in nature, as emissions affect the accumulation of GHGs in the earth’s atmosphere. Projects that fall below provided thresholds are considered to have a less than significant impact, both individually and cumulatively.

The City has a number of green power projects that would reduce overall GHG emissions in the City. The City is helping fund solar projects throughout the City that will reduce emissions from energy from current users and the cumulative projects in the City. The Riverside Public Utilities (RPU) has a number of incentive programs for residences and businesses to reduce their electricity consumption and cumulatively reduce GHG emissions from energy use.

As discussed, the Project would not exceed the SCAQMD/City's screening threshold of 3,000 MTCO₂e per year, nor would the Project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions. Further, while some measures are not directly applicable, the Project will not conflict with any of the provisions of the 2022 Scoping Plan, the City RRG CAP, or RTP/SCS strategies, or conflict with their implementation; rather, the Project supports several of the action categories. Thus, the Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions and potential impacts would be **less than significant**. Therefore, cumulative impacts would be **less than significant**.

5.8.8 References

The following references were used in the preparation of this section of the DEIR:

CARB 2022a	California Air Resources Board. <i>2022 Scoping Plan for Achieving Carbon Neutrality</i> . November 2022.
CARB 2022b	California Air Resources Board. <i>2022 Scoping Plan Appendix D – Local Actions</i> . November 2022.
LSA 2023	LSA Associates. <i>Air Quality, Greenhouse Gas Emissions, and Energy Impact Analysis Memorandum for the proposed Mission Grove Apartments Project</i> . August 2023.
RRG CAP	City of Riverside. <i>Riverside Restorative Growthprint – Climate Action Plan</i> . January 2016.
SCAG 2020	Southern California Association of Governments. <i>2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments</i> . Adopted September 2020.

5.9 Hazards and Hazardous Materials

This section analyzes the effects of the proposed Project related Hazards and Hazardous Materials. Frey Environmental, Inc. completed project-specific Phase I and Phase II Environmental Site Assessments (ESAs) in December 2021 and January 2022, respectively. The reports are summarized below and included in their entirety in Appendix F of this DEIR. Additionally, the discussion and analysis contained herein is informed by the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan (adopted in 2014), the Riverside County Airport Land Use Commission (ALUC) Staff Report prepared for the Project (Case Number: ZAP1548MA22), dated September 14, 2003, and the Riverside County ALUC Development Review Letter for the Project (Case Number: ZAP1548MA22; Appendix F).

5.9.1 Setting

The proposed Project site is situated in the southeast corner of the Mission Grove Shopping Center in Riverside, California, and is currently occupied by a vacant, approximate 106,400-square-foot, single-story building and associated parking and landscaping.

The following describes the area surrounding the proposed Project location:

North: Businesses within the Mission Grove Shopping Center and associated parking areas are located to the north of the Project site including the Mission Grove Car Wash, a 76 brand gas station, restaurants, a bank, and a coffee shop.

East: The proposed Project site is bound on the east by Mission Grove Parkway South. Immediately across Mission Grove Parkway South is a shopping center with a Shell brand gas station, a Valvoline Instant Oil Change business, two restaurants, and a liquor store. Single family residential homes are located immediately southeast of the site across Mission Grove Parkway South.

South: The proposed Project site is bound to the south by Mission Village Drive. Immediately across Mission Village Drive are single family residential homes.

West: The proposed Project site is bound to the west by adjacent businesses within the Mission Grove Shopping Center, the closest two being a gaming store and a fitness club.

5.9.2 Regulatory Setting

5.9.2.1 Federal Regulations

A variety of Federal laws and regulations governing the management and control of hazardous substances have been established at the Federal level to protect the environment. Primary Federal agencies with responsibility for hazardous materials management include the United States Environmental Protection Agency (USEPA), United States Department of Labor's Occupational Safety and Health Administration (OSHA), United States Department of Transportation (USDOT), and the Nuclear Regulatory Commission (NRC). Major Federal laws and issue areas include the following statutes and regulations:

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Discovery of environmental health damage from disposal sites prompted the United States Congress to pass CERCLA, also known as Superfund. The purpose of CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

Superfund Amendments and Reauthorization Act

The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of state and local emergency planning committees, which are responsible for collecting, material handling, and transportation data for use as a basis for planning. Chemical inventory data are made available to the community at large under the “right-to-know” provision of the law. Additionally, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Resource Conservation and Recovery Act

Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from its site of generation to its ultimate disposition. The 1984 amendments to RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and contaminant systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act (HMTA) is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

Federal Aviation Regulations, Part 77

The Federal Aviation Regulations (FAR), Part 77, Objects Affecting Navigable Airspace, establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the Federal Aviation Administration (FAA) be notified of proposed construction or alteration of objects (whether permanent, temporary, or of natural growth) using FAA Form 7460-1 if those objects would be of a height that exceeds FAR Part 77 criteria. Further, FAR Part 77 regulations define a variety of imaginary surfaces at certain altitudes around airports. Surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface. Collectively, the surfaces around an airport define a bowl-shaped area with ramps sloping up from

each runway end. FAR Part 77 standards are not absolute height restrictions, but instead identify elevations at which structures may present a potential safety problem. Penetrations of the FAR Part 77 surface generally are reviewed on a case-by-case basis.

5.9.2.2 State Regulations

At the State level, California has developed hazardous waste regulations that are similar to the Federal laws, but that are more stringent in their application in some cases. The California Environmental Protection Agency (Cal/EPA) has broad jurisdiction over hazardous materials management in the State. Within Cal/EPA, the Department of Toxic Substances Control (DTSC) is the primary State agency with jurisdiction over hazardous chemical materials management. While DTSC has the primary responsibility for enforcement and implementation of hazardous waste control laws in the State, this responsibility is shared with other State and local government agencies, including the State Water Resources Control Board (SWRCB), Regional Water Quality Control Board (RWQCB), and City and County governments. Other State agencies involved in hazardous materials management are the California Department of Industrial Relations' Division of Occupational Safety and Health (Cal/OSHA), California Emergency Management Agency's Accidental Release Prevention (Cal/ARP), California Department of Fish and Wildlife (CDFW), California Air Resources Board (CARB), California Department of Transportation (Caltrans), California Office of Environmental Health Hazard Assessment (OEHHA), and the California Department of Resources Recycling and Recovery (CalRecycle). Hazardous chemical and bio-hazardous materials management laws in California include the following statutes and regulations:

California Code of Regulations

Most State and Federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. As California is a fully authorized State according to RCRA, most RCRA regulations, such as those contained in 40 Code of Federal Regulations (CFR) 260, et seq., have been duplicated and integrated into Title 22. However, since DTSC regulates hazardous waste more stringently than USEPA, the integration of State and Federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as RCRA. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste, and toxics-related regulations contained in CCR Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27, into one consolidated CCR Title 26 "Toxics." However, the California hazardous waste regulations are still commonly referred to as Title 22.

California Hazardous Material Management Act

The California Hazardous Material Management Act (HMMA) requires that businesses handling or storing certain amounts of hazardous materials prepare a Hazardous Materials Business Plan (HMBP), which includes an inventory of hazardous materials stored on site above specified

quantities, an emergency response plan, and an employee training program. Businesses that use, store, or handle 55 gallons of liquid, 500 pounds of a solid, or 200 cubic feet of a compressed gas at standard temperature and pressure require HMBPs. Plans must be prepared prior to facility operation and are reviewed/updated biennially or within 30 days of a change.

California Hazardous Waste Control Law

California Hazardous Waste Control Law (HWCL). HWCL is the primary hazardous waste statute in the State. HWCL requires a hazardous waste generator, which stores or accumulates hazardous waste for periods greater than 90 days at an on-site facility or for periods greater than 144 hours at an off-site or transfer facility that treats or transports hazardous waste, to obtain a permit to conduct such activities. HWCL implements RCRA as a “cradle-to-grave” waste management system in the State. HWCL specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure their proper management. HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reused as raw materials. HWCL exceeds Federal requirements by mandating source reduction planning and a much broader requirement for permitting facilities that treat hazardous waste. It also regulates the number of types of wastes and waste management activities that are not covered under Federal law with RCRA.

State Aeronautics Act

The State Aeronautics Act, which is codified in Public Utilities Code Section 21670, et seq., establishes the requirement for the creation of airport land use commissions for every county in which an airport is located that is served by a scheduled airline. Additionally, these sections of the Public Utilities Code mandate the preparation of Comprehensive Land Use Plans (CLUP) to provide for the orderly growth of each public airport and the area surrounding the airport. The purpose of CLUPs includes the protection of the general welfare of inhabitants within the vicinity of the airport and the general public.

California Emergency Services Act

California Government Code 8550-8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, manmade, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the State. The general purpose is to protect the health and safety and preserve the lives and property of the people of the State.

California Division of Occupational Safety and Health

Occupational safety standards exist in Federal and State laws to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA obligates many businesses to prepare Injury and Illness

Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC is based on the International Building Code but has been amended for California conditions. The CBC is updated every three years, and the current 2022 CBC went into effect January 1, 2023. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of fire sprinklers in new construction (unless otherwise exempt or using alternative fire suppression systems); the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The CFC, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2022 CFC went into effect January 1, 2023. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The CFC regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

5.9.2.3 Regional Regulations

Riverside County Hazardous Waste Management Plan

The Riverside County Hazardous Waste Management Plan (CHWMP) identifies current and projected future hazardous waste generation and management needs throughout the County. CHWMP also provides a framework for the development of facilities to manage hazardous wastes, i.e., facility siting criteria, and includes a Households Hazardous Waste Element that is designed to divert household hazardous wastes from County landfills. CHWMP addresses only those hazardous waste issues with which local governments have responsibilities, namely land use decisions. The County and cities are required to implement facility siting policies and criteria within local planning and permitting processes. Accordingly, the City of Riverside implements applicable portions of CHWMP.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the

adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base (MARB)/Inland Port Airport (IPA) Land Use Compatibility Plan (LUCP). The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

The Project site is located within Compatibility Zone C2 of the MARB/IPA LUCP. Per Table MA-1 – Compatibility Zone Factors of the MARB/IPA LUCP, Zone C2 is a Flight Corridor Zone with Noise and Overflight Factors and Safety and Airspace Protection Factors as follows:

Zone	Noise and Overflight Factors	Safety and Airspace Protection Factors
C2 Flight Corridor Zone	Noise Impact: Moderate <ul style="list-style-type: none"> ➤ Within 60 CNEL contour, but more than 5 miles from runway end; or ➤ Outside 60-CNEL contour, but regularly overflowed in mostly daytime flight training ➤ Single-event noise may be disruptive to noise-sensitive land use activities; aircraft <3,000 feet above runway elevation on arrival 	Risk Level: Moderate to Low <ul style="list-style-type: none"> ➤ Distant (beyond 5 miles) portion of instrument arrival corridor; or ➤ Closed-circuit flight training activity corridors

Per Table MA-2 – Basic Compatibility Criteria, Zone C2 is a Flight Corridor Zone with density/intensity standards, prohibited uses, and other development conditions as follows:

Zone	Residential, Other Uses – Average and Single Acre, Required Open Space	Prohibited Uses	Other Development Conditions
C2 Flight Corridor Zone	<p>≤6.0 dwelling unit/acre</p> <p>200 people/acre (average)</p> <p>500 people/acre (single acre)</p> <p>Open Land - Not Required</p>	<ul style="list-style-type: none"> ➤ Highly noise-sensitive outdoor nonresidential uses ➤ Hazards to flight 	<ul style="list-style-type: none"> ➤ Children’s schools discouraged ➤ Airspace review required for objects > 70 feet tall ➤ Electromagnetic radiation notification ➤ Deed notice and disclosure

5.9.2.4 Local Regulations

Riverside General Plan 2025

The GP 2025 contains a guiding principle and policies to protect against public safety issues within the City in the Public Safety Element, Phase 1 General Plan Update – Adopted 2021.

Guiding Principle: Comprehensively address the public safety needs and concerns of its residents, businesses, institutions, and visitors in a proactive and coordinated way to ensure protection from foreseeable natural and human-caused hazards.

Policy PSE-2 – Hazardous Materials

Provide high-quality and responsive police, fire, and emergency services to all residents and businesses in Riverside.

Policy PSE-3 – Transportation

Minimize the risk of potential hazards associated with air and ground transportation.

Policy PSE-4 – Emergency Services

Provide high-quality and responsive police, fire, and emergency services to all residents and businesses in Riverside.

Objective LU-22: Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port, Riverside Municipal and Flabob Airports.

Policy LU-22.3: Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of residential and/or commercial facilities within identified airport safety zones and areas already impacted by current or projected airport noise.

Policy LU-22.5: Review all proposed projects within the airport influence areas of Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport as noted in the Public Safety Element (Figure PS-6A – Riverside Municipal and Flabob Airport Safety Zones and Influence Areas; and Figure PS-6B – March ARB/IPA Airport Safety Zones and Influence Areas) for consistency with all applicable airport land use compatibility plan policies adopted by the Riverside County Airport Land Use Commission (ALUC) and the City of Riverside, to the fullest extent the City finds feasible.

Policy LU-22.7: Prior to the adoption or amendment of the General Plan or any specific plan, zoning ordinance or building regulation affecting land within the airport influence areas of the airport land use compatibility plan for Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport, refer such proposed actions for determination and processing by the ALUC as provided by Public Utilities Code Section 21670.

Policy LU-22.9: All development proposals within an airport influence area and subject to ALUC review will also be submitted to the manager of the affected airport for comment.

Riverside Municipal Code

Section 9.48 of the Riverside Municipal Code requires that any person who uses or handles hazardous materials or mixtures containing hazardous materials in an amount equal to, or greater than: (i) five hundred pounds, (ii) fifty-five gallons, (iii) two hundred cubic feet at standard room temperature and pressure for compressed gas, (iv) ten pounds for organic peroxides, or (v) any known or suspected carcinogen, radioactive material, Class A poison, Class A or Class B explosive, shall, during the month of January prepare and submit a completed inventory form and file a hazardous materials business plan with the City Fire Department. It is not anticipated that the proposed apartments Project would use or handle hazardous materials that meet the requirement to file a hazardous materials business plan with the City Fire Department in accordance with Section 9.48 of the RMC.

Title 16 of the Riverside Municipal Code – Buildings and Construction provides minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the City. The proposed apartment buildings shall be constructed in accordance with Title 16 or the RMC. A permit may be withheld or denied if the Building Official finds there are existing on-site violations of the provisions of Chapter 16.04 through 16.20 or any other ordinance of the City.

Title 17 of the Riverside Municipal Code sets forth rules and regulations which will further implement the goals, and objectives of the GP 2025 in order to control evacuation, grading, and earthwork construction. In addition, Title 17 establishes the administrative procedures for grading plan approval, issuance of permits, inspections, and penalties for unauthorized grading activity.

5.9.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to hazards or hazardous materials.

5.9.4 Project Design Considerations

There are no Project-specific design considerations proposed that relate to hazardous materials. However, the Project plans include a Fire Access Plan and the Project will provide adequate fire access to ensure the safety of the residents. The fire access will leave room for the fire trucks to come in and out of the Project site and will allow them to reach all areas of the site in case of a fire. As RFD requires a minimum 20-foot-wide fire lane, the Project's fire access will have a clear fire lane/fire access to allow room for the fire trucks to navigate through the Project. There will be 4 fire hydrants throughout the site and three additional along the Project's frontage with Mission Village Drive and Mission Grove Parkway South.

5.9.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- (Threshold B) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- (Threshold C) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- (Threshold D) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- (Threshold E) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;

- (Threshold F) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- (Threshold G) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

5.9.6 Environmental Impacts before Mitigation

Threshold A: *Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Construction of the proposed Project has the potential to create a hazard to the public or environment through the transportation, use, and disposal of construction-related hazardous materials such as fuels, oils, solvents, and other materials. These materials are typical materials delivered to construction sites. However, due to the limited quantities of these materials to be used by the proposed Project, they are not considered hazardous to the public at large. In accordance with the City's Hazardous Materials Policy, the transport, use, and storage of hazardous materials during the construction and operation of the site would be conducted pursuant to all applicable local, State, and federal laws, and in cooperation with the County's Department of Environmental Health. Title 49 of the Code of Federal Regulations (CFR) implemented by Title 13 of the CCR describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable local, State, and federal laws related to the transportation, use, and storage of hazardous materials would reduce the likelihood and severity of accidents during transit, use, and storage.

With regard to the proposed Project operations, widely used hazardous materials common for residential uses include paints and other solvents, cleaners, and pesticides. As required by California Health and Safety Code Section 25507, a business shall establish and implement a Hazardous Materials Business Emergency Plan for emergency response to a release or threatened release of a hazardous material in accordance with the standards prescribed in the regulations adopted pursuant to Section 25503 if the business handles a hazardous material or a mixture containing a hazardous material that has a quantity, at any one time, above the thresholds described in Section 25507(a)(1) through (6). Furthermore, the proposed land use, as residential, would not entail the manufacturing or disposal of hazardous materials. Compliance with all applicable local, State and federal laws would ensure a **less than significant impact** from routine transport, use, or disposal of hazardous materials.

Threshold B: *Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

The transportation of hazardous materials can result in accidental spills, leaks, toxic releases, fire, or explosion. It is possible that licensed vendors could bring some hazardous materials to and from the site as a result of the proposed Project. However, appropriate documentation for all hazardous waste that is transported in connection with specific Project-site activities would be

provided in compliance with existing hazardous materials regulations codified in Titles 8, 22, and 26 of the CCR, and their enabling legislation set forth in Chapter 6.95 of the CHSC. In addition, future users would be required to comply with all applicable Federal, State, and local laws and regulations pertaining to the transport, use, disposal, handling, and storage of hazardous waste, including but not limited to the USDOT Office of Hazardous Materials Safety Title 49 of the CFR, and implemented by Title 13 of the CCR which prescribes strict regulations for the safe transportation of hazardous materials. Compliance with the applicable Federal and State laws related to the transportation of hazardous materials would reduce the likelihood and severity of accidents during transit; therefore, impacts would be less than significant.

Hazardous materials are required to be stored in designated areas designed to prevent accidental release to the environment. The CFC requirements prescribe safe accommodations for materials that present a moderate explosion hazard, high fire or physical hazard, or health hazards. Compliance with all applicable Federal and State laws related to the storage of hazardous materials would maximize containment and provide for prompt and effective clean-up if an accidental release occurs.

Project-specific Phase I and Phase II ESAs were prepared for the proposed Project. (Frey, 2021 and Frey, 2022) The site inspection included a visual review of the Site for past or present use, storage, handling, and disposal of potentially hazardous substances, and possible future releases of such substances. In addition to a site inspection, information for the proposed Project site and surrounding area was reviewed to assess potential on-site and off-site sources of chemicals of concern (COCs) in soil and groundwater beneath the proposed Project site. The following definitions are used:

- *Recognized Environmental Conditions (RECs)*, as defined in ASTM 1527-13, are the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not RECs.
- *Controlled Recognized Environmental Condition (CREC)*, as defined in ASTM 1527-13, is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority with hazardous substances or petroleum products allowed to remain in place, subject to the implementation of required controls.
- *Historical Recognized Environmental Condition (HREC)*, as defined in ASTM 1527-13, is a past release of any hazardous substance or petroleum product that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meets un-restricted use criteria established by a regulatory authority, without subjecting the property to any required controls.
- *Vapor Encroachment Condition (VEC)*, as defined in ASTM E2600-15, is the presence or likely presence of vapor phase chemical(s) of concern (COC) in the subsurface of the

target property as identified during the vapor encroachment screening process (ASTM, 2015).

Phase I ESA Results:

No on-site RECs, HRECs, or CRECs were identified in the Phase I ESA report.

The Phase I ESA report identified the following RECs and VECs at four off-site properties:

1. A Leaking Underground Storage Tank (LUST) cleanup case was closed in 2008 for a gas station located at 401 East Alessandro Boulevard. Based on soil and groundwater investigations at this property, it did not appear that the chemicals of concern (COCs) had migrated off the facility property. However, this facility is currently an active gas station, with USTs located approximately 400 feet north-northeast of the proposed Project site. Based on the proximity to the site and the hydrogeologic upgradient location, should an unauthorized release of petroleum hydrocarbons have occurred at this facility, post LUST case closure, the potential exists that petroleum hydrocarbon COCs could migrate from this facility property through shallow groundwater and to the proposed Project site. As such this facility is considered a REC and a VEC.
2. Valvoline Instant Oil Change at 7540 South Mission Grove Parkway and 250 feet east-northeast of the proposed Project site is listed as a permitted UST facility. Should an unauthorized release of COCs have occurred at this facility, the potential exists that COCs could migrate onto and negatively impact the proposed Project site, as such, this facility is considered a REC and a VEC.
3. Mission Grove Plaza Gas Station at 381 East Alessandro Boulevard is listed as a permitted UST facility with USTs located approximately 250 feet north-northeast of the proposed Project site. Due to the regulatory database information reviewed, the proximity to the site, and the hydrogeologic upgradient location relative to the site, should an unauthorized release of petroleum hydrocarbons have occurred at this facility, the potential exists that petroleum hydrocarbon COCs could migrate from this facility and negatively impact the proposed Project site. This facility is considered a REC and a VEC.
4. Mission Grove Cleaners, located at 231 East Alessandro Boulevard and 500 feet west of the proposed Project site, is listed was identified in various database listings. This facility has operated at this address since 1994 and is reported to have used halogenated dry cleaning solvents, in particular PCE, which is a highly volatile and carcinogenic COC. This facility is a REC and a VEC, however based on the hydrogeologic cross-gradient location relative to the site, the likelihood that an unauthorized release of solvent based COCs has occurred at this facility and has potentially migrated to the proposed Project site appears relatively low.

No other off-site RECs, HRECs, or CRECs were identified.

Phase II ESA Results:

As a result of the Phase I ESA findings, a Phase II ESA was conducted to evaluate whether a vapor intrusion risk exists for the planned residential buildings from four off-site properties classified as RECs and VECs in the Phase I ESA report.

Soil samples from 6 borings were examined to characterize the soil lithology and to look for evidence of the presence of chemicals of potential concern (COPCs). The soil samples were also screened in the field for undifferentiated volatile organic compounds (UVOCs) using a photo ionization detector (PID). Subsurface soil encountered during the advancement of soil borings consisted primarily of gravelly sand (decomposed granite) in all soil borings. Groundwater was not encountered during the advancement of the soil borings. A total of six soil vapor samples were collected and analyzed for total petroleum hydrocarbons as gasoline (TPHg) and VOCs during the Phase II ESA. Concentrations of bromodichloromethane and chloroform in one of the soil vapor samples collected (VP5) slightly exceeded one or more regulatory screening level. No other compounds were detected over any regulatory screening levels in any soil vapor samples.

Based on the results of this environmental site assessment, the Phase II ESA concludes that the off-site RECs listed in the Phase I report do not appear to have environmentally impacted the locations of the proposed buildings at the Project site.

Based on the results of the Phase I and Phase II ESAs, no further action was recommended. Thus, because future use will be subject to Federal, State, and local regulations, potential impacts related to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment are **less than significant**.

Threshold C: *Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

The proposed Project operations are anticipated to use hazardous materials common for residential uses, including paints and other solvents, cleaners, and pesticides. The proposed land use, as residential, would not entail the emitting hazardous emissions or handle hazardous or acutely hazardous materials or substances.

The proposed Project site is not located within one-quarter mile of an existing or proposed school site. The schools nearest the Project site are: 1) Taft Elementary School, located at 959 Mission Grove Parkway North in the City of Riverside (approximately 1.03 miles northwest of the Project site); and 2) John F. Kennedy Elementary School, located at 19125 Schoolhouse Lane in the City of Riverside (approximately 1.15 miles southwest of the Project site). As both schools are located over one-quarter mile away from the Project site, the proposed Project would have **no impact** regarding emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Threshold D: *Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Further, as discussed in Threshold B above, the Phase I ESA identified LUSTs in the vicinity of, but not within, the Project site; the Phase II ESA concluded that the off-site RECs listed in the Phase I report do not appear to have environmentally impacted the location of the proposed Project site. Therefore, potential impacts would be **less than significant**.

Threshold E: *Would the Project be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

Riverside County ALUC Consistency with MARB/IPA Analysis and Findings

The Project site is located within the March Air Reserve Base (MARB) airport influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Riverside County Airport Land Use Commission (ALUC) prepared a Staff Report (dated September 14, 2023) analyzing the Project's consistency with applicable airport land use compatibility criteria as outlined in further detail below. On September 14, 2023, the Riverside County ALUC, by a 5-0 vote, found the proposed Project inconsistent with the 2014 MARB/IPA LUCP, based on the findings of the Staff Report, that the project is inconsistent with the required residential density criteria. The Riverside County ALUC Staff Report concluded that the proposed Project would be inconsistent with the airport land use compatibility plan criteria and the City adopted General Plan and Zoning Ordinance based on the following points.

Residential Density

Pursuant to the MARB/IPA LUCP, the project site is located within Compatibility Zone C2, which restricts residential density to a maximum of 6.0 dwelling units per acre (du/ac). The proposed Project includes 347 multi-family units on 9.92 acres, which results in a density of 35.0 dwelling units per acre. The Zone C2, in which the Project is located, is identified as a Flight Corridor Zone, where the risk level is considered "moderate" in the ALUC Countywide Policies Table 3A – Compatibility Zone Factors. Per Table 3A – Compatibility Zone Factors, "some 10% to 15% of off-runway general aviation accidents near airports occur in this zone," in reference to Compatibility Zone C2. Based on these safety factors, the intent and purpose of Compatibility Zone C2 is to restrict residential density in order to limit the potential risk of an off-field aircraft landing. The Project's proposed residential density of 35.0 du/ac exceeds the maximum allowable residential density for Zone C2 of 6.0 du/ac.

County Wide Policy 3.3.1 Infill

Countywide Policy 3.3.1 (Infill) allows for greater densities than would otherwise be permitted in Compatibility Zone C2, but caps densities at double the allowable density of the zone. As the maximum density of the zone is 6.0 du/ac, doubling the density increases

the limit from 6.0 to 12.0 du/ac, which the proposed Project's density of 35.0 du/ac would significantly exceed.

As designed for the March Air Reserve Base environs, Compatibility Zone C2 would allow an average of 200 people per acre and a single acre land use intensity of 500 persons.

Non-Residential Average Intensity

Pursuant to the MARB/IPA LUCP, the non-residential average intensity for Compatibility Zone C2 is limited to 200 people per acre. Per Appendix C, Table C-1 of the MARB/IPA LUCP and the Additional Compatibility Policies included in the MARB/IPA LUCP the following rates were used to calculate the occupancy for the proposed Project:

- Office area – 1 person per 200 square feet (SF);
- Exercise Room area – 1 person per 50 SF,
- Pool area – 1 person per 50 SF;
- Pool Deck area – 1 person per 15 SF; and
- Club area – 1 person per 15 SF.

As the Project includes construction of a 347-unit multi-family development including recreational amenities including 2,963 SF of leasing office area, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, accommodating a total occupancy of 311 people, resulting in an average intensity of 31 people per acre, which is consistent with the Compatibility Zone C2 average intensity of 200 people per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle). Based on the number of parking spaces provided (347 standard vehicles) the total occupancy would be estimated at 521 people for an average intensity of 53 people per acre, which is consistent with the Compatibility Zone C2 average intensity criterion of 200 people per acre.

Non-Residential Single-Acre Intensity

Pursuant to the MARB/IPA LUCP, Compatibility Zone C2 limits maximum single-acre intensity to 500 people. There are no risk-reduction design bonuses available as MARB/IPA is primarily utilized by large aircraft weighing more than 12,500 pounds. Based on the Project site plan and the occupancies previously calculated/noted, the maximum single-acre area would occur around the multi-family residential amenities which includes 2,963 SF of leasing office, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, resulting in a single acre occupancy of 311 people, which would be consistent with the Compatibility Zone C2 single-acre intensity criterion of 500 people.

Flight Hazard Issues

Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The Project's photovoltaic (PV) panel structures would be located on the building rooftops and carports within the Compatibility Zone C2.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Project on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. Potential for temporary after-image ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The proposed Project includes approximately 40,000 SF of solar panels on the building rooftops and carports. Two solar glare studies were prepared for the proposed Project utilizing web-based Forge Solar which analyzed 1) panels with a fixed tilt of 5 degrees with no rotation and orientation of 180 degrees with a height of 45 feet. The analysis concluded that some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in no glare or a low potential for temporary after-image ("green" level glare). The glare created by the Project would range between 39,047 minutes and 40,044 minutes of "green" level glare, which represents less than 20 percent of total day light time. The Riverside County ALUC has a policy that any proposed development with solar arrays should not have more than 60,000 minutes or roughly 20 percent of daylight minutes annually in predicted glare impact and the Project would not create glare that would exceed this Riverside County ALUC policy.

Electrical and Communication Interference

The proposed Project does not include the use of equipment that would interfere with aircraft communications. The solar panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the Project site.

March Air Reserve Base/United States Air Force Input

Given that the project site is located in Zone C2 westerly of the northerly runway at March Air Reserve Base, the Base staff was notified of the project, and sent plans and the solar glare hazard study for their review. On July 31, 2023, the Air Force provided comments supporting ALUC's recommendation of inconsistency due to concerns with the project's inconsistent density.

Prohibited and Discouraged Uses

The project does not propose any uses specifically prohibited or discouraged in Compatibility Zone C2 (highly noise-sensitive outdoor nonresidential uses), other than the inconsistent density.

Noise

The MARB/IPA LUCP depicts the site as being below the 60 CNEL range from aircraft noise. Therefore, no special measures are required to mitigate aircraft-generated noise.

PAR 77 (Structure Height)

At a distance of approximately 17,464 feet from the Project site to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,710 feet above mean sea level (amsl). The Project site's finished floor elevation is 1,595 feet amsl and proposed building height is 57'2" feet, resulting in a top point elevation of 1,652'2" amsl. Therefore, review of the building for height/elevation reasons by the FAA Obstruction Evaluation Service (FAAOES) is not required.

In summary, the Riverside County ALUC Staff Report for the project concluded that the project was inconsistent with the MARB/IPA ALUCP based on the following:

- It exceeds the Zone C2 residential density criteria maximum of 6.0 du/ac.

The Riverside County ALUC Staff Report for the project concluded that the project was consistent with the following MARB/IPA ALUCP criteria:

- Non-residential average intensity (calculating with two different methods);
- Non-residential single-acre intensity.

City of Riverside Consistency with MARB/IPA Analysis and Findings

Residential Density

The Project site is located within Compatibility Zone C2, which restricts residential density to a maximum of 6.0 dwelling units per acre (du/ac). The proposed Project includes 347 multi-family units on 9.92 acres, which results in a density of 35.0 dwelling units per acre. The Project's proposed residential density of 35.0 du/ac exceeds the maximum allowable residential density for Zone C2.

Non-Residential Average Intensity

The non-residential average intensity for Compatibility Zone C2 is limited to 200 people per acre. The proposed Project includes construction of a 347-unit multi-family development including recreational amenities including 2,963 SF of leasing office area, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, accommodating a total occupancy of 311 people, resulting in an average intensity of 31 people per acre, which does not exceed and is consistent with the Compatibility Zone C2 average intensity of 200 people per acre.

The project is also consistent with non-residential intensity requirements using a second method based on the number of parking spaces provided by the Project. For determining total occupancy, the total number of parking spaces provided or required for the Project (whichever is greater) is multiplied by an average vehicle occupancy per vehicle, which is assumed to be 1.5 persons per vehicle. As outlined in the project description section (Section 3.0 – Project Description) the Project is providing a total of 604 parking spaces (not 347 as utilized in ALUC's calculation). Based on the number of parking spaces provided, the total occupancy would be estimated at 906 people, for an average intensity of 91 people per acre, which does not exceed and is consistent with the Compatibility Zone C2 average intensity criterion of 200 people per acre. The Project's average intensity of 91 people per acre is considerably lower than the C2 average intensity criterion of 200 people per acre. While the unit count may exceed ALUC's residential density requirements, the actual amount of people onsite would be much lower than what ALUC would allow in Zone C2 if this were a commercial development, and accordingly would not impose a safety impact due to the intensity of people onsite in the event of an emergency.

Flight Hazard Issues

Structure height, electrical interference, and reflectivity/glare are potential flight hazard issues from solar panels being utilized in the airport influence area. The Project's photovoltaic (PV) panel structures would be located on the building rooftops and carports within Compatibility Zone C2.

Height

The FAA FAR Part 77 Surface Map is a map used by the FAA and the ALUC to identify potential obstructions and hazards to aviation traffic. The ALUC uses the map as a height restriction boundary for the purposes of making consistency determinations with its ALUCP. The elevation of Runway 14-32 at its northerly terminus is 1,535 feet amsl. The Project at a distance of approximately 17,464 feet from the nearest point on the runway, would require FAA review if the top roof exceeded 1,710 feet amsl. The Project site's finished floor elevation is 1,595 feet amsl and the proposed maximum building height is 57'2" feet, resulting in a top point elevation of 1,652'2" feet amsl. Therefore, FAAOES review is not required. The Project is in compliance with and will have no impact related to FAA FAR Par 77 regulations.

The Project proposes to develop five, 4-story buildings with a maximum height of 57'2" feet. This is below the proposed Mixed Use – Urban (MU-U) maximum height of 60 feet and well below the current Commercial Retail (CR) maximum height of 75 feet. Development of the Project, as well as the proposed General Plan amendment (GPA) and change of zone (ZC) will result in reduced maximum height than what is allowed under the proposed GPA and ZC and what is currently allowed for the site. The Project would not impose a safety hazard due to height.

Electrical Interference

There are no radar transmission or receiving facilities within the Project site. The Project's solar panels are low profile and present little risk of interfering with radar transmission. In addition, the solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried

beneath the ground and away from any signal transmission. The Project will not utilize equipment that would interfere with aircraft communications.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Project on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. Potential for temporary after-image ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The proposed Project includes approximately 40,000 SF of solar panels on the building rooftops and carports. Based on the results of the glint and glare analysis the following are the key results:

- No significant (red glare) glint and glare impacts on key receptors are predicted.
- No impacts from glare were predicted on the final approach flight paths.
- Minor (green) impacts from glare, "glare with low potential to cause temporary after-image," were predicted; 44,049 minutes of "green" glare were predicted of annual daylight hours. Which would be approximately 16.7 percent of the total number of minutes of sunlight in a standard year. The proposed Project is in compliance with Riverside County ALUC policy that any proposed development with solar arrays should not have more than 20 percent of daylight minutes. The anticipated amount of green glare produced annually from the Project is below ALUC's threshold of 20% of daylight minutes.

Therefore, the Project's solar panels would not result in solar glare impacts on MARB/IPA flight operations.

The Project site is currently a part of the Mission Grove Plaza Shopping Center and will continue to share parking spaces with the commercial development upon Project implementation. As such, ample open space is provided adjacent to the Project in the event an aircraft requires an emergency landing.

The Project will comply with the recommended ALUC conditions of approval, including restrictions on outdoor lighting, prohibited uses, and notices and informational brochures for prospective purchasers and tenants. The Project will also comply with recommended conditions related to light and glare with minor modifications, to continue to ensure safety, but allow for flexibility in the final design of the Project's solar panels. The City of Riverside recommended conditions of approval are outlined below.

Riverside County Recommended ALUC conditions:

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.

2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.
 - b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
 - d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - e. Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.
 - f. Other Hazards to flight.
3. The “Notice of Airport in Vicinity” that was provided in the ALUC Staff Report for the Project shall be provided to all prospective purchasers and occupants of the property and be recorded as a deed notice.
4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC “LANDSCAPING NEAR AIRPORTS” brochure, and the “AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT” brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or

other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
6. The project has been evaluated to construct a multi-family development consisting of 347 multi-family residential units, pool area, leasing office, club area, and fitness center. Any increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.
7. All solar arrays installed on the project site shall consist of photovoltaic solar panels that are consistent with the specifications described in the glare study, which projects 44,049 minutes of solar glare annually based on the proposed Project. Any deviation that exceeds 20 percent of annual daylight minutes should be analyzed in an updated solar glare study which shall be submitted to ALUC. If the updated solar glare study results in a) more than 20 percent of annual solar glare minutes, b) any glare impacting the air traffic control tower, or c) creation of any "yellow" or "red" level glare in the flight paths, then the amended project shall require a new hearing by the Airport Land Use Commission.
8. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An "event" includes any situation that results in an accident, incident, "near-miss," or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary

remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

9. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An "event" includes any situation that results in an accident, incident, "near-miss," report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator's satisfaction.

The Project would be consistent with Compatibility Zone C2's non-residential density, height of structures, glare, electrical interference and there would be no safety issues related to these topics. However, the Project would be inconsistent with the allowable maximum residential density criteria for the Compatibility Zone C2. Due to the inconsistency of the maximum residential density, the project would result in a **significant and unavoidable impact**. There are no feasible mitigation measures that would reduce impacts related to inconsistency with the residential density criteria.

The City Council of the City of Riverside, by a two-thirds vote (per RMC Title 19), has the authority to overrule the Riverside County ALUC decision based on specific findings that the proposed Project is consistent with the purposes of ALUC law to protect public health, safety and welfare ensuring (1) the orderly expansion of airports, and (2) the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The Project is consistent with the purpose and intent of ALUC law and the MARB/IPA LUCP based on the following:

- 1) The Project is consistent with the residential development surrounding MARB/IPA, specifically in Zone C2 and will not result in the encroachment of incompatible residential densities affecting current or future March ARB/IPA operations. The Project involves the redevelopment of an underutilized commercial parcel with a multi-family residential development. The Project's proposed General Plan designation and zoning of Mixed Use-Urban, is consistent with surrounding development, and would assist in transitioning between commercial and single-family residential uses.

The Project site is bordered on the north, west, and east (across Mission Grove Parkway) by the Mission Grove Plaza Shopping Center, which has a General Plan Land Use Designation of C – Commercial and is zoned CR-SP – Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and is developed with retail uses. Multi-family residences are located further north (across Alessandro Boulevard), which have a General

Plan Land Use Designation of HDR – High-Density Residential, and area zoned R-3-3000-SP – Multi-Family Residential and Specific Plan (Mission Grove) Overlay Zones. The Project site is bordered on the south by a single-family residential neighborhood (across Mission Village Drive), which has a General Plan Land Use Designation of Medium High Density Residential (MHDR) and is zoned R-1-7000-SP – Single Family Residential and Specific Plan (Mission Grove) Overlay Zones.

Several multi-family residential uses are located in Zone C2, near the Project site. There is a condominium complex, Mission Villas, located at 200 E. Alessandro Boulevard, adjacent to the Project site, across from Alessandro Boulevard. The Mission Grove Park apartments, located at 7450 Northrop Drive, are located closer to the end of Runway 14-32 than the Project. Mission Grove Park consists of 432 units and has a density of 16 dwelling units per acre. Estancia, located at 7871 Mission Grove Parkway South, consists of 208 units and has a density of 1.3 du/ac. The Project is consistent with other multi-family residential developments in the C2 Zone. Additionally, the Project consist of infill development of a commercial site. The vast majority of Zone C2 in the City of Riverside has been built out, largely by single family residences. Few infill sites, such as the Project are available for development. As such, the Project would not encourage other developments to exceed Zone C2 density standards or encroach upon MARB/IPA operations.

Therefore, the Project will not affect the orderly expansion of the MARB/IPA.

- 2) The Project is consistent with the aircraft noise standards of the ALUCP and the requirements of Public Utilities Code (PUC) Section 21670. The MARB/IPA ALUCP provides the CNEL considered normally acceptable for new residential uses in the vicinity of MARB/IPA, which is 65 dBA. The Project site is approximately 3.3 miles from the end of Runway 14-32. The MARB/IPA ALUCP depicts the site as being below the 60 CNEL range from aircraft noise. Therefore, ALUC found no special measures were required to mitigate aircraft-generated noise. Because the Project is consistent with the noise standards in the March MARB/IPA ALUCP, the Project also complies with noise standards in the City of Riverside General Plan (General Plan Noise Element, Figure N-10). While multi-family or mixed uses are not defined in the City’s General Plan Noise Element, the “normally acceptable” noise level for an infill single family residential use is between 55 and 65 dBA CNEL. The General Plan Noise Element Figure N-9 shows the Project site as being just outside the 60-65 dB CNEL noise contour projected for MARB/IPA operations. Accordingly, noise exposure from MARB/IPA would not exceed normally acceptable levels for the Project site.

The Project will comply with the Riverside Municipal Code requirements regarding construction noise and will not compound noise related to MARB/IPA operations. All construction would take place between 7:00 am and 7:00 pm on weekdays, 8:00 am and 5:00 pm on Saturdays, and would not take place at any time on Sundays or federal holidays.

Consistent with MARB/IPA ALUCP, the Project will utilize standard construction techniques to ensure interior noise levels from aviation-related sources are no more than CNEL 40 dB.

The Project will comply with ALUC noticing conditions and will provide a “Notice of Airport in Vicinity” to all prospective purchasers and occupants of the property.

The Project does not propose any uses specifically prohibited or discouraged in compatibility Zone C2 (highly noise-sensitive outdoor nonresidential uses), such as major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters. The Project also does not propose noise sensitive uses such as children’s schools, day care centers, libraries, hospitals, or nursing homes.

Therefore, the Project minimizes the public’s exposure to excessive noise and safety hazards within areas around MARB/IPA.

A City Council proposed overrule of an ALUC action must provide a copy of the proposed decision and findings to both ALUC and the California Division of Aeronautics, a minimum of 45 days prior to decision to overrule ALUC. These agencies have 30 days in which to provide comments to City Council.

Threshold F: *Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The Project will be served by Mission Grove Parkway South and Mission Village Drive. No street closures are required during the Project’s construction. Per the GP 2025, Public Safety Element Technical Background Report (TBR), Figure CP-8: Evacuation Routes, Alessandro Boulevard is an arterial evacuation route and the SR-60 and I-215 are designated as freeway evacuation routes. Thus, the Project site is located adjacent to and has access to Alessandro Boulevard and SR-60 and I-215, designated evacuation routes.

Emergency response and evacuation procedures would be coordinated through the City in coordination with the police and RFD. The Project would not impair an adopted emergency response plan or evacuation plan and would comply with necessary procedures. The Project’s surrounding roadways would continue to provide emergency access to the Project area and to surrounding properties during construction and operation of the Project. Therefore, the Project would not impair implementation of or physically interfere with an emergency response or evacuation plan and potential impacts would be **less than significant**.

Threshold G: *Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

The Project site is bordered by Mission Grove Parkway South to the east and Mission Village Drive to the south. The Project site has the Mission Grove Shopping Center and parking to the north and west. Outside of the shopping center is existing residential development to the south, west and north, and commercial/retail to the east. The only open space area with vegetation that could fuel a wildland fire near the Project site is the Sycamore Canyon Wilderness Park, located approximately 3,500 feet to the northeast. If there were a wildland fire in the Sycamore Canyon Wilderness Park it would not be expected to spread to the Project site due to the distance between them and separation by existing development and Alessandro Boulevard. And for these same reasons, if a fire were to occur at the Project site it would not be expected to spread to the Sycamore Canyon Wilderness Park.

The Project will incorporate RMC standards related to fire suppression at the Project site such as smoke detectors meeting the current CBC and CFCs installed in all units and other enclosed common areas such as hallways, recreation rooms, and utility rooms. Additional fire suppression equipment such as alarm systems, fire extinguishers and sprinklers will also be incorporated as recommended by the RFD. Furthermore, Project structures would be required to comply with the CFC with regard to emergency fire access and use of building materials that would limit the spread of wildfire to the greatest extent possible.

The nearest fire stations are Orangecrest Station No. 11, located at 19595 Orange Terrace Parkway and Canyon Crest Station No. 9, located at 6674 Alessandro Boulevard, both of which are less than 2 miles from the Project site. Due to the Project's close proximity to existing fire stations, adequate response times can be provided by RFD. Also, the Project plans include a Fire Access Plan which demonstrates adequate fire access will be provided.

The Project would be constructed in compliance with the CFC and CBC, along with being compliant with the GP 2025 and RFD requirements. The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be **less than significant** with compliance with the CFC and CBC and implementation of design considerations.

5.9.7 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). As discussed, the Project would be inconsistent with one applicable MARB/IPA LUCP land use compatibility criteria. While the project is inconsistent with density criteria for Zone C2 it is otherwise wholly consistent with all other criteria. Due to the inconsistency of the maximum residential density, the Project would result in a **significant and unavoidable impact**. There are no feasible mitigation measures that would reduce impacts related to inconsistency with the residential density criteria.

5.9.8 Summary of Cumulative Environmental Effects

Hazardous Materials

The geographic context for cumulative impacts relative to the use of hazardous materials is considered to be the City limits and the surrounding areas in which listed cumulative development projects are located. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects consisting of residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public).

The Project, along with the cumulative development projects, may routinely transport, use, store, or dispose of hazardous materials and universal wastes. However, Riverside Municipal Code, Chapter 9.48 requires businesses to disclose storage and handling of hazardous materials and hazardous waste, to establish and implement emergency response plans, and to cooperate in periodic reporting and inspections. Although the overall quantity of hazardous materials and waste generated in the City and the areas in which cumulative projects are located may increase as a result of implementation of the Project in combination with the cumulative development projects, all new development that will handle or use hazardous materials and all existing development that handles or uses hazardous materials are required to comply with the regulations, standards, and guidelines established by the USEPA, the State of California, County of Riverside, and the City of Riverside related to storage, use, and disposal of hazardous materials.

Because the Project would be in compliance with Federal, State, and local regulations, standards, and guidelines, the Project would have less than significant impacts related to hazardous materials and would not contribute to cumulatively considerable impacts. With respect to the cumulative development projects, each of these projects will also be required to evaluate their own project-specific potential impacts and will also be required to comply with all applicable Federal, State, and local regulations governing the use, handling, storage and transport of hazardous materials and other hazards. Since hazardous materials and risk of upset conditions are largely site-specific, this would occur for each individual project affected, in conjunction with development proposals on these properties, and develop project specific mitigation measures to reduce potential impacts to less than significant levels, and as such would not contribute to cumulatively considerable impacts either. In light of the existing regulatory framework governing the storage and use of hazardous materials and waste, the Project's cumulative impact related to hazard and hazardous materials is less than significant, and the Project's contribution is not considered cumulatively considerable. Therefore, cumulative impacts with regard to hazardous materials are **less than significant**.

Airport Land Use Compatibility

Cumulative development projects that do not meet all criteria set forth in the applicable LUCP would be anticipated to contribute to a cumulative aviation hazard impact, and cumulative development projects within the Compatibility Zones that do not meet all criteria set forth in the LUCP are subject to review by the Riverside County ALUC. ALUC may, as part of its review, impose height, use and lighting restrictions on development to reduce the potential impacts associated with aviation use the MARB/IPA from individual development projects to less than significant levels. Other cumulative projects (as listed in Table.4.0-1) proposed within the

MARB/IPA LUCP are anticipated to meet all criteria set forth in the LUCP and if not, these projects would be independently reviewed by ALUC and additional project design features or mitigation to ensure compliance with MARB/IPA LUCP policies would be imposed.

As previously discussed, the Project’s projected residential density of 35.0 dwelling units per acre would be inconsistent with the maximum allowable residential density of 6.0 dwelling units per acre for Compatibility Zone C2. Because the Project would not meet this single MARB/IPA LUCP density compatibility criterion, the Project would result in a **significant and unavoidable impact** with respect to airport land use compatibility. ALUC consistency is project-specific, and the other cumulative projects are anticipated to be consistent with ALUC Compatibility Zone criteria. Therefore, although the proposed Project would be inconsistent with the residential density criteria for Compatibility Zone C2, as the other projects are not anticipated to have a significant impact, the proposed Project would not contribute to cumulatively considerable impacts. Therefore, cumulative impacts with regard to consistency with ALUC are **less than significant**.

Wildfire

The proposed Project site is not within a VHFHSZ. With compliance with applicable CBC and CFC standards and General Plan policies, implementation of the proposed Project, combined with other development in the City and County, would not result in increased exposure to wildfire risks. Furthermore, cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, or interfere with emergency response requirements, such as fire protection response time standards established by GP 2025. The Project is surrounded by mostly urban development and served by existing infrastructure. It would not contribute incrementally with other projects in the City of Riverside and Riverside County to create an environment that could exacerbate wildfire risks. Cumulative wildfire impacts would be **less than significant**.

5.9.9 References

The following references were used in the preparation of this section of the DEIR:

ALUC Staff Report 2023	Riverside County Airport Land Use Commission. “Staff Report – Case Number: ZAP1548MA22 – Anton Mission Grove LLC. September 14, 2023. Available at https://rcaluc.org/sites/g/files/aldnop421/files/2023-08/ALUCAGDA9-14-23.pdf , accessed September 2023
ALUC Development Review Letter 2023	Riverside County Airport Land Use Commission. “Development Review Letter – Case Number: ZAP1548MA22.” September 14, 2023. (Appendix F)

GP 2025	City of Riverside, General Plan 2025, Public Safety Element and Public Safety Technical Report. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
GP 2025 PEIR	City of Riverside, General Plan 2025 PEIR – Volume 2
MARB/IPA LUCP	Mead & Hunt, March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, adopted by Riverside County Airport Land Use Commission November 13, 2014. Available at https://rcaluc.org/current-compatibility-plans , accessed September 2023.
MGSP	City of Riverside, <i>Mission Grove Specific Plan</i> . September 16, 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed September 2023)
Frey 2021	Frey Environmental, Inc. <i>Phase I Environmental Site Assessment (ESA): 375 East Alessandro Boulevard, Riverside, California, APN 276-110-018</i> . December 16, 2021 (Appendix F).
Frey 2022	Frey Environmental, Inc. <i>Phase II Environmental Site Assessment (ESA): Former Kmart Property 375 East Alessandro Boulevard, Riverside, California, APN 276-110-018</i> . January 18, 2022 (Appendix F).

5.10 Hydrology and Water Quality

This section analyzes the effects of the proposed project on Hydrology and Water Quality. Portions of the following discussion and analysis come from the City's General Plan PEIR and the *Project Specific Water Quality Management Plan (WQMP)* prepared by Rick Engineering Company (included as Appendix G to this EIR).

5.10.1 Setting

The 9.9-acre proposed Project site is currently developed with a former K-mart retail store with asphalt drive isles and parking spaces, landscaped medians, and landscaped lawn areas between the former K-mart and the roadways to the east and south. The subject site is bounded on the north and west by the Mission Grove Shopping Center, on the east by Mission Grove Parkway, and on the south by Mission Village Drive. The shopping center was developed in 1991. Aerial photographs taken in 1974 show a gently sloping erosion plain was present at the site prior to development. The existing grades range from approximately elevation 1,588 feet above mean sea level (msl) to the west to 1,598 feet above msl to the east. (Geotech)

Surface Waters

The City is located within the Santa Ana Region (Region 8) of the California Regional Water Quality Control Board (RWQCB). The City is located within the RWQCB Middle Santa Ana River Watershed Management Area and in the Santa Ana Hydrologic Unit. The Santa Ana River flows from the San Bernardino Mountains to the Pacific Ocean for over 100 miles. The Santa Ana River is the "receiving water" for over 2,700 square miles covering portions of San Bernardino, Riverside and Orange Counties. (GP PEIR 2025) Reach 3 of the Santa Ana River, which is the receiving water for the proposed Project site, is listed as an impaired water body for pathogens on the 2022 Clean Water Act (CWA) Section 303(d) List of Water Quality Limited Segments Being Addressed by US Environmental Protection Agency (USEPA) Approved Total Maximum Daily Loads (TMDLS). (WQMP 2022)

The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for regional flood control and drainage facilities. The City maintains local facilities that tie into RCFCWCD's regional system. Local drainage facilities, consisting mostly of underground closed conduits and storm drains, located primarily in developed portions of the City, collect stormwater and convey it to regional facilities, including the Santa Ana River. (GP PEIR 2025)

Groundwater

Water resources throughout Riverside County are sustained by significant groundwater basins, which are used as reservoirs to store water during wet years and to supply stored water in dry years. Groundwater conditions in these basins are influenced by natural hydrologic conditions such as percolation of precipitation, groundwater seepage and ephemeral stream flow from the nine arroyos that traverse the City. (GP PEIR 2025)

Inundation

Most of the annual rainfall in the region occurs in the winter. Flooding in the City of Riverside could result from intense storms or as the result of dam failure. The U.S. Army Corps of Engineers is responsible for dam safety and conducting routine inspections of Federal dams, however, most of the dams within the City fall under the jurisdiction of the State Department of Water Resources Division of Safety of Dams. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) show zones of flood hazard risks. Flood hazard risks are greatest in the vicinity of channels, creeks, streams and watercourses. This includes the Santa Ana River and several dams. (GP PEIR 2025)

Due to the City's distance from the ocean, there is no foreseeable risk of tsunami (tidal wave) inundation. Seiches are oscillations in enclosed bodies of water caused by seismic waves. Existing development is subject to hazards from seiches in reservoirs such as Lake Mathews and Lake Evans and other small water bodies. Mudflows associated with erosion may also occur in portions of the community. (GP PEIR 2025)

5.10.2 Regulatory Setting

5.10.2.1 Federal Regulations

Clean Water Act

Congress enacted the Clean Water Act (CWA), formally the Federal Water Pollution Control Act of 1972, with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. The USEPA has delegated responsibility for implementation of the CWA to the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB), including water allocation and water quality protection programs and the National Pollutant Discharge Elimination System (NPDES), CWA Section 402. The NPDES program is a set of permits designed to regulate various activities that generate pollutants with potential to impact water quality.

The City is a co-permittee with the County of Riverside in the Municipal Separate Storm Sewer System (MS4) NPDES permit, and is therefore required to mandate that all new development projects and substantial redevelopment projects incorporate Best Management Practices (BMPs) for operation. As a co-permittee, the City must require that most development projects prepare a site-specific Water Quality Management Plan (WQMP). Its primary purpose is to ensure that the land use approval and permitting process of the City will minimize the impact of urban runoff from the developed site, through the use of Low-Impact Development (LID) principles in site design, source control measures and treatment control BMPs. (GP 2025 Open Space and Conservation Element)

The project will also be subject to another NPDES permit, the General Permit for Stormwater Discharges Associated with Construction Activity, requiring effective erosion and sediment

controls during construction. Construction projects that disturb one or more acres of soil or are part of a larger common plan of development that disturbs one or more acres of soil must obtain coverage under the statewide NPDES General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). To obtain coverage under the Construction General Permit, a project-specific Stormwater Pollution Prevention Plan (SWPPP) must be prepared. The SWPPP outlines best management practices (BMP) to reduce stormwater and non-stormwater pollutant discharges including erosion control, minimize contact between construction materials and precipitation, and implement strategies to prevent equipment leakage or spills.

Section 303(d) of the CWA (CWA, 33 USC 1250, et seq., at 1313(d)) requires states to identify “impaired” waterbodies as those which do not meet water quality standards. States are required to compile this information in a list and submit the list to the USEPA for review and approval. This list is known as the Section 303(d) list of impaired waters. As part of this listing process, states must prioritize waters and watersheds for future development of TMDLs. The SWRCB and RWQCBs enact ongoing efforts to monitor and assess water quality, to prepare the Section 303(d) list, and to develop TMDL requirements.

5.10.2.2 State Regulations

Porter-Cologne Water Quality Control Act and the Santa Ana River Basin Plan

The Porter-Cologne Water Quality Control Act of 1969, Division 7 of the California Water Code, authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the RWQCBs to develop regional Basin Plans. The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) is designed to preserve and enhance the quality of water resources in the Santa Ana River basin for the benefit of present and future generations. The purpose of the Basin Plan is to designate beneficial uses of the region’s surface and ground waters, designate water quality objectives for reasonable protection of those uses, and establish an implementation plan to achieve those objectives. (RWQCB)

Water quality objectives, as defined by the CWA Section 13050(h), are the “limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area.” The state has developed TMDLs, which are a calculation of the maximum amount of a pollutant that a waterbody can have and still meet water quality objectives established by the region. The Basin Plan serves as the basis for the Santa Ana River RWQCB’s regulatory programs and incorporates an implementation plan to ensure water quality objectives are met. Basin Plans undergo a triennial review process, with the Basin Plan most recently updated in 2019. (RWQCB)

Each reach of the Santa Ana River has assigned beneficial uses, which are threatened or lost when water quality objectives are violated. The Santa Ana River’s Reach 3 has the following eight beneficial uses: agricultural supply (AGR), groundwater recharge (GWR), REC1, REC2, WARM, WILD, RARE and SPWN. The Reach has been “excepted” from the municipal or domestic water supply (MUN) designation because it was determined not a good source for drinking water supply per the Sources of Drinking Water Policy (Res No. 88- 63). In addition to the narrative objectives,

Reach 3 designations must be protected by numeric thresholds for various constituents that can cause adverse impacts, such as sodium, sulfate and boron (RWQCB). Project-related runoff will discharge into the existing City drainage system and ultimately Reach 3 of the Santa Ana River. The beneficial uses designated for the receiving waters for the Project are identified in Table 5.9-1– Constituents and Beneficial Uses for Receiving Waters.

Table 5.9-1-Constituents and Beneficial Uses for Receiving Waters

Receiving Waterbody	303(d) List Constituents	TMDL Constituents	Beneficial Uses ^{a,b}
Santa Ana River, Reach 3	Copper (wet season only) Lead	Pathogens	AGR, GWR, REC1, REC2, WARM, WILD, RARE
Definitions of Beneficial Uses ^a			
AGR	Waters used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.		
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.		
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.		
REC1	Water contact recreation water used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.		
REC2	Non-contact water recreation waters, 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 picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.		
WARM	Warm freshwater habitat waters support waters support warm ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.		
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.		
RARE	Rare, threatened or endangered species waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under the State or federal law as rare, threatened, or endangered.		
Noted: ^a RWQCB ^b WQMP, p.6			

5.10.2.3 Regional Regulations

There are no Regional Regulations related to hydrology and water quality that are applicable to the project, that are not already covered under the Federal or State Regulations above.

5.10.2.4 Local Regulations

City of Riverside Municipal Code

The City of Riverside Municipal Code (RMC) contains a number of ordinances relevant to hydrology and water resources.

Title 14, Chapter 14.12 regulates the discharge of wastes to the public sewer and pollutants into the storm drain systems. Section 14.12.315 prohibits the discharge of pollutants to the storm drainage system or any waterway, whether carrying water or not. Section 14.12.316 requires the preparation of a WQMP and installation of BMPs for new development and redevelopment projects in the City, and Section 14.12.319 outlines inspection and enforcement for post-construction requirements detailed in the project's WQMP.

Title 16, Chapter 18 contains regulations pertaining to flood hazard areas in the City and implements the National Flood Insurance Program. Specifically, the ordinance outlines the process for development permit review by the Floodplain Administrator or designee as well as floodplain construction materials and standards.

Finally, Title 17 describes regulations pertaining to grading, including those intended to minimize erosion and runoff. Section 17.16.010 outlines grading permit application requirements, including noticing requirements to the SWRCB for coverage under the Statewide Construction General Permit and preparation of a SWPPP.

City of Riverside General Plan 2025

The City of Riverside adopted the General Plan 2025 in November 2007 to outline a 20-year vision for the City. The Public Safety, Open Space and Conservation, and Public Facilities and Infrastructure elements each contain policies relevant to hydrology and water quality, including the following:

PUBLIC SAFETY ELEMENT

Policy PS-2.1: Reduce flood risks for residents and businesses within urbanized areas, as feasible.

Policy PS-2.2: Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.

Policy PS-2.3: Minimize additional flood risk exposure in developing areas.

Policy PS-2.4: Identify existing facilities located in the 1% annual chance of flood zone, particularly bridges and potential emergency access routes.

Policy PS-2.6: Create and maintain evacuation routes for areas that could be affected by flooding or dam failure, with special emphasis on critical and emergency facilities.

OPEN SPACE AND CONSERVATION ELEMENT

Policy OS-7.6: Partner with other jurisdictions, including the Regional Water Quality Control Board and the U.S. Army Corps of Engineers, to minimize the impact of new development on the Santa Ana River and bring about some of the enhancements envisioned by the Santa Ana River Task Force.

Policy OS-10.2: Coordinate plans, regulations and programs with those of other public and private entities which affect the consumption and quality of water resources within Riverside.

Policy OS-10.6: Continue to enforce RWQCB regulations regarding urban runoff.

Policy OS-10.7: Work with the RWQCB in the establishment and enforcement of urban runoff water quality standards.

Policy OS-10.8: Cooperate with Riverside and San Bernardino Counties and adjacent jurisdictions in the review and approval of new developments which affect the quality and quantity of basin-wide groundwater and surface water resources.

Policy OS-10.9: Evaluate development projects for compliance with NPDES requirements, and require new development to landscape a percentage of the site to filter pollutant loads in stormwater runoff and provide groundwater percolation zones.

Policy OS-10.10: Protect aquifer recharge features and areas of important aquifers from degradation of water quality and reduction of recharge.

Policy OS-10.11: Monitor the quality and quantity of groundwater and surface water resources and consider revisions to the General Plan's policies if monitoring identifies significant reductions in water quality.

PUBLIC FACILITIES AND INFRASTRUCTURE ELEMENT

Policy PF-1.7: Protect local groundwater resources from localized and regional contamination sources such as septic tanks, underground storage tanks, industrial businesses and urban runoff.

Policy PF-3.4: Continue to investigate and carry out cost-effective methods for reducing stormwater flows into the wastewater system and the Santa Ana River.

Policy PF-4.2: Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Policy PF-4.3: Continue to routinely monitor and evaluate the effectiveness of the storm drain system and make adjustments as needed.

City of Riverside Green Action Plan

The City of Riverside is committed to becoming a clean, green and sustainable community. Beginning in 2005, a task force of citizen volunteers assembled to outline sustainability goals resulting in the City's 2009 designation by the California Department of Conservation as an "Emerald City". Developed by the Green Accountability Performance Committee, the Green Action Plan in its eighth iteration lists 19 goals and more than 50 tasks for the City to achieve additional sustainability goals and reduce its ecological footprint.

Goal 16 of the current Green Action Plan states, “Reduce per capita water usage 20 percent citywide by 2020” and Goal 17 states, “Increase the use of recycled water by 30 percent by 2020, based on the 2008 baseline (GAP, p. 32).” An update to the Green Action Plan is currently pending by the City.

In order to effectively conserve water, the Project includes water conservation and efficiency measures as discussed in Section 3 – Project Description. The Project is also subject to RMC Chapter 14.22 – Water Conservation that includes the Water Conservation Ordinance, drought plan, and water conservation programs that help water users throughout the City conform to local and state regulations for water conservation including drought-related regulations.

5.10.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to hydrology and water quality.

5.10.4 Project Design Considerations

Coverage under the State’s General Permit for Construction Activities requires a Project-specific Storm Water Pollution Prevention Plan (SWPPP). Storm water management measures identified in the Project-specific SWPPP would be required to be implemented to effectively control erosion and sedimentation and other construction-related pollutants for the duration of construction. The SWPPP outlines Best Management Practices (BMPs) to reduce stormwater and non-stormwater pollutant discharges, including erosion control, minimizing contact between construction materials and precipitation, and strategies to prevent equipment leakage or spills.

In addition, prior to issuance of a grading permit, a final approved WQMP will be required for the proposed Project. The Project Specific WQMP outlines the LID Best Management Practices (BMPs) required to adequately meet water quality standards and reduce storm water runoff for the proposed Project. In order to optimize site utilization, the WQMP includes the following post-construction LID BMPs (pp 8-9):

- The existing drainage patterns have been identified as southwesterly overland flow. The proposed drainage patterns will be preserved at the existing site drainage discharge locations. Pollutant and flow control practices will maintain the site’s existing hydrologic response.
- The existing vegetation along the existing street frontage has been preserved where feasible, and additional landscape areas have been proposed on site throughout the parking lot and adjacent to buildings where possible.
- The proposed impervious area has been limited to provide for essential proposed functions and safety (i.e., building footprint, parking, sidewalk, ADA compliance, etc.). Paved parking and drive aisles are necessary to support the vehicular traffic required by the proposed Project.

- Site runoff in the parking lot and roof runoff will be directed to the four (4) proposed Modular Wetlands Biofiltration systems.
- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance 19.570;
- Install water-efficient irrigation systems and devices, such as soil moisture based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570 developed pursuant to the California Department of Water Resources' Model Efficient Landscape Ordinance;
- Design buildings to be water-efficient; install water-efficient fixtures and appliances;
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff;
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

5.10.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- (Threshold B) substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- (Threshold C) substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i) result in substantial erosion or siltation on- or off-site;
 - ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv) impede or redirect flood flows;

- (Threshold D) in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
- (Threshold E) conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.10.6 Environmental Impacts

Threshold A: *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Expected pollutant sources from the project include interior drains, indoor/structural pesticide use, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, and parking lots. The Preliminary Project Specific WQMP outlines the LID BMPs required to adequately meet water quality standards and reduce storm water runoff. Furthermore, one of the LID principles for the proposed Project includes four biotreatment basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems. These LID BMPs have been incorporated into the site design to fully address all expected pollutant sources and storm water runoff volumes.

In addition, coverage under the State's General Permit for Construction Activities requires a Project-specific Storm Water Pollution Prevention Plan (SWPPP). Storm water management measures identified in the SWPPP will be implemented to effectively control erosion and sedimentation and other construction-related pollutants for the duration of construction.

With compliance with all applicable local, state, and federal laws regulating surface water quality, including implementation of the project specific SWPPP and WQMP, the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. The proposed Project is anticipated to result in a **less than significant impact** directly, indirectly or cumulatively to any water quality standards or waste discharge requirements.

Threshold B: *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project will be served by Western Municipal Water District for domestic water supply. The project's potential to decrease groundwater supplies is analyzed in the Utilities and Services Systems section of this EIR, specifically under the following threshold, "Will the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?" (Utilities Threshold 5.19.4.b).

Natural infiltration capacity is not currently present as the site has been previously developed, largely with impervious surfaces. Therefore, implementation of the proposed Project would not impede groundwater recharge because it does not currently provide for groundwater recharge of stormwater at the site. Also, per the WQMP, the existing drainage pattern at the site is in a southwesterly overland flow. The proposed drainage patterns will be preserved at the existing site

drainage discharge locations. Pollutant and flow control BMPs will maintain the site's existing hydrologic response. In addition, the proposed Project includes four biotreatment basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems. Therefore, development of the project would not significantly alter the volume of stormwater runoff leaving the site or the point of discharge from the site and would not in turn alter groundwater management of downstream receiving water bodies. Therefore, there will be **less than significant impacts** related to groundwater recharge either directly, indirectly or cumulatively.

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

- i) *result in substantial erosion or siltation on- or off-site;*
- ii) *substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;*
- iii) *create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*
- iv) *impede or redirect flood flows?*

The project site is currently developed with a small percent of permeable surface due to the presence of a commercial retail building and associated parking lots. The site does not contain a stream or river. Upon construction of the project, including: residential buildings, amenities, landscaping, and drive aisles, the permeable area of the project site would increase; the total impervious area is currently 475,191 SF, and post-Project the impervious area would be 437,965 SF (WQMP 2022, Appendix G).

As outlined in the WQMP, the existing drainage patterns have been identified as southwesterly overland flow. The proposed drainage patterns will be preserved at the existing site drainage discharge locations. Pollutant and flow control practices will maintain the site's existing hydrologic response. The proposed Project includes four biotreatment basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems which have been incorporated into the site design to fully address storm water runoff volumes. As outlined in the WQMP, the volume and time of concentration of storm water runoff for the post-development condition is not different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant). Per Table F.1 of the WQPM the pre-condition storm water runoff volume is 26,782 cubic feet, and the post-conditions is also 26,782 cubic feet, with no change (0% difference) from existing condition to implemented proposed project. Therefore, the proposed project will not result in an increase to the rate or amount of surface runoff from the site, and in turn would not result in flooding, additional sources of polluted runoff off, or substantial erosion or siltation off-site. As there would be no increase of the amount of runoff, the project would not exceed the capacity of

existing or planned stormwater drainage systems. Storm water management measures identified in a SWPPP would be required to be implemented to effectively control erosion and sedimentation and other construction-related pollutants for the duration of construction.

Furthermore, the proposed project site is not located within a flood hazard area. The FEMA FIRM map of the Proposed Project area (FEMA Map Number 06065C0740G) shows it is located in Zone X, which is an area of minimal flood hazard. The storm water drainage system will be installed concurrently with the construction of this project and will be adequately sized to accommodate the drainage created by this Project. On-site storm water and non-stormwater runoff will be treated with onsite BMPs identified in the Preliminary Project Specific WQMP and then discharged to the existing drainage facilities that extend off-site, retaining the overall drainage pattern of the site. Therefore, the proposed Project will not impede or redirect flood flows.

With compliance with all applicable local, state, and federal laws regulating surface water quality, including implementation of the project specific SWPPP and WQMP, the proposed Project is anticipated to result in a **less than significant impact** directly, indirectly or cumulatively to any water quality standards or waste discharge requirements.

Threshold D: *Would the Project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

The FEMA FIRM map of the Proposed Project area (FEMA Map Number 06065C0740G) shows it is located in Zone X, which is an area of minimal flood hazard. As the proposed Project site is in a minimal flood hazard zone, it is unlikely to release pollutants due to project inundation. As outlined above, the WQMP includes BMPs which have been incorporated into the site design to fully address all expected pollutant sources and storm water runoff volumes.

Tsunamis are large tidal waves that occur in coastal areas and the Project site is not located in a coastal area and would not be susceptible to tsunamis. A seiche is a to-and-fro vibration of a waterbody that is similar to the slopping of water in a basin. Once initiated, oscillation within the waterbody can continue independently. Seiches are often triggered by earthquakes. The most likely areas that could be subject to a seiche are the areas surrounding lakes. The Project site is not within proximity to Lake Mathews (approximately 10 miles), Lake Evans (approximately 4.5 miles), or the Santa Ana River (approximately 4.5 miles). The project site is also not located within a flood zone area or a dam inundation area as seen on Figure 5.8-2 in the GP FPEIR. Therefore, **no impact** potential for seiche or mudflow exists either directly, indirectly or cumulatively.

Threshold E: *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The project site is located in the Santa Ana River watershed. The Water Quality Control Plan (Basin Plan) for the Santa Ana River Basin (Region 8), as amended, includes water quality goals and policies, descriptions of conditions and discussions of solutions. It is also the basis for the Regional Board's regulatory programs and establishes water quality standards for the ground and surface waters of the region. The term "water quality standards," as used in the federal Clean Water Act, includes both the beneficial uses of specific waterbodies and the levels of quality which

must be met and maintained to protect those uses. As outlined in the WQMP, the project's downstream receiving water is Santa Ana River, Reach 3. As the WQMP includes BMPs designed to fully address all expected pollutant sources and storm water runoff volumes, the proposed project is not anticipated to conflict with or obstruct implementation of the Basin Plan.

As outlined in response to Threshold B above, the Preliminary Project Specific WQMP (pp 8-9), outlined that natural infiltration capacity is limited at the site. Therefore, development of the site would not impede groundwater recharge because it does not currently provide for groundwater recharge of stormwater at the site.

The project will be served by Western Municipal Water District for domestic water supply. The project's potential to decrease groundwater supplies is analyzed in the Utilities and Services Systems section of this EIR, specifically under the following threshold, "Will the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?" (Utilities Threshold 5.19.4.b).

Therefore, there will be **less than significant impacts** related to conflict with or obstructing implementation of a water quality control plan or sustainable groundwater management plan, either directly, indirectly or cumulatively.

5.10.7 Proposed Mitigation Measures

Impacts were found to be **less than significant**; therefore, no mitigation measures are necessary.

5.10.8 Cumulative Environmental Effects

The cumulative impact area for hydrology and water quality impacts is the Santa Ana River watershed hydrologic unit. The City is located within the Santa Ana Region (Region 8) of the Regional Water Quality Control Board and Reach 3 of the Santa Ana River is the ultimate receiving water body for runoff from the project site. As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks).

Cumulative impacts to water quality could be significant with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. These cumulative effects include increasing the amount of flow, sedimentation, and urban pollutants that are transmitted via storm flows to the Santa Ana River and its tributaries. The project, along with all of the cumulative development projects, are required to comply with current storm water requirements for construction-related activities and operation of the sites. Erosion and sediment control BMPs will be implemented during construction of the project in compliance with the NPDES General Permit for Construction Activities. After construction, the project would implement the permanent treatment systems identified in the WQMP. As noted in section 5.10.4 Project Design Considerations, the WQMP identifies site design, source control, and treatment control BMPs to be implemented as part of the proposed project. These include preserving

existing vegetation and including landscaping and impervious surfaces to the greatest extent possible, maintaining the current drainage pattern of the site, and source and treatment control modular wetlands biofiltration systems. Therefore, the project construction and operation would not considerably contribute to a significant cumulative water quality impact.

Because the project is not located within a groundwater recharge area, and will not result in the increase in the amount of impermeable surfaces within the watershed, there would be no cumulative impacts related to groundwater recharge.

The project site is not located within a flood hazard area or dam inundation zone; therefore, the project's contribution to cumulative flood or dam inundation hazards is not cumulatively considerable. Therefore, cumulative impacts with regard to flood or dam inundation hazards are less than significant.

5.10.9 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
WQMP 2022	Rick Engineering Company, <i>Preliminary Project Specific Water Quality Management Plan</i> . August 25, 2022. (Appendix G)
Geotech 2023	Geocon West, Inc. <i>Due Diligence Geotechnical Investigation Report: Mission Grove Redevelopment 375 East Alessandro Boulevard Riverside, California</i> . March 6, 2023. (Appendix E).
FIRM Flood Map	Federal Emergency Management Agency (FEMA), <i>FIRM Flood Map 06065C0740G</i> . (Available at: https://msc.fema.gov/portal/search?AddressQuery=375%20E%20Alessandro%20blvd%20riverside%20CA#searchresultsanchor , accessed January 15, 2023)
RWQCB 2019	Santa Ana Regional Water Quality Control Board, <i>Water Quality Control Plan Santa Ana River Basin</i> , January 24, 1995, updated June 2019. (Available at https://www.waterboards.ca.gov/santaana/water_issues/programs/basin_plan/ , accessed March 14, 2023)

MGSP 1985	City of Riverside, Mission Grove Specific Plan, Adopted 1985, as Amended 1986 to 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed on March 15, 2023)
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5.11 Land Use and Planning

This section analyzes the effects of the Project on land use and planning. All thresholds related to land use and planning will be analyzed below. The analysis in this section is based on the City's General Plan 2025 and the Mission Grove Specific Plan.

5.11.1 Setting

Current Land Use and Zoning

The Project site is a 9.92-acre parcel and is part of the 70-acre Mission Grove Plaza Shopping Center. The Project site is currently developed with a 104,231-square-foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991 and closed in October of 2020. The site also includes portions of a signalized intersection at Mission Grove Parkway South, and a shared driveway providing ingress and egress from Mission Grove Parkway for the shopping center.

The current land use of the Project site is a vacant retail site. The General Plan designation for the Project site is C - Commercial and it is currently zoned as CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. The site is designated as Retail Business & Office within the Mission Grove Specific Plan.

The Project includes a General Plan Amendment (GPA) to change the General Plan Land Use Designation from C – Commercial to MU-U – Mixed-Use – Urban, to allow the residential land use (refer to Figure 3.0-4 General Plan Land Use). A Zone Change is also proposed from CR – Commercial Retail – to MU-U – Mixed Use-Urban (refer to Figure 3.0-5 Zoning). Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking.

The Project also includes a Specific Plan Amendment (SPA) to the Mission Grove Specific Plan. The SPA introduces the residential land use and provides for specific design guidelines integrating both land uses. Finally, the Project includes a Tentative Parcel Map (TPM) to subdivide the underlying parcel for financing and conveyance purposes.

Although a relatively young neighborhood, Mission Grove has a complexity of land uses more typical of longer-established areas. The northern half of the neighborhood, tucked between Canyon Crest to the west and north and Sycamore Canyon Wilderness Park to the east, largely contains low-density residential development. South of Alessandro Boulevard, the neighborhood contains significant commercial and office park uses, in addition to several apartment complexes, single family planned communities and standard single-family subdivisions. The Mills Water Filtration Plant operated by Western Municipal Water District creates a relatively large expanse of open space that abuts Sycamore Canyon Wilderness Park on the north side of Alessandro Boulevard on the community's easterly edge. (GP 2025)

Development in the southern portion of the neighborhood has been guided by the Mission Grove Specific Plan, adopted in 1985. Initially proposed to include a substantial industrial park area and about eleven hundred dwelling units, to date the Specific Plan has been amended eleven times. Amendments adopted significantly reduced the industrial park acreage and more than doubled the number of allowable dwelling units to about twenty-three hundred (GP2025). As of a 2024 review of satellite imagery within the area using Google Earth, very little land remained to be developed within the Specific Plan area.

Mission Grove and its neighbor to the south, Orangecrest, are the two Riverside neighborhoods closest to the March Air Reserve Base/Inland Port Airport (MARB/IPA). The Specific Plans for both Mission Grove and Orangecrest were initially approved by Riverside County and the areas were subsequently annexed to the City. While MARB/IPA offers the potential for great economic vitality and employment base, the proximity to housing creates the potential for land use conflicts. The active use of MARB either as a military base or as the Inland Port Airport poses potential noise impacts and inadvertent flight related emergencies for the Mission Grove and Orangecrest neighborhoods, as well as in the unincorporated areas in the vicinity. (GP 2025)

Surrounding Land Uses

The site is bordered on the north, west, and east (across Mission Grove Parkway) by the Mission Grove Plaza Shopping Center, which has a General Plan Land Use Designation of C - Commercial and is zoned CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and is developed with commercial uses. Multi-family residences are located further north (across Alessandro Boulevard), which have a General Plan Land Use Designation of HDR – High-Density Residential and are zoned R-3-3000-SP – Multi-Family Residential and Specific Plan (Mission Grove) Overlay Zones. The Project site is bordered on the south by a single-family residential neighborhood (across Mission Village Drive), which has a General Plan Land Use Designation of Medium High Density Residential (MHDR) and is zoned R-1-7000-SP – Single-Family Residential and Specific Plan (Mission Grove) Overlay Zones.

Table 3.0-1 details the land use and zoning of the project site and its surrounding areas:

Table 3.0-1: Existing Site and Surrounding Land Use/Zoning Designations

	Existing Land Use	General Plan Designation	Zoning Designation	Specific Plan Designation
Project Site	Commercial Retail	C - Commercial	CR-SP – Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office
North	Commercial Retail	C - Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office
East (across Mission Grove Parkway)	Commercial Retail	C – Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office and Medium High Density Residential
South (across Mission Village Drive)	Single Family Residential	MHDR - Medium High Density Residential	R-1-7000 and Specific Plan (Mission Grove) Overlay Zone	Medium High Density Residential
West	Commercial Retail	C - Commercial	CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zone	Retail Business & Office

5.11.2 Related Regulations

The City has various tools to regulate land use and plan for future development in the City. Specific to the Project site, the City’s GP 2025 and the City’s Zoning Ordinance (RMC, Title 19) serve as the primary land use tools for the development of the Project site as well as the Mission Grove Specific Plan (formerly known as the Alessandro Heights Specific Plan).

5.11.2.1 Federal Regulations

No Federal regulations would be applicable to land use and planning with respect to the Project.

5.11.2.2 State Regulations

No State regulations would be applicable to land use and planning with respect to the Project.

5.11.2.3 Regional Regulations

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base (MARB)/Inland Port Airport (IPA) Land Use Compatibility Plan (LUCP). The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

The Project site is located within Compatibility Zone C2 of the MARB/IPA LUCP. Per Table MA-1 – Compatibility Zone Factors of the MARB/IPA LUCP, Zone C2 is a Flight Corridor Zone with Noise and Overflight Factors and Safety and Airspace Protection Factors as follows:

Zone	Noise and Overflight Factors	Safety and Airspace Protection Factors
C2 Flight Corridor Zone	Noise Impact: Moderate <ul style="list-style-type: none"> ➤ Within 60 CNEL contour, but more than 5 miles from runway end; or ➤ Outside 60-CNEL contour, but regularly overflown in mostly daytime flight training 	Risk Level: Moderate to Low <ul style="list-style-type: none"> ➤ Distant (beyond 5 miles) portion of instrument arrival corridor; or ➤ Closed-circuit flight training activity corridors

	<ul style="list-style-type: none"> ➤ Single-event noise may be disruptive to noise-sensitive land use activities; aircraft <3,000 feet above runway elevation on arrival 	
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Per Table MA-2 – Basic Compatibility Criteria, Zone C2 is a Flight Corridor Zone with density/intensity standards, prohibited uses, and other development conditions as follows:

Zone	Residential, Other Uses – Average and Single Acre, Required Open Space	Prohibited Uses	Other Development Conditions
C2 Flight Corridor Zone	≤6.0 dwelling unit/acre 200 people/acre (average) 500 people/acre (single acre) Open Land - Not Required	<ul style="list-style-type: none"> ➤ Highly noise-sensitive outdoor nonresidential uses ➤ Hazards to flight 	<ul style="list-style-type: none"> ➤ Children’s schools discouraged ➤ Airspace review required for objects > 70 feet tall ➤ Electromagnetic radiation notification ➤ Deed notice and disclosure

5.11.2.4 Local Regulations

City of Riverside General Plan 2025

The GP 2025 serves as a guide for land use decision making and the implementation of the community’s vision for the City. Each of the 12 elements in the GP 2025 contain objectives and policies to help guide development and decisions in the City. Of these, the Land Use and Urban Design Element applies to the analysis in this section and will be discussed further below.

Land Use and Urban Design Element

The GP 2025 Land Use and Urban Design Element identifies the location of present and planned land uses and their relationship to the vision of the City and guides development and growth in the City and overall planning area through its objectives and policies. The element also relates how the land uses integrate with other areas addressed in the GP 2025, such as Public Safety and Parks and Recreation. City-wide and neighborhood specific objectives and policies that relate to land use are included in the Land Use Element. The following GP 2025 Land Use Element objective and policies would be applicable to the Project.



Objective LU-8: Emphasize smart growth principles steps of the land development through all steps of the land development process.

Policy LU-8.1: Ensure well-planned infill development Citywide, allow for increased density in selected areas along established transportation corridors.

Policy LU-8.3: Allow for mixed-use development at varying intensities at selected areas as a means of revitalizing underutilized urban parcels.

Objective LU-9: Provide for continuing growth within the and designated General Plan Area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objectives.

Policy LU-9.3: Designate areas for urban land uses where adequate urban levels of public facilities and services exist or are planned, in accordance with the public facilities and service provisions policies of this General Plan.

Policy LU-9.4: Promote future patterns of urban development and land use that reduce infrastructure construction costs and make better use of existing and planned public facilities when considering amendments to the Land Use Policy Map (GP 2025 Figure LU-10).

Policy LU-9.5: Encourage the design of new commercial developments as “integrated centers,” rather than as small individual strip development. Integrate pedestrian access, parking, access, building design and landscape themes across all parcels in the commercial center to unify the development.

Objective LU-22: Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port Airport, Riverside, Municipal Airport, and Flabob Airports.

Policy LU-22.2: Work cooperatively with the Riverside County Airport Land Use Commission in developing, defining, implementing and protecting airport influence zones around the March Air Reserve Base/Inland Port Airport, Riverside Municipal Airport, and Flabob Airport, and in implementing the new Airport Land Use Compatibility Plan.

Policy LU-22.3: Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of residential and/or commercial facilities within identified airport safety zones and areas already impacted by current or projected airport noise.

Policy LU-22.4: Adopt and utilize an Airport Protection Overlay Zone and the Riverside County Airport Land Use Compatibility Plan as it affects lands within the City of Riverside.

Policy LU-22.5: Review all proposed projects within the airport influence area of Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport as noted in the Public Safety Element for consistency with all applicable airport land use

compatibility plan policies adopted by the Riverside County Airport Land Use Commission and the City of Riverside, to the fullest extent the City finds feasible.

Objective LU-27: Enhance, maintain, and grow Riverside's inventory of street trees.

Policy LU-27.4: Encourage trees on private property to add to the City's urban forest.

Smart Growth Principles

The GP 2025 Land Use and Urban Design Element additionally provides a number of "smart growth" principles. A major tenet of smart growth includes focusing development in already urbanized areas of the City, rather than spreading growth to urban fringes, which reduces urban sprawl.

The Smart Growth Network has defined the ten principles of smart growth:

1. Mix land uses.
2. Take advantage of compact building design.
3. Create a range of housing opportunities and choices.
4. Create walkable neighborhoods.
5. Foster distinctive, attractive communities with a strong sense of place.
6. Preserve open space, farmland, natural beauty and critical environmental areas.
7. Strengthen and direct development toward existing communities.
8. Provide a variety of transportation sources.
9. Make development decisions predictable, fair and cost effective.
10. Encourage community and stakeholder collaboration in development decisions.

City of Riverside Municipal Code

Title 7 – Noise Control

The proposed Project will be subject to Title 7 the City's Noise Control Code both during construction and afterward during operation. It is determined that certain noise levels are detrimental to the public health, safety and welfare and are contrary to the public interest. Therefore, the City has created the Noise Control Chapter of the Municipal Code. Maintaining that causing any noise in a manner not in conformity with the provisions of this Code, is a public nuisance and shall be punishable as such. In order to control unnecessary, excessive and/or annoying noise in the City, it is declared to be the policy of the City to prohibit such noise generated by the sources specified in this Chapter. It shall be the goal of the City to minimize noise levels and mitigate the effects of noise to provide a safe and healthy living environment. See Section 5.9 Noise for information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated in the City.

Title 17 - Grading Code

The RMC contains regulations the City designed to implement the General Plan. RMC Title 17 Grading, sets forth:

Rules and regulations intended to control excavation, grading and earthwork construction which includes fills and embankments. Title 17-Grading also establishes the framework for the administrative procedures for grading plans, inspections, and establishes penalties for unauthorized grading activities. The purpose of this title is to protect life, limb, property, the public welfare and the physical environment by regulating grading on private property.

Title 19 – Zoning Code

RMC Title 19 Zoning states:

The purpose of the Zoning Code is to encourage, classify, designate, regulate, restrict and segregate the highest and best location and use of buildings, structures and land for agriculture, residence, commerce, trade, industry, water conservation or other purposes in appropriate places; to regulate and limit the height, number of stories and size of buildings and other structures hereafter erected or altered; to regulate and determine the size of yards and other open spaces; and, to regulate and limit the density of population and for such purpose to divide the City into zones of such number, shape and area as may be deemed best suited to carry out these regulations and provide for their enforcement.

Furthermore, Chapter 19.120.010 describes the purpose of mixed-use zones:

1. To encourage a mixture of compatible and synergistic land uses, such as residential with compatible nonresidential uses including office, retail, personal services, public spaces and other community amenities. These uses are allowed as either: a. Singular, stand-alone uses that contribute to a mixture of uses within the zone; or b. Combined uses in one project as a mixed-use development.
2. To strengthen the interaction between residential, commercial and employment uses in order to reduce dependency on automobiles, improve air quality, decrease urban sprawl, facilitate use of transit and encourage conservation of land resources.
3. To provide opportunities for transit-oriented development.
4. To revitalize deteriorating commercial areas by integrating residential uses and public institutions into the commercial fabric to create an active street life and enhance the vitality of businesses.
5. To provide alternatives to new development of small shopping centers.

6. To foster pedestrian-oriented activity nodes by providing a mix of uses in compact, walkable areas.
7. To increase the area available for residential development and provide alternative types of housing.
8. To provide appropriate locations for a broad range of live/work activities to occur.
9. To encourage medium- and high-density residential development to occur in close proximity to employment and services.
10. To allow for a greater variety of land uses and structures, including adaptive reuse of existing structures and flexibility in site planning.

Citywide Design and Sign Guidelines

The Citywide Design and Sign Guidelines (CDSG) reinforce the physical image of the City. The CDSG work to reinforce the physical image of Riverside. They are intended to promote quality, well-designed development throughout the City that enhances existing neighborhoods, creates identity, and improves the overall quality of life within the City.

5.11.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to land use and planning.

5.11.4 Project Design Considerations

Mixed Use-Urban zoning has been selected for this site to bring together medium- to-high-density residential and retail development in a mixed-use environment that maximizes the residential potential of the site. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking. The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the proposed apartment Project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site. The shared parking will be memorialized in a new covenant and restriction agreement between the residential developer entity and Mission Grove Plaza. Landscaping throughout the Project site will consist of low water use trees, shrubs, and ground cover. The existing Mexican fan palms located along Mission Grove Parkway South will be protected in place and kept as part of the Project. Large trees are proposed on the periphery of the project site, along roadways (Mission Grove Parkway South and Mission Village Drive), within parking lot planters, and throughout the residential common open space areas and around the apartment structures.

5.11.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix

G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) Physically divide an established community; or
- (Threshold B) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

5.11.6 Environmental Impacts before Mitigation

Threshold A: *Would the Project physically divide an established community?*

The Project site is currently developed with an existing 104,231 square foot vacant retail building (former K-Mart store) and associated parking lot. The structure would be demolished and replaced by the proposed Project. The proposed Mixed Use-Urban land use and zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone would allow the proposed apartment Project to be introduced into the existing retail environment and would create a framework for integration of uses, with features such as pedestrian connectivity and shared elements including parking. Rather than dividing an existing community, the proposed Project would create community and infrastructure connections by creating a mixed-use environment encouraging walkability and an urban setting, and by providing a high-quality residential development in close proximity to many amenities and transit corridors. The project would accomplish these goals by creating paved walkways and marked crosswalks throughout the Project site for resident paths of travel. These resident paths of travel would connect to existing public paths of travel, such as the sidewalks along Mission Grove Parkway South and Mission Village Drive, which would create walkable and bikeable connectivity between the Project's residential uses and surrounding existing shopping center uses. The location of the proposed project would allow residents pedestrian access to amenities that would otherwise only be accessible by burdening traffic and public transportation. The centralized location of the project would allow residents and their guests to forgo having to drive to these resources and incentivizes their use. The proposed Project is located within 1,200 feet of a Stater Bros grocery store, a Galaxy Theatres movie theatre, a hobby store, a hair salon, a gym, animal hospital and pet grooming, bank and ATMs, UPS Store, Goodwill Bookstore & Donation Center, Circle K convenient store, Starbucks coffee shop, and a variety of restaurants. Pedestrian walkways allow foot traffic to the neighboring shopping center amenities; Current use of the closed K*Mart and seasonal Halloween store does not accomplish these goals. Furthermore, rezoning and redevelopment of the proposed Project site would serve to increase the type and amount of housing available, consistent with the goals of the City's Housing Element, and to assist the City in meeting project housing demand as part of the City's growth projections. The development of the Project would not displace residents or any established community and thus would be **no impact**.

Threshold B: *Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan,*

specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

City of Riverside General Plan 2025

Consistency with General Plan Policies

Table 5.11-1 below provides an analysis of the Project's consistency with applicable GP 2025 policies.

Table 5.11-1 – Consistency with Applicable General Plan Policies

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level	
Air Quality Element			
Objective AQ-1:	Adopt land use policies that site polluting facilities away from sensitive receptors and vice versa; improve job-housing balance; reduce vehicle miles traveled and length of work trips; and improve the flow of traffic.		
Policy AQ-1.2:	Consider potential environmental justice issues in reviewing impacts (including cumulative impacts for each project proposed).	The CalEnviroScreen 4.0 Indicator Score for the Project location is 31, indicating a relatively low pollution burden for the community. Furthermore, the census tract is not categorized as a Disadvantaged Community, a Low-Income Community, nor part of a Community Air Protection Program. Additionally, as discussed in Section 5.3 Air Quality, the Project would not result in significant air quality impacts and cumulative impacts were determined to be less than significant.	Consistent
Policy AQ-1.3:	Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.	No polluting facilities are proposed or within the vicinity of the Project site.	Consistent
Policy AQ-1.5:	Encourage infill development projects within urbanized areas that include job centers and transportation nodes.	The Project would consist of an infill development located within close proximity to various commercial and retail businesses. Additionally, there is a bus stop with 2 bus lines adjacent to the Project site, along Mission Village Drive, in close proximity to one of the existing driveways.	Consistent
Policy AQ-1.6:	Provide mixed-use development that allows the integration of retail, office, institutional and residential uses for the purpose of reducing costs of infrastructure construction and	The proposed GPA, SPA, and change of zoning will allow for mixed use development in the Mission Grove Plaza. The Project would consist of developing a residential apartment complex within the existing Mission Grove Plaza. The apartment complex would replace an existing retail store structure (previously a K-Mart) within the Plaza, which would place residential uses in close walking/biking proximity to retail and commercial	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	maximizing the use of land.	uses within the plaza, such as grocery stores, gas stations, and bank ATMs.	
Policy AQ-1.7:	Support appropriate planned residential developments and infill housing, which reduce vehicle trips.	The Project would consist of an infill housing development that would replace an existing vacant retail building. The Project site would be located in close proximity to existing businesses and services as well as existing bus stops. This would increase walkability within the area and residential access to public transportation, which would reduce vehicle trips.	Consistent
Policy AQ-1.12:	Support mixed-use land use patterns but avoid placing residential and other sensitive receptors in close proximity to businesses that emit toxic air contaminants to the greatest extent possible. Encourage community centers that promote community self-sufficiency and containment and discourage automobile dependency.	There are no businesses that emit toxic air contaminants within the Project vicinity. Additionally, the proposed infill development would provide increased walkable access to businesses, services, and public transportation, thus reducing automobile dependency.	Consistent
Policy AQ-1.16:	Design safe and efficient vehicular access to commercial land uses from arterial streets to ensure efficient vehicular ingress and egress.	Project driveways have been designed to provide safe and efficient vehicular access from adjacent streets (see Section 5.17 Transportation). As discussed in Section 5.17 Transportation and in the Project's TOA Report (Appendix I), while implementation of Project Driveways 2 and 3 would remove public access from those driveways, implementation of the Project Driveways would not affect public access to the areas of the shopping center that will remain as retail and commercial uses.	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
Policy 1.17:	AQ- Avoid locating multiple-family developments close to commercial areas that emit harmful contaminants.	The Project would be located within an existing shopping center consisting of uses such as a grocery store, movie theater, and restaurants, which are uses not associated with emitting harmful contaminants.	Consistent.
Policy 1.19:	AQ- Require future commercial areas to foster pedestrian circulation through the land use entitlement process and/or business regulation.	The Project includes paved walkways and marked crosswalks throughout the Project site for resident paths of travel. These resident paths of travel would connect to existing public paths of travel, such as the sidewalks along Mission Grove Parkway and Mission Village Drive, which would create walkable and bikeable connectivity between the Project's residential uses and surrounding existing shopping center uses.	Consistent.
Policy 1.20:	AQ- Create the maximum possible opportunities for bicycles as an alternative work transportation mode.	The Project would provide bike racks throughout the site for resident use. The provision of the bike racks as well as the connectivity between resident paths of travel and public paths of travel would help promote local, non-vehicle travel within the Project area.	Consistent.
Policy 1.21:	AQ- Cooperate and participate in regional air quality management plans, programs and enforcement measures.	The Project would comply with SCAQMD Rule 403 (fugitive dust control measures), Rule 1113 (limits VOCs), and all other applicable control measures required in the AQMP (see Section 5.3 Air Quality).	Consistent.
Objective 2:	AQ- Reduce air pollution by reducing emissions from mobile sources.		
Policy AQ-2.4:	Monitor and strive to achieve performance goals and/or VMT reduction which are consistent with SCAG's goals.	Implementation of Project design features and transportation demand management (TDM) measures may possibly reduce the Project's VMT by approximately up to 17.7%. These TDM measures can help offset some of the VMT impacts of the proposed Project but would not reduce the impact to	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level
	a less than significant level. (see Section 5.17 Transportation).	
Objective AQ-3:	Prevent and reduce pollution from stationary sources, including point sources (such as power plants and refinery boilers) and area sources (including small emission sources such as residential water heaters and architectural coatings).	
Policy AQ-3.4:	Require projects to mitigate, to the extent feasible, anticipated emissions which exceed AQMP Guidelines.	The Project would not exceed assumptions in the AQMP or cause emissions which would exceed AQMP Guidelines (see Section 5.3 Air Quality). As discussed in Section 5.3, while the Project would not be consistent with the site's current General Plan land use designation, the Project would include a General Plan Amendment (GPA) for land use designation consistency, and Project construction and operational-source emissions would not exceed applicable SCAQMD regional and localized thresholds.
Policy AQ-3.6:	Support "green" building codes that require air conditioning/filtration installation, upgrades or improvements for all buildings, but particularly for those associated with sensitive receptors.	The Project would comply with all applicable building codes, thus adhering to Title 24, Part 11, CALGreen Building Standards Code (see Section 5.3 Air Quality).
Policy AQ-3.7:	Require use of pollution control measures for stationary and area sources through the use of best available control activities, fuel/material substitution, cleaner fuel alternatives, product reformulation, and change in work	The Project would comply with construction BMPs, SCAQMD Rule 403 (fugitive dust control measures), Rule 1113 (limits VOCs), and all other applicable control measures required in the AQMP (see Section 5.3 Air Quality).

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	practices and of control measures identified in the latest AQMP.		
Objective AQ-4:	Reduce particulate matter, as defined by the Environmental Protection Agency, as either airborne photochemical precipitates or windborne dust.		
Policy AQ-4.5:	Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.	The Project would comply with this policy in addition to complying with SCAQMD Rule 403 (fugitive dust control measures).	Consistent
Objective AQ-5:	Increase energy efficiency and conservation in an effort to reduce air pollution.		
Policy AQ-5.1:	Utilize source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills.	The Project would encourage source reduction, recycling, and other appropriate measures to reduce the amount of solid waste disposed of in landfills. The Project would adhere to CALGreen building code standards which include management of construction waste, reuse or recycling of excavated soil and land clearing debris, and recycling by occupants (see Section 5.19 Utilities and Service Systems).	Consistent
Policy AQ-5.3:	Continue and expand use of renewable energy sources such as wind, solar, water, landfill gas, and geothermal sources.	The Project would adhere to Title 24, Part 11, CALGreen Building Standards Code (see Section 5.3 Air Quality), and would include various energy efficiency measures, such as solar photovoltaic systems and electric vehicle (EV) Parking/Charging Infrastructure. The Project proposes to include a total of 513 parking spaces and would therefore be required to provide a minimum of 26 EV charging stations and another 180 EV capable and EV ready spaces per CALGreen code. In order to achieve maximum GHG reduction, and therefore VMT reduction, it was estimated that an additional 15 electric charging stations would achieve 11.9%	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level	
		reduction in GHG/VMT. Therefore, as a Project Design Consideration, the Project proposes to provide a total of 41 electric charging stations (26 CALGreen requirement + 15 additional). (see Section 5.17 Transportation)	
Policy AQ-5.8:	Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.	<p>The Project would comply with all applicable building codes, thus adhering to Title 24, Part 11, CALGreen Building Standards Code (see Section 5.3 Air Quality).</p> <p>In addition to Section 5.3, Section 5.6 Energy discusses that the Project would incorporate all-electric appliances within the residential units, with use of natural gas connections limited to some Project common use areas/amenities. The Project's limited use of natural gas/natural gas connections would result in a Project natural gas demand equating to approximately 0.01% of Riverside County's total natural gas demand, which would be a minimal increase in the County's natural gas consumption.</p>	Consistent
Objective AQ-7:	Support a regional approach to improving air quality through multi-jurisdictional cooperation.		
Policy AQ-7.9:	Adhere with Federal, State and regional air quality laws, specifically with Government Code Section 65850.2, which requires that each owner or authorized agent of a project indicate, on the development or building permit for the project, whether he/she will need to comply with the requirements for a	The Project would comply with all applicable Federal, State and regional air quality laws, specifically with Government Code Section 65850.2; The Project would also comply with the requirements for a permit for construction from the SCAQMD (see Section 5.3 Air Quality).	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	permit for construction or modification from the SCAQMD.		
Policy AQ-7.10:	Incorporate, to the extent applicable and permitted by law, current and proposed AQMP measures.	The Project would comply with SCAQMD Rule 403 (fugitive dust control measures), Rule 1113 (limits VOCs), and all other applicable control measures required in the AQMP (see Section 5.3 Air Quality).	Consistent
Circulation and Community Mobility Element			
Objective CCM-2:	Build and maintain a transportation system that combines a mix of transportation modes and transportation system management techniques, and that is designed to meet the needs of Riverside’s residents and businesses, while minimizing the transportation system’s impacts on air quality, the environment and adjacent development.		
Policy CCM-2.3:	Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.	<p>LOS analyses were conducted for intersections and roadway segments in the Project area, and some were forecast to operate at an unsatisfactory LOS for Opening Year and Cumulative With Project Conditions. (See TOA, Appendix I) However, these intersections and roadway segments operate at an unsatisfactory LOS under Without Project Conditions, as well. Improvements have been recommended at study intersections where the proposed Project is forecast to create or contribute to operational deficiencies under Opening Year and Cumulative conditions where feasible improvements could be identified.</p> <p>It should be noted that with the implementation of the proposed improvements, the intersection of Alessandro Boulevard/ Cannon Road is still forecast to operate at a deficient LOS F, which is what the intersection currently operates at. However, the improvements will improve the delay under With Project Conditions to better than the corresponding delay under Without Project Conditions. Project associated improvements would decrease the intersection’s A.M. Peak Hour delay from 197.3 seconds to 152.9 seconds.</p>	Consistent

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		<p>The intersection of Trautwein Road/Alessandro Boulevard is forecast to operate at a satisfactory LOS D under the Opening Year and Cumulative with the recommended improvements. The intersection currently operates at an unacceptable LOS E during peak A.M. hours.</p> <p>The intersection of Trautwein Road/Mission Grove Parkway is forecast to continue to operate at a deficient LOS. This intersection currently operates at LOS E under no Project conditions and there are no feasible improvements at this intersection for all Project scenarios that would cause the intersection to operate at a more acceptable level. As such, the Project would pay its fair share of the cost required to offset operational deficiencies. Since there are no feasible improvements for the Trautwein Road/Mission Grove Parkway intersection, the Project's fair share would be based on Project traffic as a percentage of total growth from existing to cumulative conditions, which would be fair share percentage of 3.22%.</p> <p>For the intersection of Mission Grove Parkway/Plaza Driveway 2, it is forecast to operate at an acceptable LOS under all analysis scenarios: an LOS B without the Project and LOS C with the Project. However, the northbound left-turn and eastbound left-turn queues would exceed the available storage under Opening Year and Cumulative With Project scenarios. Therefore, improvements were identified at this intersection to alleviate the respective queuing deficiencies. (See Section 5.17 Transportation)</p>	
Policy CCM-2.4:	Minimize the occurrence of streets operating at LOS F by building out the planned street network and by integrating land use and transportation	<p>Eight roadway segments are forecast to operate at an unsatisfactory LOS even under Opening Year Without Project Conditions:</p> <p>Alessandro Blvd., between Overlook Parkway-Canyon Crest Dr. and Cannon Rd.; Alessandro Blvd., between Cannon Road and Communications Center Dr.; Alessandro Blvd., between</p>	Consistent

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	in accordance with the General Plan principles.	<p>Communications Center Dr. and Trautwein Rd.; Alessandro Blvd., between Trautwein Rd. and Plaza Driveway 1; Alessandro Blvd., between Plaza Driveway 1 and Mission Grove Pkwy.; Alessandro Blvd., between Mission Grove Pkwy. and Northrop Dr.; Alessandro Blvd., between Northrop Dr. and Barton St.; and Trautwein Rd., between Alessandro Blvd. and Mission Grove Pkwy.</p> <p>However, based on the City’s criteria, the proposed Project would not create an operational deficiency at these segments and therefore, operational improvements are not required.</p>	
Policy CCM-2.7:	Limit driveway and local street access on Arterial Streets to maintain a desired quality of traffic flow. Wherever possible, consolidate driveways and implement access controls during redevelopment of adjacent parcels.	<p>Currently, the Project can be accessed via four driveways, none of which are located on an arterial:</p> <ul style="list-style-type: none"> • Project Driveway 1 located at Plaza Driveway; • Project Driveway 2 on Mission Grove Parkway; • Project Driveway 3 on Mission Village Drive; and • Project Driveway 4 within Mission Grove Plaza. <p>Project Driveway 1, Project Driveway 3, and Project Driveway 4 will be full access driveways. Project Driveway 2 will be converted from a right-in-right-out driveway to a right-out egress only driveway. Retail customers will no longer be able to enter and exit Mission Grove Plaza via Project Driveway 2 and the driveway on Mission Village Drive upon implementation of the Project, as these driveways will be gated for resident access only. Additionally, the existing full access shopping center driveway located on Mission Village Drive between Project Driveway 3 and Mission Grove Parkway will also be removed as the project is constructed.</p>	Consistent
Policy CCM-2.8:	Design street improvements considering the effect of aesthetic character and livability of	The proposed Project would be served by existing, improved streets, Mission Grove Parkway South and Mission Village Drive which are built out to their ultimate half-section widths. The Project will install driveway approaches, curb and gutter, and sidewalk	Consistent

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	residential neighborhoods, along with traffic engineering criteria.	along the Project’s frontage of these streets. The Project will also install minor improvements at three intersections to alleviate the respective queuing deficiencies. (See Section 5.17 Transportation) All of the proposed improvements would be in accordance with applicable City of General Plan Circulation Element and City design standards which take into account aesthetic character and livability of residential neighborhoods.	
Policy CCM-2.9:	Design all street improvement projects in a comprehensive fashion to include consideration of street trees, pedestrian walkways, bicycle lanes, equestrian pathways, signing, lighting, noise and air quality wherever any of these factors are applicable.	<p>The proposed Project intends to protect in place the existing Mexican fan palm trees located those along Mission Grove Parkway and large trees within parking lot planters and around buildings are included in the proposed landscaping plans.</p> <p>Additionally, based on coordination with RTA, the proposed Project would relocate the bus stop approximately 200 ft north of the existing location as part of its project design features. This relocation of the bus stop would enhance pedestrian connectivity and access to public transit to and from the proposed Project site and the existing commercial/retail.</p> <p>The Project would also include paved walkways and marked crosswalks throughout the Project site for resident paths of travel. These resident paths of travel would connect to existing public paths of travel, such as the sidewalks along Mission Grove Parkway and Mission Village Drive, which would create walkable and bikeable connectivity between the Project’s residential uses and surrounding existing shopping center uses.</p> <p>In addition, the Project would provide bike racks throughout the site for resident use. The provision of the bike racks as well as the connectivity between resident paths of travel and public paths of travel would help promote local, non-vehicle travel within the Project area, which would thereby reduce vehicle emissions and potential air quality impacts.</p>	Consistent

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Policy CCM-2.10:	Emphasize the landscaping of parkways and boulevards.	The existing Mexican fan palm trees along Mission Grove Parkway South would be protected in place and kept as part of the Project. Additionally, large trees are proposed on the periphery of the site, along Mission Grove Parkway South and Mission Village Drive.	Consistent.
Objective CCM-6:	Cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the regional transportation system.		
Policy CCM-6.1:	Encourage the reduction of vehicle miles, reduce the total number of daily peak hour vehicular trips, increase the vehicle occupancy rate and provide better utilization of the circulation system through the development and implementation of transportation demand management (TDM) programs contained in the SCAQMD and County of Riverside TDM Guidelines.	TDMs from WRCOG, applicable measures from CAPCOA, and measures recommended by the City were used to analyze and estimate VMT reductions that could be achieved through additional TDMs. Table 5.17-3, Potential VMT Reduction Strategies, summarizes the VMT reduction strategies considered for the proposed Project, the maximum VMT reduction achievable for each strategy, and the feasibility of each for the proposed Project. (see Section 5.17 Transportation) For example, among the feasible TDMs that would result in a quantifiable Project VMT reduction is providing pedestrian network improvements. The Project has been designed to include paved sidewalks and marked crosswalks throughout the site for resident paths of travel. These resident paths of travel have been designed to connect to existing public paths of travel along Mission Grove Parkway South and Mission Village Drive. This would create walkable and bikeable connectivity between the proposed Project’s residential uses and the surrounding existing shopping center uses, thereby reducing local vehicle trips and associated VMT.	Consistent
Objective CCM-7:	Minimize or eliminate cut-through traffic within Riverside’s residential neighborhoods.		
Policy CCM-7.1:	Discourage and/or prevent regional cut-through traffic in residential	The Project site is located within an already developed commercial area. All of the vehicular access points to the Project will have vehicular gates that are restricted to the project residents only. As	Consistent

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	neighborhoods through the employment of traffic-calming measures within Riverside.	there is no public access through the Project site, no cut-through traffic would occur.	
Objective CCM-9:	Promote and support an efficient public multi-modal transportation network that connects activity centers in Riverside to each other and to the region.		
Policy CCM-9.6:	Enhance and encourage the provision of attractive and appropriate transit amenities, including shaded bus stops, to facilitate use of public transportation, through the development process by incorporating necessary design features as appropriate.	Based on coordination with RTA, the proposed Project would relocate the bus stop approximately 200 ft north of the existing location as part of its project design features. This relocation of the bus stop would enhance pedestrian connectivity and access to public transit to and from the proposed Project site and the existing commercial/retail.	Consistent
Objective CCM-10:	Provide an extensive and regionally linked public bicycle, pedestrian and equestrian trails system.		
Policy CCM-10.2:	Incorporate bicycle and pedestrian trails and bicycle racks in future development projects.	The Project proposes to include 32 short term bike lockers and 35 long term bike lockers at the Project site. These bike racks could potentially encourage increased use of bikes as a mode of transportation for short trips. In addition, the Project proposes to provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the retail land uses in the surroundings. These pedestrian improvements would also connect to the existing sidewalk infrastructure.	Consistent
Policy CCM-10.3:	Provide properly designed pedestrian facilities for the	All pedestrian improvements would be ADA compliant and would ensure safety and mobility to all members of the community.	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	disabled and senior population to ensure their safety and enhanced mobility as users of streets, roads and highways emphasizing “complete streets” principles.		
Policy CCM-10.6:	Encourage pedestrian travel through the creation of sidewalks and street crossings.	The Project proposes to provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the retail land uses in the surroundings. These pedestrian improvements would also connect to the existing sidewalk infrastructure.	Consistent
Policy CCM-10.11:	Provide sufficient paved surface width to enable bicycle traffic to share the road with motor vehicles where traffic volumes and conditions warrant.	The Project would include the creation of paved sidewalks and marked crosswalks. These paved paths of travel would connect to existing sidewalk infrastructure and would allow for bikeable accessibility to and from adjacent shopping center uses. This would allow for paths of bicycle traffic to coexist with paths of vehicle traffic within the Project and shopping center area.	Consistent.
Objective CCM-11:	Promote and support an efficient public multi-modal transportation network that connects activity centers in Riverside to each other and to the region.		
Policy CCM-11.1:	Protect flight paths from encroachment by inappropriate development using the Riverside County Airport Land Use Compatibility Plan and the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan to determine the	<p>The Project site is located in the March Air Reserve Base influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Project’s proposed 35.0 dwelling units per acre would exceed the maximum permitted density of 6.0 dwelling units per acre within this zone. However, the Project does not exceed the non-residential average or single-acre intensity criteria.</p> <p>The Project would not impose a safety hazard due to height. The Project’s solar panels would not result in a solar glare impacts on MARB/IPA flight operations.</p>	<p>Partially Inconsistent (with residential density criteria)</p> <p>Partially Consistent (with non-residential average or single-acre</p>

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	consistency of proposed development.	<p>The Project is consistent with the residential development surrounding MARB/IPA, specifically in Zone C2 and will not result in the encroachment of incompatible residential densities affecting current or future March ARB/IPA operations.</p> <p>For a more detailed analysis of the Project's consistency with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (subsection 5.9.6) as well as in the analysis following this table.</p>	intensity criteria) and would not cause safety hazard due to height or solar glare
Policy CCM-11.2:	Limit Building heights and land use intensities beneath airport approaches and departure paths to protect public safety consistent with the Riverside County Airport Land Use Compatibility Plan, the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, and all other applicable State and Federal regulations.	<p>The project is less than 70 feet tall, with proposed building heights no more than 57'2"-feet and therefore, review of the building for height/elevation reasons by the FAA Obstruction Evaluation Service (FAAOES) is not required.</p> <p>The non-residential average intensity for Compatibility Zone C2 is limited to 200 people per acre. The proposed Project includes construction of a 347-unit multi-family development including recreational amenities including 2,963 SF of leasing office area, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, accommodating a total occupancy of 311 people, resulting in an average intensity of 31 people per acre, which does not exceed and is consistent with the Compatibility Zone C2 average intensity of 200 people per acre.</p>	Consistent
Objective CCM-13:	Ensure that adequate on- and off-street parking is provided throughout Riverside.		
Policy CCM-13.1:	Ensure that new development provides adequate parking.	The Project would include a total of 604 parking spaces, which would meet the City's parking requirements for the Project. Of these 604 spaces, 513 would only be for Project resident use and the remaining 91 would serve as shared parking spaces between the Project and adjacent shopping center uses.	Consistent

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Policy CCM-13.2:	Accommodate joint use of parking facilities as part of an area plan or site plan, based on the peak parking demands of permitted uses in the planning area.	The proposed Project would include a total of 513 parking spaces. In addition, 91 parking spaces are provided and to be shared with the adjacent retail site. Mission Grove shopping center also provides nearby parking.	Consistent
Environmental Justice Policies			
Policy LU-EJ-1.0:	HOUSING LOCATION: Ensure new housing developments adhere to local, state and federal requirements to avoid disproportionate impacts on environmental justice communities.	The Project area is not categorized as a Disadvantaged Community, a Low-Income Community, nor part of a Community Air Protection Program. Therefore, there would be no disproportionate impacts on an environmental justice community.	Consistent
Policy CCM-EJ-1.0:	ACTIVE TRANSPORTATION: Promote physical activity and active transportation to address negative health outcomes, particularly among environmental justice communities.	The Project proposes to include 32 short term bike lockers and 35 long term bike lockers at the Project site. These bike racks could potentially encourage increased use of bikes as a mode of transportation for short trips. In addition, the Project proposes to provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the retail land uses in the surroundings. These pedestrian improvements would also connect to the existing sidewalk infrastructure.	Consistent
Policy CCM-EJ-2.0:	TRANSPORTATION OPTIONS: Encourage increased public transportation and multimodal transportation choices	In addition to bike racks and sidewalk improvements (see above), the existing bus stop located along Mission Grove Parkway South will be moved approximately 200 ft north along Mission Grove Parkway South to increase ease of use. The proposed Project would create a mixed-use	Consistent

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	as means of reducing roadway congestion and associated air pollution and promoting overall health.	environment encouraging walkability in an urban setting, and by providing a high-quality residential development in close proximity to many amenities and transit corridors.	
Policy N-EJ-1.0:	NOISE: With a particular focus on environmental justice communities, reduce noise pollution by enforcing noise reduction and control measures within and adjacent to residential neighborhoods.	A Project-specific noise study was conducted, and indicated the Project will not exceed City noise standards (see Section 5.13 Noise). As discussed in Section 5.13, construction and operation of the Project would not exceed any noise thresholds of significance and potential Project-related noise impacts would be less than significant. Additionally, per the Mission Grove Specific Plan, the Project would require the use and proper maintenance of noise-reducing devices on construction equipment, which would further reduce construction-related noise levels. As such, the Project would not result in significant noise impacts to the surrounding community.	Consistent
Policy AQ-EJ-1.0:	AIR QUALITY: Ensure that land use decisions, including enforcement actions, are made in an equitable fashion to protect residents and workers in environmental justice communities from the short- and long-term effects of air pollution.	The CalEnviroScreen 4.0 Indicator Score for the Project location is 31, indicating a relatively low pollution burden for the community. Furthermore, the census tract is not categorized as a Disadvantaged Community, a Low-Income Community, nor part of a Community Air Protection Program. Additionally, as discussed in Section 5.3 Air Quality, the Project would not result in significant air quality impacts.	Consistent
Policy HP-EJ-1.0:	HISTORIC PRESERVATION: Encourage identification and preservation of historic and cultural resources	No cultural resources have been previously identified on the Project site. In order to identify any unknown cultural resources during construction, archaeological and paleontological monitoring will be performed for any ground-breaking activities (MM CUL-2). Additionally, if any cultural resources are	Consistent

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	associated with communities whose histories and historical contributions are not well documented.	inadvertently discovered, the detailed provisions for the treatment and disposition of the resources in MM CUL-3 will be followed. These mitigation measures will ensure that any inadvertently discovered cultural resources are avoided and/or preserved.	
Historic Preservation Element			
Objective HP-1:	To use historic preservation principles as an equal component in the planning and development process.		
Policy HP-1.3:	The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and Federal cultural resources protection and management laws in its planning and project review process.	Though no cultural resources have been identified on the Project site, the Project area is surrounded by 129 sites, including 124 prehistoric sites, two (2) multicomponent sites, and three (3) historic period archaeological sites. The nearest resource is located approximately 230 feet west of the Project area. Consequently, Phase I and Phase II Cultural Resource Assessments were conducted and revealed no cultural resources on the Project site (see Section 5.5 Cultural Resources).	Consistent
Policy HP-1.4:	The City shall protect natural resources such as geological features, heritage trees, and landscapes in the planning and development review process and in park and open space planning.	As the Project area is completely developed, there are no natural resources such as geological features, heritage trees, or landscapes present.	Consistent
Policy HP-1.6:	The City shall use historic preservation as a tool for "smart growth" and mixed-use development.	Phase I and Phase II Cultural Resource Assessments were conducted and revealed no cultural resources on the Project site (see Section 5.5 Cultural Resources).	Consistent

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Objective HP-2:	To continue an active program to identify, interpret and designate the City's cultural resources.		
Policy HP-2.2:	The City shall continually update its identification and designation of cultural resources that are eligible for listing in local, state and national registers based upon the 50-year age guideline for potential historic designation eligibility.	The proposed Project site is completely developed with a 104,231-square-foot, vacant retail building and an associated surface parking lot. The vacant retail building is a former K-Mart retail store that was constructed in 1991 and was closed in 2020. As the building has no historical significance and is only 32 years old, it does not meet any of the criteria to be considered a Landmark or a Resource or Structure of Merit (see Section 5.5 Cultural Resources).	Consistent
Objective HP-4:	To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.		
Policy HP-4.3:	The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.	In accordance with the City requirement for discretionary tribal notification ("scoping"), the Sacred Lands File was reviewed and a list of Native American contacts from the NAHC were contacted. The results of a Sacred Lands File search reported negative results. Furthermore, the Project has complied with AB 52 and SB 18 (see Section 5.5 Cultural Resources).	Consistent
Objective HP-5:	To ensure compatibility between new development and existing cultural resources.		
Policy HP-5.1	The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.	As outlined in Section 5.5 Cultural Resources there are no historic or archaeological resources that have been documented within or adjacent to the project area. Therefore, there would be no incompatibility issues.	Consistent

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Policy HP-5.2:	The City shall use its design and plot plan review processes to encourage the compatibility of street design, public improvements, and utility infrastructure with cultural resources.	As outlined in Section 5.5 Cultural Resources, there are no historic or archaeological resources that have been documented within or adjacent to the project area. Therefore, there would be no incompatibility issues.	Consistent
Housing Element			
Guiding Principle:	Provide a diverse, abundant, adaptable, and equitably distributed mix of rental and ownership housing that is safe, healthy, and affordable for people of all income levels and backgrounds and meets the needs of current and future Riverside residents.		
Policy HE-2:	HOMELESSNESS Expand housing and services that address the needs of the City's homeless population.	By providing high-density residential dwelling units, the Project will help address the City's need for housing.	Consistent
Policy HE-3:	FAIR HOUSING Promote safe, healthy, and attainable housing opportunities for all people regardless of their special characteristics as protected under State and Federal fair housing laws.	The proposed Project site would serve to increase the type and amount of housing available, consistent with the goals of the City's Housing Element, and to assist the City in meeting project housing demand as part of the City's growth projections. The Project will create community and infrastructure connections by creating a mixed-use environment encouraging walkability and an urban setting, and by providing a high-quality residential development in close proximity to many amenities and transit corridors. The application and selection process for the Project's tenants will not be discriminatory and will be in compliance with all State and Federal fair housing laws.	Consistent
Policy HE-4:	THRIVING NEIGHBORHOODS	The proposed Project site would serve to increase the type and amount of housing available, consistent	Consistent

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	Facilitate and encourage a variety of new housing types, including both single- and multi-family and missing middle housing, and the necessary public amenities to support a sense of community that results in equitable and sustainable neighborhoods.	with the goals of the City’s Housing Element, and to assist the City in meeting project housing demand as part of the City’s growth projections. The project itself will be a much needed multi-family residential neighborhood. This available housing will be a more affordable alternative than the nearby single family home options. The Project will create community and infrastructure connections by creating a mixed-use environment encouraging walkability and an urban setting, and by providing a high-quality residential development in close proximity to many amenities and transit corridors.	
Land Use and Urban Design Element			
Objective LU-8:	Emphasize smart growth principles steps of the land development through all steps of the land development process.		
Smart Growth Principles	<ol style="list-style-type: none"> 1. Mix land uses. 2. Take advantage of compact building design. 3. Create a range of housing opportunities and choices. 4. Create walkable neighborhoods. 5. Foster distinctive, attractive communities with a strong sense of place. 6. Preserve open space, farmland, natural beauty and critical environmental areas. 	<p>Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking.</p> <p>The Project takes advantage of compact building design as it is an infill redevelopment of a one-story vacant retail building and associated parking with five, 4-story buildings with 347 apartment units and amenities (clubroom, fitness center, pool and spa, dog park, etc.)</p> <p>The proposed Project site increase the type and amount of housing available by providing a multi-family residential neighborhood within a largely single-family residential community. This available</p>	Consistent

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<p>7. Strengthen and direct development toward existing communities.</p> <p>8. Provide a variety of transportation sources.</p> <p>9. Make development decisions predictable, fair and cost effective.</p> <p>10. Encourage community and stakeholder collaboration in development decisions.</p>	<p>housing will be a more affordable alternative than the nearby single family home options.</p> <p>The Project will provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the surrounding commercial development (with grocery store, gym, restaurants, retail). These pedestrian improvements would also connect to the existing sidewalk infrastructure.</p> <p>The Project, as an infill redevelopment, would not affect existing open space, farmland, or critical environmental areas. The Project provides for enhanced residential architecture and aesthetically coherent design elements that are compatible and complimentary with the existing surrounding residential built environment in terms of colors and materials and landscaping.</p> <p>The proposed Project would relocate an RTA bus stop approximately 200 ft north of the existing location along Mission Grove Parkway South which will enhance pedestrian connectivity and access to public transit to and from the proposed Project site and the existing commercial/retail. The Project will also include paved walkways and marked crosswalks throughout the Project site for resident paths of travel. These resident paths of travel would connect to existing public paths of travel, such as the sidewalks along Mission Grove Parkway and Mission Village Drive, which would create walkable and bikeable connectivity between the Project’s residential uses and surrounding existing shopping center uses.</p>	
	<p>In addition, the Project would provide bike racks throughout the site for resident use. The provision of the bike racks as well as the connectivity between resident paths of travel and public paths of travel</p>	

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		<p>would help promote local, non-vehicle travel within the Project area.</p> <p>The Project design team has outreached extensively to both the business and residential communities. The project has been presented to the Greater Riverside Chambers of Commerce and twice to the East Hills Business Council.</p> <p>The project was presented at two community meetings. One meeting was hosted in a retail space adjacent to the Project site, with an open house style format, and was notified to the community by a mailer sent out to properties within 1,000 feet of the Project site, which is much larger than the City’s required radius of 300 feet. Another community meeting was hosted at the same location by Mission Grove Area Neighborhood Alliance using a Question & Answer style format.</p> <p>The design team also engaged with a reporter of the Press Enterprise and provided information on the project for an article which was published.</p>	
Policy LU-8.1:	Ensure well-planned infill development Citywide, allow for increased density in selected areas along established transportation corridors.	The proposed Project is an infill development and the Project site is located adjacent to a major City transportation corridor, Alessandro Boulevard.	Consistent
Policy LU-8.3:	Allow for mixed-use development at varying intensities at selected areas as a means of revitalizing underutilized urban parcels.	By blending commercial uses with residential uses, mixed use projects, such as the proposed Project, offer the opportunity for symbiotic developments that benefit both residents and any businesses operating within them. In the case of the Project, the Project’s location in relation to adjacent shopping center businesses allows for walkable, close proximity travel for Project residents to access and patronize nearby businesses.	Consistent

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Objective LU-9:	Provide for continuing growth within the and designated General Plan Area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objectives.		
Policy LU-9.3:	Designate areas for urban land uses where adequate urban levels of public facilities and services exist or are planned, in accordance with the public facilities and service provisions policies of this General Plan.	The urban location of the Project site offers adequate levels of public facilities and services. Refer to <i>Chapter 5.15 Public Services</i> for GP consistency and impacts discussion related to fire, police, schools, and other public facilities.	Consistent
Policy LU-9.4:	Promote future patterns of urban development and land use that reduce infrastructure construction costs and make better use of existing and planned public facilities when considering amendments to the Land Use Policy Map (GP 2025 Figure LU-10).	By changing the land use/zoning of the proposed Project site and redeveloping the vacant retail space and associated parking lot, the proposed Project would be making use of previously developed urban land use space rather than developing in currently undeveloped areas. This aids in reducing infrastructure construction costs associated with the GPA the Project would require to develop a residential project within a commercial designation location. Additionally, the location would provide future residents access to a variety of commercial and retail businesses, transportation options, and public services/facilities. As it is infill development in an urbanized area, no additional infrastructure construction would be required.	Consistent
Policy LU-9.5:	Encourage the design of new commercial developments as "integrated centers," rather than as small individual strip development. Integrate pedestrian access, parking,	Although the proposed Project is redevelopment of existing commercial to multi-family residential, the Project has been designed to include paved sidewalks and marked crosswalks throughout the site for resident paths of travel. These resident paths of travel have been designed to connect to existing public paths of travel along Mission Grove Parkway South and Mission Village Drive. This would create walkable and bikeable connectivity between the	Consistent

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	access, building design and landscape themes across all parcels in the commercial center to unify the development.	proposed Project's residential uses and the surrounding existing shopping center uses, Design review of the Project's plans has been completed to ensure compatible and complimentary architectural and landscaping design of the proposed Project with the existing and surrounding commercial center.	
Objective LU-22:	Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/ Inland Port Airport, Riverside Municipal and Flabob Airports.		
Policy LU-22.2:	Work cooperatively with the Riverside County Airport Land Use Commission in developing, defining, implementing and protecting airport influence zones around the March Air Reserve Base/Inland Port Airport, Riverside Municipal Airport, and Flabob Airport, and implementing the new Airport Land Use Compatibility Plan.	The Project site is located within the March Air Reserve Base (MARB) airport influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). Therefore, the Project was submitted for review to Riverside County Airport Land Use Commission (ALUC) staff who prepared a Staff Report (dated September 14, 2023) analyzing the Project's consistency with applicable airport land use compatibility criteria. The Riverside County ALUC Staff Report for the project concluded that the project was inconsistent with the MARB/IPA ALUCP based on the fact that it exceeds the Zone C2 residential density criteria maximum of 6.0 du/ac. The Staff Report concluded the Project was consistent with non-residential average intensity (calculating with two different methods and non-residential single-acre intensity. The City of Riverside Planning Commission and City Council will consider Riverside County ALUC findings and the Project's inconsistency with the residential density criteria of the MARB/IPA LUCP when considering the Project for approval.	Consistent
Policy LU-22.3:	Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of	The Project site is not within the vicinity of Riverside Municipal or Flabob Airports. The Project site is located in the March Air Reserve Base influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Project's proposed 35.0 dwelling units per acre would exceed	Partially Inconsistent (with residential density criteria)

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	residential and/or commercial facilities within identified airport safety zones and areas already impacted by current or projected airport noise.	<p>the maximum permitted density of 6.0 dwelling units per acre within this zone. However, the Project does not exceed the non-residential average or single-acre intensity criteria.</p> <p>The General Plan Noise Element Figure N-9 shows the Project site as being just outside the 60-65 dB CNEL noise contour projected for MARB/IPA operations. Accordingly, noise exposure from MARB/IPA would not exceed normally acceptable levels for the Project site.</p> <p>For a more detailed analysis of the Project’s consistency with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (subsection 5.9.6) as well as in the analysis following this table.</p>	Partially Consistent (with non-residential average or single-acre intensity criteria)
Policy LU-22.4	Adopt and utilize an Airport Protection Overlay Zone and the Riverside County Airport Land Use Compatibility Plan as it affects lands within the City of Riverside.	<p>The Project site is currently zoned as CR-SP - Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. The site is designated as Retail Business & Office within the Mission Grove Specific Plan. The City of Riverside has not adopted an Airport Protection Overlay Zone for the Project site.</p> <p>The City of Riverside Planning Commission and City Council will consider Riverside County ALUC findings and the Project’s inconsistency with the residential density criteria of the MARB/IPA LUCP when considering the Project for approval.</p>	Consistent
Policy LU-22.5:	Review all proposed projects within the airport influence areas of Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport as noted in the Public Safety Element (Figure PS-6A – Riverside Municipal	The Project site is not within the vicinity of Riverside Municipal or Flabob Airports. The Project site is located in the March Air Reserve Base influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Project’s proposed 35.0 dwelling units per acre would exceed the maximum permitted density of 6.0 dwelling units per acre within this zone. However, the Project does not exceed the non-residential average or single-acre intensity criteria.	<p>Partially Inconsistent (with residential density criteria)</p> <p>Partially Consistent (with non-residential average or</p>

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level
	<p>The City of Riverside Planning Commission and City Council will consider Riverside County ALUC findings and the Project’s inconsistency with the residential density criteria of the MARB/IPA LUCP when considering the Project for approval.</p> <p>For a more detailed analysis of the Project’s consistency with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (subsection 5.9.6) as well as in the analysis following this table.</p>	single-acre intensity criteria)
Policy LU-22.7:	<p>Prior to the adoption or amendment of the General Plan or any specific plan, zoning ordinance or building regulation affecting land within the airport influence areas of the airport land use compatibility plan for Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport, refer such proposed actions for determination and processing by the ALUC as provided by</p> <p>The Project was reviewed by ALUC staff for determination and processing and considered by ALUC on September 14, 2023.</p> <p>The City Council of the City of Riverside, by a two-thirds vote (per RMC Title 19), has the authority to overrule the Riverside County ALUC decision based on specific findings that the proposed Project is consistent with the purposes of ALUC law to protect public health, safety and welfare ensuring (1) the orderly expansion of airports, and (2) the adoption of land use measures that minimize the public’s exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. A City Council proposed overrule of an ALUC action must provide a copy of the proposed decision and findings to both ALUC and the California Division of Aeronautics, a minimum of 45 days prior to decision to overrule ALUC. These agencies have 30 days in which to provide comments to City Council.</p>	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	Public Utilities Code Section 21670.	For a more detailed analysis of the Project's consistency with the purpose and intent of ALUC law and with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (subsection 5.9.6) as well as in the analysis following this table.	
Policy LU-22.9:	All development proposals within an airport influence area and subject to ALUC review will also be submitted to the manager of the affected airport for comment.	The September 14, 2023 ALUC Staff Report for the Project was provided to Gary Gosliga of the March Inland Port Airport Authority and Major David Shaw, Base Civil Engineer, March Air Reserve Base.	Consistent
Objective LU27:	Enhance, maintain and grow Riverside's inventory of street trees.		
Policy LU-27.4:	Encourage trees on private property to add to the City's urban forest.	The proposed Project would protect in place the existing Mexican fan palm trees along Mission Grove Parkway. Furthermore, the Project would plant approximately 147 additional trees and palms.	Consistent
Objective LU69:	Complete buildout of the Mission Grove Specific Plan, encouraging development that can harmoniously co-exist near the March Airport Facility.		
Policy LU-69.1:	Do not permit further amendments to the Mission Grove Specific Plan that would increase the residential density of the neighborhood or otherwise conflict with ongoing safe operations at March Air Reserve Base/Inland Port as called out in the Riverside County	<p>The Project site is located in the March Air Reserve Base influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Project's proposed 35.0 dwelling units per acre would exceed the maximum permitted density of 6.0 dwelling units per acre within this zone. However, the Project does not exceed the non-residential average or single-acre intensity criteria.</p> <p>For a more detailed analysis of the Project's consistency with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (subsection 5.9.6) as well as in the analysis following this table.</p>	<p>Partially Inconsistent (with residential density criteria)</p> <p>Partially Consistent (with non-residential average or single-acre intensity criteria)</p>

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	Airport Land Use Compatibility Plan.		
Noise Element			
Objective N-1:	Minimize noise levels from point sources throughout the community and, whenever possible, mitigate the effects of noise to provide a safe and healthful environment.		
Policy N-1.1:	Continue to enforce noise abatement and control measures particularly within residential neighborhoods.	The Project would comply with all State and City noise requirements, including Section 7.25.010 (A) of the RMC.	Consistent
Policy N-1.2:	Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10 (Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.	The Project would consist of an infill residential project. Exterior noise levels up to 65 dBA CNEL are the upper limit of what is considered a “normally acceptable” noise environment, and noise levels between 65 dBA CNEL and 75 dBA CNEL are considered a “conditionally acceptable” noise environment based on the City’s Noise/Land Use Compatibility Criteria. Since existing exterior noise levels for on-site uses, which include traffic on Mission Grove Parkway and Mission Village Drive, are below 75 dBA CNEL, the Project is considered “conditionally acceptable.” Furthermore, interior noise levels would not exceed standards with windows and doors closed, and no additional measures would be required. (see Section 5.13 Noise).	Consistent
Policy N-1.3:	Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residen	Short-term construction noise levels would not exceed the FTA construction noise criteria of 80 dBA Leq for residences and 85 dBA Leq for commercial uses. In addition, Section 7.35.010 of the City’s Municipal Code exempts construction noise during the daytime between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. Compliance with the City’s exempt hours of construction and the mitigation measure related to construction activities	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	ces and special events are minimized.	<p>in the Mission Grove Specific Plan as well as the mitigation measure in the Mission Grove Specific Plan requiring the use and proper maintenance of noise-reducing devices on construction equipment would minimize construction-related noise and ensure construction noise would not be generated during the more sensitive nighttime hours (see Section 5.13 Noise).</p> <p>Specifically, the aforementioned Mission Grove Specific Plan noise mitigation measures (Mission Grove Specific Plan Appendix 1, part D) state:</p> <p>“Construction activities will take place only during those days and hours specified in the City Noise Ordinance to reduce noise impacts during more sensitive time periods,” and “The use and proper maintenance of noise reducing devices on construction equipment will minimize construction-related noise.”</p>	
Policy N-1.4:	Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.	A Project-specific noise study was conducted, and indicated the Project would not exceed City noise standards (see Section 5.13 Noise).	Consistent
Policy N-1.5:	Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.	The Project site is not located in an existing or anticipated noise-impacted area.	Consistent
Policy N-1.8:	Continue to consider noise concerns in evaluating all proposed development	A Project-specific noise study was conducted, and indicated the Project would not exceed City noise standards (see Section 5.13 Noise).	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level	
	decisions and roadway projects.		
Objective N-2:	Minimize the adverse effects of airport-related noise through proper land use planning.		
Policy N-2.2:	<p>Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 60 dB CNEL) for Riverside Municipal Airport and Flabob Airport in accordance with the Riverside County Airport Land Use Compatibility Plan.</p>	<p>The Project site is not located near the Riverside Municipal Airport or Flabob Airport.</p> <p>The General Plan Noise Element Figure N-9 shows the Project site as being just outside the 60-65 dB CNEL noise contour projected for MARB/IPA operations. Accordingly, noise exposure from MARB/IPA would not exceed normally acceptable levels for the Project site.</p>	Consistent.
Objective N-3:	Ensure the viability of March Air Reserve Base/March Inland Port		
Policy N-3.1:	<p>Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 65 dB CNEL) for March Air Reserve Base/March Inland Port in accordance with the Riverside County 2014 March Air Reserve Base/Inland Port Airport Land Use</p>	<p>As discussed in Section 5.13 Noise, the Project site is located outside of the 60 dBA CNEL noise contour. Therefore, the Project site would not be exposed to aircraft noise exceeding the exterior noise standard of 65 dBA CNEL based on the MARB/IPA LUCP Countywide Policy 4.1.5.</p>	Consistent.

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	Compatibility Plan (MARB/IPA LUCP).		
Objective N-4:	Minimize ground transportation-related noise impacts.		
Policy N-4.1:	Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).	As discussed in Section 5.13 Noise, worst-case scenario traffic noise levels were analyzed to determine potential long-term traffic noise impacts. The worst-case scenario assumes that no shielding is provided between the traffic and the location where the noise contours are drawn. The analysis shows that the Project would result in a project-related traffic noise increase of up to 0.6 dBA, which would be below 3 dBA and therefore not perceptible to the human ear in an outdoor environment. Therefore, the Project would already result in minimal potential noise impacts generated by vehicular sources and would not need to implement noise reduction features.	Consistent.
Open Space and Conservation Element			
Objective OS-1:	Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.		
Policy OS-1.6:	Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.	The Project proposes to provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the retail land uses and the surrounding areas. Additionally, the Project would include residential use driveways that would provide residential access to surrounding streets, such as Mission Village Drive and Mission Grove Parkway South, without impairing public access to these streets or to adjacent shopping center uses, and an enhanced pedestrian walkway from the development to adjacent commercial uses.	Consistent
Policy OS-1.8	Encourage residential clustering as means of	The Project would consist of a multi-family residential development that would offer a variety of unit options, including 1-, 2, and 3-bedroom units. The	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	preserving open space.	Project would be an infill development within a previously developed shopping center, with existing single-family residential uses to the south, across Mission Village Drive, and multi-family residential uses to the north, across Alessandro Boulevard. Thus, the Project would contribute to the clustering of residential uses in the area and, as an infill development, would contribute towards the preservation of open space from development.	
Objective OS-5:	Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.		
Policy OS-5.2:	Continue to participate in the MSHCP Program and ensure all projects comply with applicable requirements.	The Project would participate in and comply with all applicable requirements of the MSHCP Program (see Section 5.4 Biological Resources).	Consistent
Policy OS-5.4:	Protect native plant communities in the General Plan Area, including sage scrub, riparian areas, and vernal pools, consistent with the MSHCP.	The Project would be an infill development within an existing, previously developed shopping center. As such, the Project site currently does not contain, nor does it contain the habitat to support, native plant communities such as sage scrub, riparian areas, or vernal pools. Thus, the Project would not result in impacts to these native plant communities. Additionally, as an infill development within an already developed, urbanized area, the Project lends toward the protection of these native plant communities by helping to preserve open space areas within the City that can support these communities.	Consistent.
Objective OS-8:	Encourage the efficient use of energy resources by residential and commercial users.		
Policy OS-8.2:	Require incorporation of energy conservation features in the design of all new construction and substantial	The Project would adhere to CALGreen building code standards which include water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas, management of construction waste, reuse or recycling of excavated	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.	soil and land clearing debris, and recycling by occupants.	
Policy OS-8.3:	Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.	The Project would adhere to Title 24 and California Green Building Standards (see Section 5.3 Air Quality), and will include various energy efficiency measures, such as solar photovoltaic systems.	Consistent
Policy OS-8.4:	Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.	The Project includes various energy efficiency measures, such as solar photovoltaic systems.	Consistent
Policy OS-8.5:	Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).	The proposed Project includes landscaping with low water use trees, shrubs, and ground cover and will plant approximately 147 trees.	Consistent
Policy OS-8.6:	Require all new development to incorporate energy efficient lighting,	The Project would comply with the 2022 California Building Code and utilize all-electric appliances and would not use natural gas connections, propane, or	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	heating and cooling systems pursuant to the Uniform Building Code and Title 24.	other fossil fuels and would implement photovoltaic solar power.	
Policy OS-8.7:	Encourage mixed-use development as a means of reducing the need for auto travel.	The mixed-use redevelopment Project would reduce the need for auto travel as the surrounding commercial/retail amenities are within walking distance and connected to the Project via sidewalks.	Consistent
Policy OS-8.9:	Encourage construction and subdivision design that allows the use of solar energy systems.	The Project would comply with all applicable building codes, thus adhering to Title 24, Part 11, CALGreen Building Standards Code (see Section 5.3 Air Quality), and would include various energy efficiency measures, such as solar photovoltaic systems.	Consistent
Policy OS-8.10:	Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of nonrenewable energy supplies.	The Project would consist of a mixed-use infill development and would provide convenient access to alternative means of transportation. The Project would include paved sidewalks and marked crosswalks that would connect to existing public sidewalks along Mission Grove Parkway South and Mission Village Drive, which would support walking and biking to local destinations rather than driving. Additionally, the Project would relocate an existing bus stop along Mission Grove Parkway South 200 ft north of its existing location, which would make the stop more accessible to Project residents.	Consistent
Policy OS-8.12:	Require bicycle parking in new non-residential development.	The Project would include 32 short-term bicycle racks and 35 long-term bicycle racks at the proposed Project site.	Consistent.
Objective OS-10:	Preserve the quantity and quality of all water resources throughout Riverside		
Policy OS-10.1:	Support the development and promotion of water conservation programs.	The Project Specific WQMP outlines the LID BMPs and includes the creation of water-efficient landscapes; the installation of water-efficient buildings, fixtures, appliances, and irrigation systems and devices; restriction of watering methods; and providing education about water conservation and	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
		available programs and incentives to the building operators to distribute to residents.	
Policy 10.2:	OS- Coordinate plans, regulations and programs with those of other public and private entities which affect the consumption and quality of water resources within Riverside.	Domestic water services would be provided to the Project by WMWD, which has provided the Project with a Will Serve Letter.	Consistent
Policy 10.4:	OS- Develop a recommended native, low-water-use and drought-tolerant plant species list for use with open space and park development. Include this list in the landscape standards for private development.	The Project landscape design includes quality, drought-tolerant landscaping and efficient use of water in compliance with the City's Water Efficient Landscaping and Irrigation Ordinance (Chapter 19.570 of the RMC). (see Section 5.19 Utilities and Service Systems)	Consistent
Policy 10.6:	OS- Continue to enforce RWQCB regulations regarding urban runoff.	The Project would comply with applicable RWQCB regulations regarding urban runoff. Storm water BMPs identified in the Project-specific SWPPP would be required to be implemented to effectively control erosion and sedimentation and other construction-related pollutants for the duration of construction. On-site storm water and non-stormwater runoff would be treated with on-site BMPs identified in the Preliminary Project Specific WQMP and then discharged to the existing drainage facilities that extend off-site (see Section 5.19 Utilities and Service Systems).	Consistent
Policy 10.8:	OS- Cooperate with Riverside and San Bernardino Counties	Domestic water services would be provided to the Project by WMWD, which has provided the Project with a Will Serve Letter. WMWD Wholesale expects	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	and adjacent jurisdictions in the review and approval of new developments which affect the quality and quantity of basin-wide groundwater and surface water resources.	to have sufficient supplies available to meet the demands of Western Retail and its other wholesale customers, even in dry years, based on Metropolitan’s 2020 UWMP (see Section 5.19 Utilities and Service Systems).	
Policy OS-10.9:	Evaluate development projects for compliance with NPDES requirements, and require new development to landscape a percentage of the site to filter pollutant loads in stormwater runoff and provide groundwater percolation zones.	The Project would comply with NPDES requirements. In addition, the proposed impervious area has been limited. Also, the existing vegetation along the existing street frontage has been preserved where feasible, and additional landscape areas have been proposed on site throughout the parking lot and adjacent to buildings where possible. Finally, site runoff would be directed to the 4 proposed Modular Wetlands Biofiltration systems (see Section 5.19 Utilities and Service Systems).	Consistent
Public Facilities and Infrastructure Element			
Objective PF-1:	Provide superior water service to customers.		
Policy PF-1.1:	Coordinate the demands of new development with the capacity of the water system.	WMWD’s 2020 UWMP includes a Water Reliability Assessment to compare the total water supply sources available to long-term projected water use over the next 25 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. WMWD Wholesale expects to have sufficient supplies available to meet the demands of Western Retail and its other wholesale customers, even in dry years, based on Metropolitan’s 2020 UWMP (see Section 5.19 Utilities and Service Systems).	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
Policy PF-1.3:	Continue to require that new development fund fair-share costs associated with the provision of water service.	There are major domestic water distribution facilities currently available within the project area to serve the Project. The Project would not need to fund fair-share costs associated with the provision of water service.	Consistent
Policy PF-1.4:	Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.	Although the Project would include a change to land use and zoning, the change would result in a very small incremental increase in population growth, approximately 1.5%, of what was anticipated under the GP 2025 typical growth scenario (refer to Section 5.14 Population and Housing). Thus, the Project would be within the City's anticipated 2025 growth projection. Implementation of the Project would not require new or expanded entitlements for water supplies.	Consistent
Policy PF-1.5:	Implement water conservation programs aimed at reducing demands from new and existing development.	In order to effectively conserve water, the Project would include water conservation and efficiency measures as discussed in Section 3 – Project Description. The Project is also subject to RMC Chapter 14.22 – Water Conservation that includes the Water Conservation Ordinance, drought plan, and water conservation programs that help water users throughout the City conform to local and state regulations for water conservation including drought-related regulations (see Section 5.10 Hydrology and Water Quality).	Consistent
Policy PF-1.7:	Protect local groundwater resources from localized and regional contamination sources such as septic tanks, underground storage tanks, industrial businesses and urban runoff.	Project-specific Phase I and Phase II ESAs were prepared and did not identify any potential sources of contamination for the Project (see Section 5.9 Hazards and Hazardous Materials).	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies	Relationship of the Project to the Policy	Consistency Level	
Objective PF-3:	Maintain sufficient levels of wastewater service throughout the community.		
Policy-PF-3.1:	Coordinate the demands of new development with the capacity of the wastewater system.	The Project's Sewer Capacity Evaluation determined that the City's collection system has sufficient capacity to convey existing PWWFs downstream of the Project without exceeding the established flow depth criteria (see Section 5.19 Utilities and Service Systems).	Consistent
Policy PF-3.2:	Continue to require that new development fund fair-share costs associated with the provision of wastewater service.	A Sewer Capacity Evaluation was conducted to assess the impact the Project would have on the City's wastewater collection system. (see Section 5.19 Utilities and Service Systems) The analysis indicated the existing collection system is adequately sized for the proposed Project. The Project would not need to fund fair-share costs associated with the provision of wastewater service.	Consistent
Policy PF-3.3:	Pursue improvements and upgrades to the City's wastewater collection facilities consistent with current master plans and the City's Capital Improvement Program.	The Project's Sewer Capacity Evaluation (Appendix K) determined that the City's collection system has sufficient capacity to convey existing peak wet weather flows (PWWFs) in addition to Project flows. It also showed that the City's 2020 Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities' (Master Plan Updates) proposed existing collection system projects are adequately sized to handle the proposed Project's change in the land use type.	Consistent
Policy PF-3.4:	Continue to investigate and carry out cost-effective methods for reducing stormwater flows into the wastewater system and the Santa Ana River.	The Project will utilize the City's existing sewer line on the southwestern side of the property. Furthermore, stormwater will be treated by flowing through modular wetlands throughout the site which are detailed and sized by the WQMP (see Section 5.10 Hydrology and Water Quality).	Consistent
Objective PF-4:	Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.		

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
Policy PF-4.2:	Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.	Coverage under the State's General Permit for Construction Activities require a Project-specific SWPPP. Storm water management measures identified in the Project-specific SWPPP will be implemented to effectively control erosion and sedimentation and other construction-related pollutants for the duration of construction.	Consistent
Policy PF-4.3:	Continue to routinely monitor and evaluate the effectiveness of the storm drain system and make adjustments as needed.	The storm water drainage system will be installed concurrently with the construction of the Project and will be adequately sized to accommodate the drainage created by this Project. On-site storm water and non-stormwater runoff will be treated with onsite BMPs identified in the Preliminary Project Specific WQMP and then discharged to the existing drainage facilities that extend off-site, thus retaining the overall drainage pattern of the site (see Section 5.19 Utilities and Service Systems).	Consistent
Objective PF-5:	Minimize the volume of waste materials entering regional landfills.		
Policy PF-5.1:	Develop innovative methods and strategies to reduce the amount of waste materials entering landfills. The City should aim to achieve 100% recycling citywide for both residential and non-residential development.	The Project will adhere to CALGreen building code standards which include management of construction waste, reuse or recycling of excavated soil and land clearing debris, and recycling by occupants. The Project will provide readily accessible areas that serve the entire development and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals.	Consistent
Objective PF-6:	Provide affordable, reliable and, to the extent practical, environmentally sensitive energy resources to residents and businesses.		
Policy-PF-6.4:	Encourage energy-efficient development through its site plan	The Project would comply with the 2023 California Building Code and utilize all-electric appliances within the Project's residential units. The residential units would not use natural gas connections,	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	and building design standard guidelines.	propane, or other fossil fuels; rather, natural gas connections would only be used for common space areas/amenities. In addition, the Project would implement photovoltaic solar power.	
Objective PF-7:	Ensure that Riverside residents, the business community and educational institutions have easy access to state-of-the-art internet services and modern telecommunications technology.		
Policy-PF-7.4:	Encourage new development to be wired or provided with other necessary infrastructure for up-to-date telecommunications services.	RPU will provide electricity to the proposed Project. Telecommunications will be provided by a local provider such as Spectrum or AT&T. The proposed residential project would not limit any residents from accessing telecommunications, wi-fi, or any modern telecommunications technology.	Consistent
Public Safety Element			
Guiding Principle:	Comprehensively address the public safety needs and concerns of its residents, businesses, institutions, and visitors in a proactive and coordinated way to ensure protection from foreseeable natural and human-caused hazards.		
Policy PSE-1:	NATURAL HAZARDS Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding, drought, and structural and wildland fires.	The Project is required to comply with applicable CBC, CFC, GP 2025, and City Guidelines requirements which reduce the risk of natural hazards. As outlined in the geotechnical report (Appendix E), the Project site is not susceptible to liquefaction and has a low risk of landslides. The site underlain at shallow depths by granitic bedrock and the potential for liquefaction or seismic induced settlement is considered low. The Project site is not located within a flood hazard area and with implementation of the proposed drainage improvements would not result in flooding. The Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).	Consistent
Policy PSE-2:	HAZARDOUS MATERIALS Minimize the risk of potential hazards associated	Based on the results of the Phase I and Phase II ESAs, there is a low risk of potential hazards associated with the Project site. Although the Project would include use of hazardous materials common	Consistent

Applicable City of Riverside General Plan 2025 Objectives and Policies		Relationship of the Project to the Policy	Consistency Level
	with management and transport of hazardous materials.	for residential uses including paints and other solvents, cleaners, and pesticides, due to the limited quantities of these materials, they are not considered hazardous to the public at large and compliance with applicable federal, state, and local laws would minimize risks. (see Section 5.9 Hazards and Hazardous Materials).	
Policy PSE-3:	TRANSPORTATION Minimize the risk of potential hazards associated with air and ground transportation.	Title 49 of the CFR implemented by Title 13 of the CCR describes strict regulations for the safe transportation of hazardous materials. Compliance with all applicable local, State, and federal laws related to the transportation, use, and storage of hazardous materials will reduce the likelihood and severity of accidents during transit.	Consistent
Policy PSE-4:	Policy PSE-4: EMERGENCY SERVICES Provide high-quality and responsive police, fire, and emergency services to all residents and businesses in Riverside.	In 2019, RFD was awarded the highest available ISO rating of Class 1. The project site is served by two existing nearby fire stations. Furthermore, there would be sufficient police protection service and facilities to accommodate the additional population resulting from the proposed Project. Therefore, the proposed Project would not increase response times of emergency services.	Consistent
Policy PSE-6:	Policy PSE-6: HOMELESSNESS Reduce homelessness in Riverside through coordinated implementation of and equitable accessibility to public safety, economic, and social programs.	By providing high-density residential dwelling units, the Project will help address the City's need for housing.	Consistent

General Plan 2025

Consistency with General Plan Policies

As outlined in Table 5.11-1 above, the Project would be consistent with all applicable GP 2025 policies, with the exception of those that relate to consistency with the applicable airport land use compatibility plan, the MARB/IPA LUCP, in which the Project is partially inconsistent and partially consistent with, which are the following:

- **Policy CCM-11.1:** Protect flight paths from encroachment by inappropriate development using the Riverside County Airport Land Use Compatibility Plan and the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan to determine the consistency of proposed development.
- **Policy LU-22.3:** Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of residential and/or commercial facilities within identified airport safety zones and areas already impacted by current or projected airport noise.
- **Policy LU-22.5:** Review all proposed projects within the airport influence areas of Riverside Municipal Airport, Flabob Airport or March Air Reserve Base/Inland Port Airport as noted in the Public Safety Element (Figure PS-6A – Riverside Municipal and Flabob Airport Safety Zones and Influence Areas; and Figure PS-6B – March ARB/IPA Airport Safety Zones and Influence Areas) for consistency with all applicable airport land use compatibility plan policies adopted by the Riverside County Airport Land Use Commission (ALUC) and the City of Riverside, to the fullest extent the City finds feasible.
- **Policy LU-69.1:** Do not permit further amendments to the Mission Grove Specific Plan that would increase the residential density of the neighborhood or otherwise conflict with ongoing safe operations at March Air Reserve Base/Inland Port as called out in the Riverside County Airport Land Use Compatibility Plan.

The Project's proposed 35.0 dwelling units per acre would exceed the maximum permitted density of 6.0 dwelling units per acre within Zone C2. However, the Project does not exceed the non-residential average criteria (limited to 200 people per acre) or single-acre intensity criteria (limited to 500 people per acre).

Consistency with General Plan Land Use Designation

The current commercial land use designation would not allow the proposed Project's multi-family residential development. The proposed Project includes a General Plan Amendment (GPA) to change the existing General Plan Land Use Designation of the project site from C - Commercial to MU-U - Mixed Use-Urban, to allow residential land use. The existing and proposed land use designations are shown in Figure 3.0-4 General Plan Land Use Map. As outlined in Section 3.0 Project Description, the proposed Project would comply with the City's Site Development Standards (Table 3.0-3 Building Development Standards). Upon approval of the Project, including

the proposed GPA, the proposed development would comply with the new applicable land use designation.

Consistency with General Plan Housing Element

The proposed Project would comply with the applicable GP 2025 Housing Element objectives and policies by increasing the types and availability of housing in the City. The Project will comply with smart growth principles by providing multi-family residential housing in a mixed-use environment. The Project would also provide appropriate site design, landscaping, and building design in order to comply with the GP 2025 Land Use and Urban Design Elements.

The Project would be consistent with all applicable GP 2025 objectives and policies, with the exception of policies CCM-11.1, Policy LU-22.3, Policy LU-22.5, and Policy LU-69.1, in which it would be partially consistent and partially inconsistent. The partial inconsistency is due to the Project exceeding the maximum permitted density of 6.0 dwelling units per acre within Combability Zone C2. Due to the partial inconsistency with applicable GP 2025 policies, the project would result in a **significant and unavoidable impact**. There are no feasible mitigation measures that would reduce impacts related to inconsistency with the residential density criteria.

Mission Grove Specific Plan

The current Mission Grove Specific Plan designation as Retail Business & Office would not allow the proposed Project's multi-family residential development. The proposed Project includes a Specific Plan Amendment (SPA) to revise the Mission Grove Specific Plan. The proposed revisions to the Mission Grove Specific Plan include adding Mixed-Use – Urban for 9.92 acres, with density of 40 dwelling units per acre, and number of Mixed-Use – Urban units of 396.80, and reducing the Non-Residential, Retail Business & Office to 59.84 acres. The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the Proposed apartment project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site. The shared parking will be memorialized in a new covenant and restriction agreement between the residential developer entity and Mission Grove Plaza. A 15% parking reduction request has been outlined for the Project site as noted in the Project's Specific Plan Amendment, per City of Riverside Municipal Code 19.580.060.C.2.b. Upon approval of the Project, including the proposed SPA, the proposed development would comply with the new applicable zoning regulations.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Project site is located within the March Air Reserve Base (MARB) airport influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Riverside County Airport Land Use Commission (ALUC) prepared a Staff Report (dated September 14, 2023) analyzing the Project's consistency with applicable airport land use compatibility criteria as outlined in further detail below. The Project does not propose any uses specifically prohibited or discouraged in Compatibility Zone C2 (highly noise-sensitive outdoor nonresidential uses). On September 14, 2023 the Riverside County ALUC, by a 5-0 vote, found the proposed Project, City of Riverside Case Nos. PR-2022-001359

inconsistent with the 2014 MARB/ IPA LUCP, based on the fact that the project is inconsistent with the required residential density criteria.

The Riverside County ALUC Staff Report concluded that the proposed Project would be inconsistent with the airport land use compatibility plan criteria and the City adopted General Plan and Zoning Ordinance based on the following points:

Residential Density

Pursuant to the MARB/IPA LUCP, the project site is located within Compatibility Zone C2, which restricts residential density to a maximum of 6.0 dwelling units per acre (du/ac). The proposed Project includes 347 multi-family units on 9.92 acres, which results in a density of 35.0 dwelling units per acre. The Zone C2, in which the Project is located, is identified as a Flight Corridor Zone, where the risk level is considered “moderate” in the ALUC Countywide Policies Table 3A – Compatibility Zone Factors. Per Table 3A – Compatibility Zone Factors, “some 10% to 15% of off-runway general aviation accidents near airports occur in this zone,” in reference to Compatibility Zone C2. Based on these safety factors, the intent and purpose of Compatibility Zone C2 is to restrict residential density in order to limit the potential risk of an off-field aircraft landing. The Project’s proposed residential density of 35.0 du/ac exceeds the maximum allowable residential density for Zone C2 of 6.0 du/ac.

County Wide Policy 3.3.1 Infill

Countywide Policy 3.3.1 (Infill) allows for greater densities than would otherwise be permitted in Compatibility Zone C2, but caps densities at double the allowable density of the zone. As the maximum density of the zone is 6.0 du/ac, doubling the density increases the limit from 6.0 to 12.0 du/ac, which the proposed Project’s density of 35.0 du/ac would significantly exceed.

As designed for the March Air Reserve Base environs, Compatibility Zone C2 would allow an average of 200 people per acre and a single acre land use intensity of 500 persons.

Non-Residential Average Intensity

Pursuant to the MARB/IPA LUCP, the non-residential average intensity for Compatibility Zone C2 is limited to 200 people per acre. Per Appendix C, Table C-1 of the MARB/IPA LUCP and the Additional Compatibility Policies included in the MARB/IPA LUCP the following rates were used to calculate the occupancy for the proposed Project:

- Office area – 1 person per 200 square feet (SF);
- Exercise Room area – 1 person per 50 SF,
- Pool area – 1 person per 50 SF;
- Pool Deck area – 1 person per 15 SF; and
- Club area – 1 person per 15 SF.

As the Project includes construction of a 347-unit multi-family development including recreational amenities including 2,963 SF of leasing office area, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, accommodating a total occupancy of 311 people, resulting in an average intensity of 31 people per acre, which is consistent with the Compatibility Zone C2 average intensity of 200 people per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle). Based on the number of parking spaces provided (347 standard vehicles) the total occupancy would be estimated at 521 people for an average intensity of 53 people per acre, which is consistent with the Compatibility Zone C2 average intensity criterion of 200 people per acre.

Non-Residential Single-Acre Intensity

Pursuant to the MARB/IPA LUCP, Compatibility Zone C2 limits maximum single-acre intensity to 500 people. There are no risk-reduction design bonuses available as MARB/IPA is primarily utilized by large aircraft weighing more than 12,500 pounds. Based on the Project site plan and the occupancies previously calculated/noted, the maximum single-acre area would occur around the multi-family residential amenities which includes 2,963 SF of leasing office, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, resulting in a single acre occupancy of 311 people, which would be consistent with the Compatibility Zone C2 single-acre intensity criterion of 500 people.

Flight Hazard Issues

Structure height, electrical interference, and reflectivity/glare are among the issues that solar panels in the airport influence area must address. The Project's photovoltaic (PV) panel structures would be located on the building rooftops and carports within the Compatibility Zone C2.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Project on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. Potential for temporary after-image ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The proposed Project includes approximately 40,000 SF of solar panels on the building rooftops and carports. Two solar glare studies were prepared for the proposed Project utilizing web-based Forge Solar which analyzed 1) panels with a fixed tilt of 5 degrees with no rotation and orientation of 180 degrees with a height of 45 feet. The analysis concluded

that some potential for glare was identified within the Air Force traffic pattern. Evaluation of the Air Force traffic patterns indicates that the panels would result in no glare or a low potential for temporary after-image (“green” level glare). The glare created by the Project would range between 39,047 minutes and 40,044 minutes of “green” level glare, which represents less than 20 percent of total day light time. The Riverside County ALUC has a policy that any proposed development with solar arrays should not have more than 60,000 minutes or roughly 20 percent of daylight minutes annually in predicted glare impact and the Project would not create glare that would exceed this Riverside County ALUC.

Electrical and Communication Interference

The proposed Project does not include the use of equipment that would interfere with aircraft communications. The solar panels themselves present little risk of interfering with radar transmission due to their low profiles. In addition, solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. There are no radar transmission or receiving facilities within the Project site.

March Air Reserve Base/United States Air Force Input

Given that the project site is located in Zone C2 westerly of the northerly runway at March Air Reserve Base, the Base staff was notified of the project, and sent plans and the solar glare hazard study for their review. On July 31, 2023, the Air Force provided comments supporting ALUC’s recommendation of inconsistency due to concerns with the project’s inconsistent density.

Prohibited and Discouraged Uses

The project does not propose any uses specifically prohibited or discouraged in Compatibility Zone C2 (highly noise-sensitive outdoor nonresidential uses), other than the inconsistent density.

Noise

The MARB/IPA LUCP depicts the site as being below the 60 CNEL range from aircraft noise. Therefore, no special measures are required to mitigate aircraft-generated noise.

PAR 77 (Structure Height)

At a distance of approximately 17,464 feet from the Project site to the nearest point on the runway, Federal Aviation Administration (FAA) review would be required for any structures with top of roof exceeding 1,710 feet above mean sea level (amsl). The Project site’s finished floor elevation is 1,595 feet amsl and proposed building height is 57’2” feet, resulting in a top point elevation of 1,652’2” amsl. Therefore, review of the building for height/elevation reasons by the FAA Obstruction Evaluation Service (FAAOS) is not required.

In summary, the Riverside County ALUC Staff Report for the project concluded that the project was inconsistent with the MARB/IPA ALUCP based on the following:

- It exceeds the Zone C2 residential density criteria maximum of 6.0 du/ac.

The Riverside County ALUC Staff Report for the project concluded that the project was consistent with the following MARB/IPA ALUCP criteria:

- Non-residential average intensity (calculating with two different methods);
- Non-residential single-acre intensity.

City of Riverside Consistency with MARB/IPA Analysis and Findings

Residential Density

The Project site is located within Compatibility Zone C2, which restricts residential density to a maximum of 6.0 dwelling units per acre (du/ac). The proposed Project includes 347 multi-family units on 9.92 acres, which results in a density of 35.0 dwelling units per acre. The Project's proposed residential density of 35.0 du/ac exceeds the maximum allowable residential density for Zone C2.

Non-Residential Average Intensity

The non-residential average intensity for Compatibility Zone C2 is limited to 200 people per acre. The proposed Project includes construction of a 347-unit multi-family development including recreational amenities including 2,963 SF of leasing office area, 1,001 SF of pool area, 1,293 SF of pool deck area, 2,136 SF of club area, and 2,386 SF of fitness area, accommodating a total occupancy of 311 people, resulting in an average intensity of 31 people per acre, which does not exceed and is consistent with the Compatibility Zone C2 average intensity of 200 people per acre.

The project is also consistent with non-residential intensity requirements using a second method based on the number of parking spaces provided by the Project. For determining total occupancy, the total number of parking spaces provided or required for the Project (whichever is greater) is multiplied by an average vehicle occupancy per vehicle, which is assumed to be 1.5 persons per vehicle. As outlined in the project description section (Section 3.0 – Project Description) the Project is providing a total of 604 parking spaces (not 347 as utilized in ALUC's calculation). Based on the number of parking spaces provided, the total occupancy would be estimated at 906 people, for an average intensity of 91 people per acre, which does not exceed and is consistent with the Compatibility Zone C2 average intensity criterion of 200 people per acre. The Project's average intensity of 91 people per acre is considerably lower than the C2 average intensity criterion of 200 people per acre. While the unit count may exceed ALUC's residential density requirements, the actual amount of people onsite would be much lower than what ALUC would allow in Zone C2 if this were a commercial development, and accordingly would not impose a safety impact due to the intensity of people onsite in the event of an emergency.

Flight Hazard Issues

Structure height, electrical interference, and reflectivity/glare are potential flight hazard issues from solar panels being utilized in the airport influence area. The Project's photovoltaic (PV) panel structures would be located on the building rooftops and carports within the Compatibility Zone C2.

Height

The FAA FAR Part 77 Surface Map is a map used by the FAA and the ALUC to identify potential obstructions and hazards to aviation traffic. The ALUC uses the map as a height restriction boundary for the purposes of making consistency determinations with its ALUCP. The elevation of Runway 14-32 at its northerly terminus is 1,535 feet amsl. The Project at a distance of approximately 17,464 feet from the nearest point on the runway, would require FAA review if the top roof exceeded 1,710 feet amsl. The Project site's finished floor elevation is 1,595 feet amsl and the proposed maximum building height is 57'2" feet, resulting in a top point elevation of 1,652'2" feet amsl. Therefore, FAAOES review is not required. The Project would be in compliance with and will have no impact related to FAA FAR Par 77 regulations.

The Project proposes to develop five, 4-story buildings with a maximum height of 57'2" feet. This is below the proposed Mixed Use – Urban (MU-U) maximum height of 60 feet and well below the current Commercial Retail (CR) maximum height of 75 feet. Development of the Project, as well as the proposed General Plan amendment (GPA) and change of zone (ZC) will result in reduced maximum height than what is allowed under the proposed GPA and ZC and what is currently allowed for the site. The Project would not impose a safety hazard due to height.

Electrical Interference

There are no radar transmission or receiving facilities within the Project site. The Project's solar panels are low profile and present little risk of interfering with radar transmission. In addition, the solar panels do not emit electromagnetic waves over distances that could interfere with radar signal transmissions, and any electrical facilities that do carry concentrated current will be buried beneath the ground and away from any signal transmission. The Project will not utilize equipment that would interfere with aircraft communications.

Glint and Glare/Reflectivity

Based on the Federal Aviation Administration's Interim Policy for Review of Solar Energy System Project on Federally Obligated Airports, no glare potential or low potential for temporary after-image ("green" level) are acceptable levels of glare on final approach (within 2 miles from end of runway) for solar facilities located on airport property. Potential for temporary after-image ("yellow" level) and potential for permanent eye damage ("red" level) are not acceptable levels of glare on final approach. No glare is permitted at air traffic control towers.

The proposed Project includes approximately 40,000 SF of solar panels on the building rooftops and carports. Based on the results of the glint and glare analysis the following are the key results:

- No significant (red glare) glint and glare impacts on key receptors are predicted.

- No impacts from glare were predicted on the final approach flight paths.
- Minor (green) impacts from glare, “glare with low potential to cause temporary after-image,” were predicted; 44,049 minutes of “green” glare were predicted of annual daylight hours. Which would be approximately 16.7 percent of the total number of minutes of sunlight in a standard year. The proposed Project is in compliance with Riverside ALUC policy that any proposed development with solar arrays should not have more than 20 percent of daylight minutes. The anticipated amount of green glare produced annually from the Project is below ALUC’s threshold of 20% of daylight minutes.

Therefore, the Project’s solar panels would not result in a solar glare impacts on MARB/IPA flight operations.

The Project site is currently a part of the Mission Grove Plaza Shopping Center and will continue to share parking spaces with the commercial development upon Project implementation. As such, ample open space is provided adjacent to the Project in the event an aircraft requires an emergency landing.

The Project will comply with the recommended ALUC conditions of approval, including restrictions on outdoor lighting, prohibited uses, and notices and informational brochures for prospective purchasers and tenants. The Project will also comply with recommended conditions related to light and glare with minor modifications, to continue to ensure safety, but allow for flexibility in the final design of the Project’s solar panels. The ALUC recommended conditions of approval are outlined below.

Riverside County ALUC conditions:

1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DoD or FAA-approved navigational signal light or visual approach slope indicator.
 - b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
 - c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations,

wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)

- d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
 - e. Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.
 - f. Other Hazards to flight.
3. The "Notice of Airport in Vicinity" that was provided in the ALUC Staff Report for the Project shall be provided to all prospective purchasers and occupants of the property and be recorded as a deed notice.
 4. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

5. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
6. The project has been evaluated to construct a multi-family development consisting of 347 multi-family residential units, pool area, leasing office, club area, and fitness center. Any

increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.

7. All solar arrays installed on the project site shall consist of photovoltaic solar panels that are consistent with the specifications described in the glare study, which projects 44,049 minutes of solar glare annually based on the proposed Project. Any deviation that exceeds 20 percent of the annual daylight minutes should be analyzed in an updated solar glare study which shall be submitted to ALUC. If the updated solar glare study results in a) more than 20 percent of annual solar glare minutes, b) any glare impacting the air traffic control tower, or c) creation of any “yellow” or “red” level glare in the flight paths, then the amended project shall require a new hearing by the Airport Land Use Commission.
8. In the event that any glint, glare, or flash affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such glint, glare, or flash. An “event” includes any situation that results in an accident, incident, “near-miss,” or specific safety complaint regarding an in-flight experience to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the incidence. Suggested measures may include, but are not limited to, changing the orientation and/or tilt of the source, covering the source at the time of day when events of glare occur, or wholly removing the source to diminish or eliminate the source of the glint, glare, or flash. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator’s satisfaction.
9. In the event that any electrical interference affecting the safety of air navigation occurs as a result of project operation, upon notification to the airport operator of an event, the airport operator shall notify the project operator in writing. Within 30 days of written notice, the project operator shall be required to promptly take all measures necessary to eliminate such interference. An “event” includes any situation that results in an accident, incident, “near-miss,” report by airport personnel, or specific safety complaint to the airport operator or to federal, state, or county authorities responsible for the safety of air navigation. The project operator shall work with the airport operator to prevent recurrence of the event. For each such event made known to the project operator, the necessary remediation shall only be considered to have been fulfilled when the airport operator states in writing that the situation has been remediated to the airport operator’s satisfaction.

Riverside Municipal Code

Title 7 – Noise Control

The Project will meet the applicable requirements of the Noise Code. See Section 5.9 Noise for more information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard public health, safety and general welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated by the City. The Project has been reviewed by the City's Departments and has been found consistent with Title 16.

As outlined in Sections 5.2, 5.5, and 5.7, the Project will meet or exceed all applicable standards under California's Green Building Code Title 24 Standards. As outlined in Section 5.13, the Project is required to and will include automatic fire sprinkler systems. Construction plans are required to be submitted and permitted prior to construction. Fire Department access shall be maintained during all phases of construction. All required public and private fire hydrants will be in service and fire flow available prior to building permit issuance by the City. The Project will meet the applicable requirements of the Building Code.

Title 17 – Grading Code

Grading of the Project is regulated by Title 17, which sets forth rules and regulations to control erosion, grading, and earthwork construction, including fills and embankments. The purpose of the Grading Code is to regulate grading in a manner that minimizes the adverse effects on natural landforms, soil erosion, dust control water runoff, and construction equipment emissions. The Project will meet the applicable requirements of the Grading Code.

Title 19 – Zoning Code

The Zoning Code Amendment request would change the on-site zoning designation from CR – Commercial Retail – to MU-U – Mixed-use Urban. Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking. The existing and proposed zoning are shown in Figure 3.0-5 Zoning. The proposed Project is consistent with the development standards of the proposed zone.

Title 20 – Cultural Resources

See Section 5.4 Cultural Resources and Section 5.11 Tribal Cultural Resources for information on compliance with Title 20.

Consistency Conclusion

As discussed above, the Project will be consistent with the RMC, Titles 7, 16, 17, 19, and 20, the Mission Grove Specific Plan and General Plan 2025 land use designation and Housing Element. The Project would be consistent with all applicable GP 2025 objectives and policies except for

Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, in which the Project would be partially consistent and partially inconsistent. As the Project's projected density would exceed the MARB/IPA LUCP Zone C2 residential density criteria of 6.0 dwelling units per acre and thus would also be partially inconsistent with Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, the Project would result in a **significant and unavoidable impact**.

5.11.7 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). As discussed, the Project would be consistent with all applicable GP 2025 policies except for Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP due to exceeding the Zone C2 residential density criteria, resulting in a significant and unavoidable impact. There are no feasible mitigation measures that would make the Project consistent with the Zone C2 residential density criteria and completely consistent with GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP.

5.11.8 Cumulative Environmental Effects

The geographic context for cumulative impacts relative to the use of hazardous materials is considered to be the City limits and the surrounding areas in which listed cumulative development projects are located. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects consisting of residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public).

Similar to the Project, land use regulations and policy consistency impacts associated with other cumulative projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies. It is anticipated that most of the other cumulative projects, if not all of them, would be consistent with applicable GP 2025 policies. Therefore, although the proposed Project would be inconsistent with the Zone C2 residential density criteria and partially inconsistent with applicable GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, as the other cumulative projects are not anticipated to be inconsistent and have a significant impact, the proposed Project would not contribute to cumulatively considerable impacts. Therefore, cumulative impacts with regard to consistency with GP policies are **less than significant**.

5.11.9 References

The following references were used in the preparation of this section of the EIR:

ALUC Staff Report 2023	Riverside County Airport Land Use Commission. "Staff Report – Case Number: ZAP1548MA22 – Anton Mission Grove LLC. September 14, 2023. Available at https://rcaluc.org/sites/g/files/aldnop421/files/2023-08/ALUCAGDA9-14-23.pdf , accessed September 2023
ALUC Staff Letter 2023	Riverside County Airport Land Use Commission. "Letter RE: Airport Land Use Commission (ALUC) Development Review to Veronica Hernandez, Project Planner, City of Riverside Planning Division, dated September 14, 2023, File No: ZAP1548MA22, from Paul Rull, ALUC Director." Available at City of Riverside Planning Division, 3900 Main Street, 3 rd Floor, Riverside, CA 92522.
GP 2025	City of Riverside, General Plan 2025. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report</i> (PEIR) (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
MGSP	City of Riverside, <i>Mission Grove Specific Plan</i> . September 16, 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed September 2023)
RMC, Title 17	City of Riverside, Code of Ordinances, Title 17 Grading Code (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT7NOCO , accessed September 2023)
RMC, Title 19	City of Riverside, Code of Ordinances, Title 19 Zoning Code (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT7NOCO , accessed September 2023)

5.12 Mineral Resources

This section analyzes the effects of the proposed project on Mineral Resources. The following discussion and analysis include findings about Mineral Resources from the City's General Plan and General Plan EIR.

5.12.1 Setting

For decades, mining operations have not been active within the City. All that is left are the past remnants of mining activities, and the maximum potential for mineral extraction that had occurred. Historically, granite rock was a significant industry in Riverside. Now, the quarry site is mostly used for recreational purposes; these operations have not been active for decades and most extraction sites are now beyond the urban periphery. Figure OS-1, Mineral Resources of the GP 2025 PEIR shows the location of mineral resource sites within the City. As shown in the Riverside County Integrated Plan, areas in the Sphere of Influence and areas located generally within the eastern half of the City are designated MRZ-3; indicating that the area contains known or inferred mineral occurrences of undetermined mineral resource significance. Scattered areas harbor marginally economic deposits of feldspar, silica, limestone and other rock products. (GP 2025; GP 2025 PEIR)

5.12.2 Regulatory Setting

5.12.2.1 Federal Regulations

There are no Federal Regulations regarding Mineral Resources.

5.12.2.2 State Regulations

Surface Mining and Reclamation Act of 1975

The California Surface Mining and Reclamation Act of 1975 (SMARA) requires that all cities incorporate into their general plans mapped mineral resources designations approved by the State Mining and Geology Board. SMARA was enacted to limit new development in areas with significant mineral deposits. The State Geologist classifies land in California based on availability of mineral resources. Because available aggregate construction material is limited, five designations have been established for the classification of sand, gravel, and crushed rock resources:

- **SZ:** Scientific Research area containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance.
- **MRZ-1:** Mineral Resource Zone 1 – adequate information indicates that no significant mineral deposits are present or likely to be present.
- **MRZ-2:** Mineral Resource Zone 2 – adequate information indicates that significant mineral deposits are present or there is a high likelihood for their presence and development should be controlled.

- **MRZ-3:** Mineral Resource Zone 3 – the significance of mineral deposits cannot be determined from the available data.
- **MRZ-4:** Mineral Resource Zone 4 – there is insufficient data to assign any other MRZ designation.

The classification system is intended to ensure consideration of statewide or regionally significant mineral deposits by the City in planning and development administration. These mineral designations are intended to prevent incompatible land use development on areas determined to have significant mineral resource deposits. Permitted uses within a mineral resource zone include mining, uses that support mining such as smelting and storage of materials, or uses that will not hinder future mining such as grazing, agriculture, large lot rural development, recreation, silviculture¹ and open space.

Mineral Resources and Mineral Hazards Mapping Program

California's Mineral Resources and Mineral Hazards Mapping Program (MRMHMP) provides data about nonfuel mineral resources, naturally occurring mineral hazards (such as asbestos, radon, and mercury), and historic mining activities throughout the state. The MRMHMP is divided into two projects; the Mineral Resources Project, which provides information about California's nonfuel mineral resources, and the Mineral Hazards Project, which maps and monitors minerals related to public health and safety concerns.

5.12.2.3 Regional Regulations

There are no Regional Regulations regarding Mineral Resources.

5.12.2.4 Local Regulations

Riverside General Plan 2025

The GP does not contain any objectives and policies regarding mineral resources specifically, but the Open Space Conservation Element includes the following policies, the adherence to which will reduce potential environmental impacts to mineral resources:

OPEN SPACE AND CONSERVATION ELEMENT

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.2: Establish an open space acquisition program that identifies acquisition area priorities based on capital costs, operation and maintenance costs, accessibility, needs, resource preservation, ability to complete or enhance the existing open space linkage system and unique environmental features.

Policy OS-1.3: Work with Riverside County and adjacent cities, landowners and conservation organizations to preserve, protect, and enhance open space and natural resources.

Policy OS-1.4: Support efforts of State and Federal agencies and private conservation organizations to acquire properties for open space and conservation

uses. Support efforts of nonprofit preservation groups, such as the Riverside Land Conservancy, to acquire properties for open space and conservation purposes.

Policy OS-1.7: Work closely with the County of Riverside pursuant to the Joint Cities/County Memorandum of Understanding, emphasizing the City's need to participate in the development review process of projects proposed in surrounding unincorporated areas. Work to ensure that such developments.

5.12.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to agriculture or forestry resources.

5.12.4 Project Design Considerations

As there are no impacts to Mineral Resources as a result of implementation of the proposed Project, there are no Project-specific design considerations related to Mineral Resources.

5.12.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- (Threshold B) result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

5.12.6 Environmental Impacts

Threshold A: *Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

State-classified Mineral Resource Zones (MRZ) are shown in Mineral Land Classification Map prepared by California Department of Conservation. Per the GP 2025 PEIR Figure OS-1 Mineral Resources, the Project site is located in an MRZ-3 Zone. The MRZ-3 designation is for areas that have been determined by the California Department of Conservation to contain "known or inferred mineral occurrences of undetermined mineral resource significance." As the project site is developed for commercial uses, the Project site is not within or adjacent to areas of known mineral resources that would be of value to the region or the State as identified in Figure OS-1 Mineral Resources.

Approximately 0.4 miles southwest of the proposed Project site is an area that is designated "Rock Products" (RP) by the GP 2025 Figure OS-1 Mineral Resources. However, this entire area has

been developed for commercial and residential land uses. Furthermore, implementation of the proposed project would not conflict with any Mineral Resources or Open Space Element GP policies.

The Phase I ESA did not identify any active or previous mining occurring on site. There are no current mining operations surrounding the Project site. Therefore, the site and surrounding areas are not designated for mineral resources or mining or allow for these types of uses/operations. Thus, development of the Project site is not anticipated to result in the loss of a known mineral resource that would be of value to the region and the residents of the State. The Project would have **no impacts** to known mineral resources, directly, indirectly, and cumulatively.

Threshold B: *Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?*

The GP 2025 PEIR determined that there are no specific areas with the City boundary or the Proposed Sphere of Influence Area which have locally-important mineral resource recovery sites and that the implementation of the GP 2025 would not significantly preclude the ability to extract State-designated resources. Therefore, there is **no impact** from implementation of the Project.

5.12.7 Proposed Mitigation Measures

Impacts were found to be **less than significant**; therefore, no mitigation measures are necessary.

5.12.8 Cumulative Environmental Effects

The GP 2025 determined that there are no areas within the City which have locally-important mineral resources recovery sites. The types of mineral deposits on the site are not known; however, there has been no historical use of the project site for mineral extraction purposes and the project does not involve the extraction of mineral resources. There would therefore be **no significant cumulative environmental impacts** from Project implementation.

5.12.9 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report</i> (PEIR) (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)

5.13 Noise

This section analyzes both the temporary noise impacts related to construction activity and long-term operations from the proposed Project. The analysis is based on data from the Project’s *Noise and Vibration Impact Analysis* (LSA 2023, Appendix H).

5.13.1 Setting

Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health.

To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect the ability to hear. Pitch is the number of complete vibrations (or cycles per second) of a wave, resulting in the tone’s range from high to low. Loudness is the strength of a sound and describes a noisy or quiet environment; it is measured by the amplitude of the sound wave. Loudness is determined by the intensity of the sound waves combined with the reception characteristics of the human ear. Sound intensity is the average rate of sound energy transmitted through a unit area perpendicular to the direction in which the sound waves are traveling. This characteristic of sound can be precisely measured with instruments. The analysis of a project defines the noise environment of the project area in terms of sound intensity and its effect on adjacent sensitive land uses. Table 5.13-1 provides definitions of acoustical terms, and Table 5.13-2 presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

Table 5.13-1: Definitions of Acoustical Terms

Term	Definition
Decibel, dB	A unit of noise level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
Frequency, Hz	Of a function periodic in time, the number of times that the quantity repeats itself in 1 second (i.e., number of cycles per second).
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very-low-frequency and very-high-frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise. (All sound levels in this report are A-weighted unless reported otherwise.)
L ₂ , L ₈ , L ₅₀ , L ₉₀	The fast A-weighted noise levels that are equaled or exceeded by a fluctuating sound level 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period.
Equivalent Continuous Sound Level, L _{eq}	The level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound.
Community Noise Equivalent Level, CNEL	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 5 dB to sound levels occurring in the evening from 7:00 p.m. to 10:00 p.m. and after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
Day/Night Average Noise Level, L _{dn}	The 24-hour A-weighted average sound level from midnight to midnight, obtained after the addition of 10 dB to sound levels occurring in the night between 10:00 p.m. and 7:00 a.m.
L _{max} , L _{min}	The maximum and minimum A-weighted sound levels measured on a sound level meter during a designated time interval using fast time averaging.
Ambient Noise Level	The all-encompassing noise associated with a given environment at a specified time; usually a composite of sound from many sources from many directions, near and far; no particular sound is dominant.
Intrusive	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends on its amplitude, duration, frequency, time of occurrence, and tonal or informational content, as well as the prevailing ambient noise level.

Table 5.13-2: Common Sound Levels and Their Noise Sources

Noise Source	A-Weighted Sound Level in Decibels	Noise Environments	Subjective Evaluations
Near Jet Engine	140	Deafening	128 times as loud
Civil Defense Siren	130	Threshold of Pain	64 times as loud
Hard Rock Band	120	Threshold of Feeling	32 times as loud
Accelerating Motorcycle a Few Feet Away	110	Very Loud	16 times as loud
Pile Driver; Noisy Urban Street/Heavy City Traffic	100	Very Loud	8 times as loud
Ambulance Siren; Food Blender	95	Very Loud	—
Garbage Disposal	90	Very Loud	4 times as loud
Freight Cars; Living Room Music	85	Loud	—
Pneumatic Drill; Vacuum Cleaner	80	Loud	2 times as loud
Busy Restaurant	75	Moderately Loud	—
Near-Freeway Auto Traffic	70	Moderately Loud	Reference Level
Average Office	60	Quiet	½ as loud
Suburban Street	55	Quiet	—
Light Traffic; Soft Radio Music in Apartment	50	Quiet	¼ as loud
Large Transformer	45	Quiet	—
Average Residence without Stereo Playing	40	Faint	⅓ as loud
Soft Whisper	30	Faint	—
Rustling Leaves	20	Very Faint	—
Human Breathing	10	Very Faint	Threshold of Hearing
—	0	Very Faint	—

Range of Noise

Sound intensity is measured through the A-weighted scale to correct for the relative frequency response of the human ear. That is, an A-weighted noise level de-emphasizes low and very high frequencies of sound similar to the human ear's de-emphasis of these frequencies. Decibels (dB), unlike the linear scale (e.g., inches or pounds), is a scale based on powers of 10.

For example, 10 dB is 10 times more intense than 0 dB, 20 dB is 100 times more intense than 0 dB, and 30 dB is 1,000 times more intense than 0 dB. Thirty decibels (30 dB) represent 1,000 times as much acoustic energy as 0 dB. The decibel scale increases as the square of the change, representing the sound pressure energy. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. A 10 dB increase in sound level is perceived by the human ear as only a doubling of the loudness of the sound. Ambient sounds generally range from 30 A-weighted decibels (dBA) (very quiet) to 100 dBA (very loud).

Sound levels are generated from a source, and their decibel level decreases as the distance from that source increases. Sound dissipates exponentially with distance from the noise source. For a single point source, sound levels decrease approximately 6 dB for each doubling of distance from the source. This drop-off rate is appropriate for noise generated by stationary equipment. If noise is produced by a line source, such as highway traffic or railroad operations, the sound decreases 3 dB for each doubling of distance in a hard site environment. Line source noise in a relatively flat environment with absorptive vegetation decreases 4.5 dB for each doubling of distance.

Noise Rating Scales

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. The equivalent continuous sound level (L_{eq}) is the total sound energy of time-weighted average noise over a sample period. However, the predominant rating scales for human communities in California are L_{eq} and the Community Noise Equivalent Level (CNEL) or the day-night average noise level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the relaxation hours. CNEL and L_{dn} are within 1 dBA of each other and are normally interchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance, when assessing the annoyance factor, include the maximum instantaneous noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise. Another noise scale often used together with L_{max} in noise ordinances for enforcement purposes is noise standards in terms of percentile noise levels. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half of the time the noise level exceeds this level, and half of the time it is less than this level. The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, L_{eq} and L_{50} are approximately the same.

Noise Impacts

Noise impacts can be described in three categories. The first is audible impacts, which refer to increases in noise levels noticeable to humans. Audible increases in noise levels generally refer to a change of 3 dB or greater since this level has been found to be barely perceptible in exterior environments. The second category, potentially audible, refers to a change in the noise level between 1 and 3 dB. This range of noise levels has been found to be noticeable only in laboratory environments. The last category is changes in noise level of less than 1 dB, which are inaudible to the human ear. Only audible changes in existing ambient or background noise levels are considered potentially significant.

Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions and thereby affecting blood pressure and functions of the heart and the nervous system. In comparison, extended periods of noise exposure above 90 dBA would result in permanent cell damage. When the noise level reaches 120 dBA, a tickling

sensation occurs in the human ear, even with short-term exposure. This level of noise is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation is replaced by the feeling of pain in the ear. This is called the threshold of pain. A sound level of 160 to 165 dBA will potentially result in dizziness or loss of equilibrium. The ambient or background noise problem is widespread and generally more concentrated in urban areas than in outlying, less-developed areas.

Fundamentals of Vibration

Vibration refers to ground-borne noise and perceptible motion. Ground-borne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernible, but without the effects associated with the shaking of a building there is less adverse reaction. Vibration energy propagates from a source through intervening soil and rock layers to the foundations of nearby buildings. The vibration then propagates from the foundation throughout the remainder of the structure. Building vibration may be perceived by occupants as the motion of building surfaces, the rattling of items sitting on shelves or hanging on walls, or a low-frequency rumbling noise. The rumbling noise is caused by the vibration of walls, floors, and ceilings that radiate sound waves. Although the perceptibility threshold is approximately 65 vibration velocity decibels (VdB), human response to vibration is not usually substantial unless the vibration exceeds 70 VdB. A vibration level that causes annoyance is well below the damage risk threshold for typical buildings.

Typical sources of ground-borne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with both ground-borne vibration and noise from these sources are usually localized to areas within approximately 100 ft from the vibration source, although there are examples of ground-borne vibration causing interference out to distances greater than 200 ft. When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible. It is assumed for most projects that the roadway surface will be smooth enough that ground-borne vibration from street traffic will not exceed the impact criteria; however, both construction of the project and freight train operations could result in ground-borne vibration that may be perceptible and annoying.

Ground-borne noise is not likely to be a problem because noise arriving via the normal airborne path will usually be greater than ground-borne noise. Ground-borne vibration has the potential to disturb people and damage buildings. Although it is very rare for train-induced ground-borne vibration to cause even cosmetic building damage, it is not uncommon for construction processes (e.g., blasting and pile driving) to cause vibration of sufficient amplitudes to damage nearby buildings (FTA 2018). Ground-borne vibration is usually measured in terms of vibration velocity, either the root-mean-square (RMS) velocity or peak particle velocity (PPV). The RMS velocity is best for characterizing human response to building vibration, and PPV is used to characterize potential for damage. Decibel notation acts to compress the range of numbers required to describe vibration. The vibration velocity level in decibels is defined as the following:

$$L_v = 20 \log_{10} [V/V_{ref}]$$

where L_v is the vibration velocity in decibels (VdB), V is the RMS velocity amplitude, and V_{ref} is the reference velocity amplitude, or 1×10^{-6} inches/second (in/sec) used in the United States.

Land Use Compatibility with Noise

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The Federal Highway Administration (FHWA) encourages State and local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized.

Existing Noise Setting

The primary existing noise sources in the project area are transportation facilities. Traffic on Mission Grove Parkway, Mission Village Drive, and other local streets contribute to the ambient noise levels in the project vicinity. Noise from motor vehicles is generated by engines, the interaction between the tires and the road, and vehicle exhaust systems. Other sources of noise in the project area include commercial activity and aircraft noise from MARB/IPA.

Short-Term Ambient Noise Measurements

Measurements of existing (ambient) noise were taken at multiple locations within the Project site as shown in Figure 5.13-1 – Noise Monitoring Locations. Short-term (20-minute) noise level measurements were conducted at the Project site on Monday, June 28, and Tuesday, June 29, 2022. Table 5.13-3 shows the results of the short-term noise level measurements along with a description of the measurement location and noise sources that occurred during the measurement. As shown in Table 5.13-3, the measured average noise levels in the project area range from 55.1 to 61.1 dBA L_{eq} , and the instantaneous maximum noise levels range from 70.1 to 77.3 dBA L_{max} . The calculated CNEL noise levels at short-term noise measurement locations ST-1, ST-2, and ST-3 were calculated to be 62.9, 57.4, and 63.3 dBA, respectively, based on the noise level profiles from the long-term noise level measurements.



FIGURE 3

LSA

LEGEND

- Project Site
- ST-# Short-term Noise Monitoring Location
- LT-# Long-term Noise Monitoring Location

0 125 250
FEET

SOURCE: Google Earth 2021
I:\ATD2022\G\Noise_Loccs.ai (11/15/2022)

Mission Grove Apartments Project
Noise Monitoring Locations

MISSION GROVE APARTMENTS

Noise Monitoring Locations
Figure 5.13-1

Table 5.13-3: Short-Term Ambient Noise Level Measurements

Monitor No.	Location	Start Time	Noise Level (dBA)				Noise Source(s)
			L _{eq}	L _{max}	L _{min}	CNEL	
ST-1	Located at the northern edge of the project site. Near the main road entering/exiting the Mission Grove Shopping Center. Approximately 386 ft from Mission Grove Parkway centerline.	2:45 p.m.	61.1	77.3	52.8	62.9 ¹	Traffic on the main road entering/exiting the Mission Grove Shopping Center. Faint radio music and noise from the car wash northeast of the project site.
ST-2	Located in front of a store at 1B E. Alessandro Boulevard, #341, Riverside, CA 92508. Approximately 520 ft from Mission Grove Parkway centerline and 380 ft from Mission Village Drive centerline.	11:39 a.m.	55.1	70.1	47.2	57.4 ²	Parking lot activity with light duty vehicles passing by. Landscaping activity from hedge cutting 18 minutes into the measurement.
ST-3	Located at the southeast corner of the project site. Northwestern corner of the Mission Grove Parkway and Mission Village Drive intersection. Approximately 75 ft from Mission Grove Parkway centerline and 60 ft from Mission Village Drive centerline.	12:40 p.m.	59.7	71.0	49.7	63.3 ³	Traffic noise at the intersection of Mission Village Drive and Mission Grove. Faint yard work (mower) activity noise at the beginning of the measurement. Leaf blower noise 10 minutes into the measurement.

¹ The CNEL noise level for ST-1 was calculated based on the noise level profile from the long-term noise level measurement at LT-1.

² The CNEL noise level for ST-2 was calculated based on the noise level profile from the long-term noise level measurement at LT-1.

³ The CNEL noise level for ST-3 was calculated based on the noise level profile from the long-term noise level measurement at LT-2.

dBA = A-weighted decibel

L_{eq} = equivalent continuous sound level

L_{max} = maximum measured sound level

L_{min} = minimum measured sound level

Long-Term Ambient Noise Measurements

Three long-term (24-hour) noise level measurements were conducted from Sunday, July 12, to Monday, July 13, 2022. Table 5.13-4 summarizes the results of the long-term noise level measurements along with a description of the measurement locations and noise sources that occurred during the measurements. As shown in Table 5.13-4, the daytime noise levels ranged from 54.9 to 69.3 dBA L_{eq}, and the nighttime noise levels ranged from 45.2 to 63.7 dBA L_{eq}. The daytime maximum instantaneous noise levels ranged from 69.1 to 89.3 dBA L_{max} and the nighttime maximum instantaneous noise level ranged from 63.6 to 83.6 dBA L_{max}. Also, the calculated CNEL levels from the long-term noise level measurements at LT-1, LT-2, and LT-3 were 68.9, 60.7, and 60.3 dBA, respectively.

Table 5.13-4: Long-Term Ambient Noise Monitoring Results

Monitor No.	Location	Noise Level (dBA)				CNEL	Noise Sources
		Daytime		Nighttime			
		L _{eq}	L _{max}	L _{eq}	L _{max}		
LT-1	Eastern edge of the project site along Mission Grove Parkway. On a palm tree approximately 50 ft from the Mission Grove Parkway centerline.	64.1–69.3 (66.8) ¹	80.9–89.3	55.1–63.7 (60.0) ²	75.0–83.6	68.9	Traffic Mission Grove Parkway. Infrequent bus stop activity.
LT-2	Near the southeastern corner of the project site. On a light pole approximately 146 ft from Mission Grove Parkway centerline and 130 ft from Mission Village Drive centerline.	56.3–63.8 (58.4) ¹	69.1–84.3	47.7–55.3 (52.2) ²	64.2–75.1	60.7	Traffic noise on Mission Grove Parkway. Intermittent parking activity.
LT-3	South side of the project site. East of the Sunset Recycling Center. On a light pole approximately 60 ft from Mission Village Drive centerline.	54.9–63.1 (58.8) ¹	69.8–83.9	45.2–53.6 (51.1) ²	63.6–75.0	60.3	Traffic noise from Mission Village Drive and faint traffic on Mission Grove Parkway. Light chattering noise from the Sunset Recycling Center.

Source: Compiled by LSA Associates, Inc. (2022).

Note: Long-term (24-hour) noise level measurements were conducted from July 12, 2022, to July 13, 2022.

¹ Average daytime noise level.

² Average nighttime noise level.

CNEL = Community Noise Equivalent Level

L_{eq} = equivalent continuous sound level

dBA = A-weighted decibels

L_{max} = maximum instantaneous noise level

ft = foot/feet

5.13.2 Related Regulations

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the Federal government, the State, various county governments, and most municipalities in the State have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, State, and local agencies regulate different aspects of environmental noise. Federal and State agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

5.13.2.1 Federal Regulations

No Federal noise requirements or regulations apply directly to the implementation of the Project, but Federal agencies have established guidelines and thresholds pertaining to noise and groundborne vibration as they relate to land use compatibility, human response, and structural integrity.

5.13.2.2 State Regulations

The State regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires each county and city to adopt a General Plan that includes a Noise Element prepared per guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. CEQA requires all known environmental effects of a project be analyzed, including environmental noise impacts.

California Building Code

The State's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are developed near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or higher. Acoustical studies that accompany building plans for noise-sensitive land uses must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for is 45 dBA CNEL.

California General Plan Guidelines

The California General Plan Guidelines, published by the Governor's Office of Planning and Research, indicate acceptable, specific land use types in areas with specific noise exposure. The guidelines also offer adjustment factors that may be used to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution. These guidelines are advisory, and local jurisdictions, including the City, have the responsibility to set specific noise standards based on local conditions. Please refer to the discussion below for the compatibility guidelines adopted by the City.

5.13.2.3 Local Regulations

City of Riverside General Plan 2025

The City has adopted a Noise Element of the General Plan to control and abate environmental noise, and to protect the citizens of the City from excessive exposure to noise. In addition, the Noise Element identifies several polices to minimize the impacts of excessive noise levels throughout the community and establishes noise level compatibility criteria for different land uses.

Objective N-1: Minimize noise levels from point sources throughout the community and, whenever possible, mitigate the effects of noise to provide a safe and healthful environment.

Policy N-1.1: Continue to enforce noise abatement and control measures particularly within residential neighborhoods.

Policy N-1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10 (Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.

Policy N-1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N-1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.

Policy N-1.5: Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N-1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-2: Minimize the adverse effects of airport-related noise through proper land use planning.

Policy N-2.2: Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 60 dB CNEL) for Riverside Municipal Airport and Flabob Airport in accordance with the Riverside County Airport Land Use Compatibility Plan.

Objective N-3: Ensure the viability of March Air Reserve Base/March Inland Port.

Policy N-3.1: Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 65 dB CNEL) for March Air Reserve Base/March Inland Port in accordance with the Riverside County 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP).

Objective N-4: Minimize ground transportation-related noise impacts.

Policy N-4.1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Objective LU-22: Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port Airport, Riverside Municipal and Flabob Airports.

Policy LU-22.3: Work to limit the encroachment of uses that potentially pose a threat to continued airport operations, including intensification of residential and/or commercial facilities within identified airport safety zones and areas already impacted by current or projected airport noise.

Land Use Compatibility

The Noise/Land Use Noise Compatibility Criteria in the City of Riverside General Plan Noise Element provides guidelines to evaluate the land use compatibility, as shown in Table 5.13-5. The compatibility criteria, shown in Table 5.13-5, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The Noise/Land Use Noise Compatibility Criteria describes categories of compatibility and not specific noise standards. To conservatively estimate the compatibility of the residential use, the Project is considered as infill single-family residential land use. According to the noise/land use categories of compatibility, infill single-family residential uses are considered *normally acceptable* with unmitigated exterior noise levels below 65 dBA CNEL, *conditionally acceptable* with noise levels below 75 dBA CNEL, *normally unacceptable* with noise levels below 80 dBA CNEL, and *conditionally unacceptable* with noise levels above 80 dBA CNEL.

Table 5.13-5 – Land Use Compatibility for Community Noise Exposure

Land Use Category	Community Noise Equivalent Level (CNEL) or Day-Night Level (L _{dn}), dBA			
	Normally Acceptable ³	Conditionally Acceptable ⁴	Normally Unacceptable ⁵	Conditionally Unacceptable ⁶
Single Family Residential	<60	60-65	65-70	>70
Infill Residential	<65	65-75	75-80	>80
Commercial (Motels, Hotels, Lodging)	<60	60-70	70-80	>80
Schools, Libraries, Churches, Hospitals, Nursing Homes	<60	60-70	70-80	>80
Amphitheaters, Concert Hall, Auditorium, Meeting Hall	N/A	<65	N/A	>65
Sports Areas, Outdoor Spectator Sports	N/A	<70	N/A	>70
Playgrounds, Neighborhood Parks	<70	N/A	70-75	>75
Golf Courses, Riding Stables, Water Rec, Cemeteries	<70	N/A	70-80	>80
Office Buildings, Business, Commercial, Professional	<65	65-75	>75	N/A
Industrial, Manufacturing, Utilities, Agriculture	<70	70-80	>80	N/A
Freeway Adjacent Commercial, Office, and Industrial Uses	<65	65-80	>80	N/A

³ **Normally Acceptable:** Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

⁴ **Conditionally Acceptable:** New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

⁵ **Normally Acceptable:** New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

⁶ **Conditionally Acceptable:** New construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Source: City of Riverside, 2007; Figure N-10

City of Riverside Sound Level Limits

To control unnecessary, excessive and/or annoying noise, the City has adopted exterior and interior sound level limits in the Noise Control section (Title 7) of the Municipal Code. Title 7 outlines exterior and interior noise level standards for affected land uses. Title 7 relies on the use of percentile noise descriptors to ensure that the duration of the noise source is fully considered. However, due to the relatively constant intensity of the Project noise activities, the L₅₀ or average L_{eq} noise level metrics best describe the Project related operational noise source activities.

The L_{eq} noise level metric accounts for noise fluctuations over time by averaging the louder and quieter events and giving more weight to the louder events. In addition, due to the mathematical relationship between the median (L₅₀) and the mean (L_{eq}), the L_{eq} will always be larger than or equal to the L₅₀. The more variable the noise becomes, the larger the L_{eq} becomes in comparison

to the L₅₀. Therefore, the Project's Noise Study conservatively relies on the average L_{eq} sound level limits to describe the Project noise levels.

Exterior Noise Standards

For noise-sensitive residential properties, Table 7.25.010A of the Riverside Municipal Code identifies exterior noise standards for the daytime (7:00 a.m. to 10:00 p.m.) hours of 55 dBA L₅₀ and 45 dBA L₅₀ during the nighttime (10:00 p.m. to 7:00 a.m.) hours as shown on Table 5.13-6.

Table 5.13-6 – Exterior Noise Standards

Land Use	Time Period	Exterior Noise Level Standards (dBA) ⁷				
		L ₅₀ (30 mins)	L ₂₅ (15 mins)	L ₈ (5 mins)	L ₂ (1 min)	L _{max} (0 min)
Residential	Daytime	55	60	65	70	75
	Nighttime	45	50	55	60	65

⁷ The percent noise level is the level exceeded "n" percent of the time during the measurement period. L₅₀ is the noise level exceeded 50% of the time.
 Source: City of Riverside Municipal Code, Title 7 Noise Control, Section 7.25.010(A)
 "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Section 7.25.010 (A) the Riverside Municipal Code indicates that it is unlawful for any person to cause or allow the creation of any noise which exceeds the following:

1. The exterior noise standard of the applicable land use category up to 5 dBA for a cumulative period of 30 minutes in any hour (L₅₀); or
2. The exterior noise standard of the applicable land use category, plus 5 dBA, for a cumulative period of more than 15 minutes in any hour (L₂₅); or
3. The exterior noise standard of the applicable land use category, plus 10 dBA, for a cumulative period of more than 5 minutes in any hour (L₈); or
4. The exterior noise standard of the applicable land use category, plus 15 dBA, for a cumulative period of more than 1 minute in any hour (L₂).
5. The exterior noise standard for the applicable land use category, plus 20 dBA or the maximum measured ambient noise level, for any period of time (L_{max}).

In addition, Section 7.25.010 (B) the Riverside Municipal Code indicates that if the existing ambient noise level already exceeds any of the exterior noise level limit categories, then the standard shall be increased in five decibel increments in each category as appropriate to encompass the ambient noise level.

According to Section 7.25.010 (C) the Riverside Municipal Code, if possible, the ambient noise level shall be measured at the same location along the property line with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the offending noise is inaudible. If the measurement location is on the boundary between two different districts, the noise shall be the arithmetic mean of the two districts.

Interior Noise Standard

To assess the interior noise levels for noise sensitive residential properties, Table 7.30.015 of the Riverside Municipal Code identifies interior noise standards for the daytime (7:00 a.m. to 10:00 p.m.) hours of 45 dBA L_8 and 35 dBA L_8 during the nighttime (10:00 p.m. to 7:00 a.m.) hours as shown on Table 5.13-7.

Table 5.13-7 – Interior Noise Level Limits

Land Use	Time Period	Interior Noise Standard (dBA) ⁸		
		L_8 (5 mins)	L_2 (1 min)	L_{max} (0 min)
Residential	Daytime	45	50	55
	Nighttime	35	40	45

⁸ The percent noise level is the level exceeded in “n” percent of the time during the measurement period. L_{50} is the noise level exceeded 50% of the time.
Source: City of Riverside Municipal Code, Title 7 Noise Control, Section 7.30.015 (A)
“Daytime” = 7:00 a.m. to 10:00 p.m.; “Nighttime” = 10:00 a.m. to 7:00 a.m.

Section 7.30.015 (A) the Riverside Municipal Code indicates that no person shall operate or cause to be operated, any source of sound indoors which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

1. The interior noise standard for the applicable land category area, up to five decibels, for a cumulative period of more than five minutes in any (L_8); or
2. The interior noise standard for the applicable land use category, plus five decibels, for a cumulative period of more than one minute in any hour; (L_2); or
3. The interior noise standard for the applicable land use category, plus ten decibels or the maximum measured ambient noise level, for any period of time (L_{max}).

In addition, Section 7.25.015 (B) the Riverside Municipal Code indicates that if the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.

According to Section 7.25.010 (C) the Riverside Municipal Code, the interior noise standard for various land use districts shall apply, unless otherwise specifically indicated, within structures located in designated zones with windows opened or closed as is typical of the season.

Construction Noise Standards

To control noise impacts associated with the construction of the Project, the City has established limits to the hours of operation. Section 7.35.020 (G) of the General Noise Regulations indicates that *noise sources associated with construction, repair, remodeling, or grading of any real property; provided a permit has been obtained from the City as required; and provided said activities do not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, between the hours of 5:00 p.m. and 8:00 a.m. on Saturdays, or at any time on Sunday or a Federal holiday.*

Therefore, Project construction noise levels are considered exempt from municipal regulation if activities occur within the hours specified Section 7.35.020 (G); provided a permit has been obtained from the City as required.

However, neither the City General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers. Therefore, a numerical construction threshold based on Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* is used for analysis of daytime construction impacts. According to the FTA, local noise ordinances are typically not very useful in evaluating construction noise. They usually relate to nuisance and hours of allowed activity, and sometimes specify limits in terms of maximum levels, but are generally not practical for assessing the impact of a construction project. Project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dBA L_{eq} as a reasonable threshold for noise sensitive residential land use.

Construction Vibration Standards

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction vibration is generally associated with pile driving and rock blasting. Other construction equipment such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. The City does not identify specific vibration level limits and instead will rely on FTA methodology for the purpose of analyzing vibration impacts from the Project. The FTA *Transit Noise and Vibration Impact Assessment Manual* general vibration assessment methodology provides guidelines for the maximum-acceptable vibration criteria for different types of land uses. These guidelines allow for 80 VdB for daytime residential uses in buildings where people normally sleep.

5.13.3 Project Design Considerations

The Project would comply with the State's noise insulation standards as codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code as described in Section 5.13.2.2 above.

5.13.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist additionally indicates that impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed project would:

- (Threshold A) Result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (Threshold B) Result in the generation of excessive groundborne vibration or groundborne noise levels; or
- (Threshold C) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels.

5.13.5 Environmental Impacts

Threshold A: *Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Short-Term Construction Noise Impacts

Two types of short-term noise impacts could occur during construction on the project site. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site, which would incrementally raise noise levels on roadways leading to the site. The pieces of construction equipment for construction activities would move on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. Although there would be a relatively high single-event noise exposure potential causing intermittent noise nuisance (passing trucks at 50 ft would generate up to a maximum of 84 dBA), the effect on longer-term ambient noise levels would be small because the number of daily construction-related vehicle trips is small compared to existing daily traffic volume on Mission Grove Parkway and Mission Village Drive. Roadways that would be used to access the project site are Mission Grove Parkway South and Mission Village Drive. Mission Grove Parkway South and Mission Village Drive have estimated existing daily traffic volumes of 10,353 and 1,962, respectively, near the project site. Based on the information above, construction-related traffic would increase noise by up to 1.3 dBA. A noise level increase of less than 3 dBA would not be perceptible to the human ear in an outdoor environment. Therefore, short-term, construction-related impacts associated with worker commutes and transport of construction equipment and material to the Project site would be **less than significant**.

The second type of short-term noise impact is related to noise generated from construction activities. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. The proposed Project anticipates demolition, site preparation, grading, building construction, paving, and architectural coating phases of construction. These various sequential phases change the character of the noise generated on a Project site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table 5.13-8 lists the closest residence and commercial use from the Project site along with the distance from the average location of construction activities (distance from the center of the Project site) to their property line, distance attenuation, noise level at the property line, whether or not noise levels exceed the FTA construction noise limit, and the ambient noise level increase. As shown in Table 5.13-8, the closest residence and commercial use may be subject to short-term construction noise reaching 70.2 dBA L_{eq} and 78.6 dBA L_{eq} , respectively.

Table 5.13-8: Construction Noise Levels

Land Use	Direction	Reference Noise Level at 50 ft (dBA L_{eq})	Distance ¹ (ft)	Distance Attenuation (dBA)	Noise Level (dBA L_{eq})	FTA Construction Noise Criteria (dBA L_{eq})	Exceed?
Residence	South	89.2	445	19.0	70.2	80	No
Commercial	West	89.2	170	10.6	78.6	85	No

Source: Compiled by LSA Associates, Inc. (2023).

¹ Distance from the average location of construction activities (distance from the center of the project site) to the property line.

dBA = A-weighted decibel

ft = foot/feet

FTA = Federal Transit Administration

L_{eq} = equivalent continuous sound level

Although the closest residence and commercial use may be subject to temporary substantial ambient noise level increases, short-term construction noise levels would not exceed the FTA construction noise criteria of 80 dBA L_{eq} for residences and 85 dBA L_{eq} for commercial uses. In addition, Section 7.35.010 of the City’s Municipal Code exempts construction noise during the daytime between the hours of 7:00 a.m. and 7:00 p.m. on weekdays and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays. Compliance with the City’s exempt hours of construction pursuant to Section 7.35.010 of the City’s Municipal Code and the mitigation measure related to construction activities in the Mission Grove Specific Plan requiring the use and proper maintenance of noise-reducing devices on construction equipment would minimize construction-related noise and ensure construction noise would not be generated during the more sensitive nighttime hours. Short-term noise increases due to construction activities would be **less than significant**, and no noise reduction measures are necessary.

Long-Term Traffic Noise Impacts

The FHWA Highway Traffic Noise Prediction Model (FHWA RD-77-108) was used to evaluate traffic-related noise conditions along street segments in the project vicinity. This model requires various parameters, including traffic volumes, vehicle mix, vehicle speed, and roadway geometry, to compute typical equivalent noise levels during daytime, evening, and nighttime hours. The resulting noise levels are weighted and summed over 24-hour periods to determine the CNEL values. The Existing (2022), Opening Year (2027), and Cumulative (2045) ADT volumes were obtained from traffic counts conducted on May 12 and 17, 2022, and calculated with the project trip generation and cumulative project information. The standard vehicle mix for Southern California roadways was used for roadways in the project vicinity. The traffic noise levels for the Existing (2022), Opening Year (2027), and Cumulative (2045) Without and With Project scenarios, were analyzed and compared. These noise levels represent the worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise

contours are drawn. The analysis shows that the proposed Project would result in a project-related traffic noise increase of up to 0.6 dBA in the project vicinity. This noise level increase is below 3 dBA and would not be perceptible to the human ear in an outdoor environment. Therefore, long-term traffic noise impacts would be **less than significant**.

Long-Term Stationary Source Noise Impacts: HVAC Equipment

The proposed Project includes on-site rooftop heating, ventilation, and air conditioning (HVAC) units for the 347 residential units, leasing office, clubhouse, and fitness room. It is estimated that the proposed Project would have a total of 354 HVAC units on site, which could potentially operate 24 hours per day. The HVAC equipment would generate a sound power level (SPL) of 76 dBA, which would be equivalent to 44.4 dBA L_{eq} at 50 ft. The rooftop HVAC units are located in mechanical wells based on the roof plan, which would provide a minimum noise reduction of 5 dBA.

Noise levels generated by HVAC equipment at the property line of the closest off-site land use along with the total number of HVAC units, range of distances from the equipment to the property line, range of distance attenuation, and shielding from the roofline and parapet were calculated. Noise levels generated from on-site HVAC units would not exceed the City's exterior daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) 30-minute (L_{50}) noise standards of 60 dBA and 50 dBA, respectively, for residential uses. Also, noise levels generated from on-site HVAC units would not exceed the City's exterior 30-minute (L_{50}) noise standard of 65 dBA for commercial uses. Therefore, no off-site noise impacts from on-site HVAC equipment would occur. No noise reduction measures are required. Long-term stationary noise impacts would be **less than significant**.

Land Use Compatibility Assessment: Exterior Noise Assessment

As discussed above, exterior noise levels in the project area include traffic on Mission Grove Parkway and Mission Village Drive. The project is located within the C2 zone of influence for the MARB, however it is located outside of the noise contour and the contribution of aircraft noise in the project area would be minimal to negligible. The FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to evaluate the proposed on-site uses based on the cumulative (2045) with project traffic noise levels on Mission Grove Parkway and Mission Village Drive. Table 5.13-9 shows the cumulative (2045) with project exterior noise levels at the façade of the proposed residential building and at the courtyard/pool area represented by Receptors R-1 through R-14. The proposed residential building would shield the courtyard/pool area (Receptor R-14) from traffic on Mission Grove Parkway and Mission Village Drive and would provide a noise reduction of 17 dBA. As shown in Table 5.13-9, traffic noise levels at the façade of the proposed residential building and at the courtyard/pool use area would reach up to 69.2 dBA CNEL. The proposed Project is an infill residential project and noise levels up to 65 dBA CNEL are the upper limit of what is considered a "normally acceptable" noise environment, and noise levels between 65 dBA CNEL and 75 dBA CNEL are considered a "conditionally acceptable" noise environment based on the City's Noise/Land Use Compatibility Criteria shown in Table 5.13-5 above. Since exterior noise levels for on-site uses are below 75 dBA CNEL, the proposed project is considered "conditionally acceptable." Therefore, the proposed on-site exterior residential uses are

considered compatible with the City's Noise/Land Use Compatibility Criteria. No noise reduction measures are required.

Table 5.13-9: Cumulative (2045) With Project Exterior Noise Levels

Receptor No.	Mission Grove Parkway			Mission Village Drive				Shielding (dBA)	Noise Level (dBA CNEL)	Combined Noise Level (dBA CNEL)	
	Reference Noise Level (dBA CNEL)	Reference Distance (ft)	Distance ¹ (ft)	Shielding (dBA)	Noise Level (dBA CNEL)	Reference Noise Level (dBA CNEL)	Reference Distance (ft)				Distance ¹ (ft)
R-1	65	97	406.4	0.0	52.6	60.0	71.0	696.8	0.0	40.2	52.8
R-2	65	97	274.6	0.0	56.0	60.0	71.0	683.3	0.0	40.3	56.1
R-3	65	97	205.3	0.0	58.5	60.0	71.0	649.0	0.0	40.8	58.6
R-4	65	97	92.7	0.0	65.4	60.0	71.0	561.9	0.0	42.0	65.4
R-5	65	97	83.0	0.0	66.4	60.0	71.0	543.5	0.0	42.3	66.4
R-6	65	97	66.5	0.0	68.3	60.0	71.0	383.0	0.0	45.4	68.3
R-7	65	97	65.3	0.0	68.4	60.0	71.0	323.6	0.0	46.8	68.4
R-8	65	97	63.2	0.0	68.7	60.0	71.0	187.4	0.0	51.6	68.8
R-9	65	97	65.5	0.0	68.4	60.0	71.0	59.0	0.0	61.6	69.2
R-10	65	97	82.4	0.0	66.4	60.0	71.0	49.2	0.0	63.2	68.1
R-11	65	97	184.1	0.0	59.4	60.0	71.0	110.1	0.0	56.2	61.1
R-12	65	97	373.2	0.0	53.3	60.0	71.0	109.3	0.0	56.3	58.1
R-13	65	97	533.8	0.0	50.2	60.0	71.0	113.4	0.0	55.9	56.9
R-14	65	97	330.8	17.0 ²	37.3	60.0	71.0	330.2	17.0 ²	29.6	38.0

Source: Compiled by LSA Associates, Inc. (2022).

¹ Distance from receptor to roadway centerline.

² The calculated traffic noise reduction from shielding of the proposed residential building is provided in Appendix F.

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

ft = foot/feet



Land Use Compatibility Assessment: Interior Noise Assessment

Table 5.13-10 shows the interior noise levels with windows and doors open at Receptors R-1 through R-13. Interior noise levels with windows and doors *open* were calculated using an exterior-to-interior noise reduction of 12 dBA based on the United States Environmental Protection Agency’s (EPA) Protective Noise Levels and standard construction in California (warm climate) with a combination of exterior walls, doors, and windows. As shown in Table 5.13-10, interior noise levels with windows and doors open for all residential units on the project site would reach up to 57.2 dBA CNEL, which would exceed the interior noise standard of 45 dBA CNEL. Mechanical ventilation systems such as air conditioning would be required for all residential units so that windows and doors could remain closed for a prolonged period of time. The Project would include HVAC equipment for all residential units on the Project site. Interior noise levels with windows and doors *closed* were calculated using an exterior-to-interior noise reduction of 25 dBA with windows and doors closed based on the United States EPA Protective Noise Levels and standard construction in California (warm climate) with a combination of exterior walls, doors, and windows. As shown in Table 5.13-10, interior noise levels with windows and doors *closed* for all residential units on the project site would reach up to 44.2 dBA CNEL, which would not exceed the interior noise standard of 45 dBA CNEL. With standard construction the interior noise levels would not exceed standards with windows and doors closed, no additional measures would be required.

Table 5.13-10: Interior Noise Levels and Required Noise Reduction

Receptor No.	Combined Noise Level (dBA CNEL)	Interior Noise Level with Windows and Doors Open ¹ (dBA CNEL)	Interior Noise Level with Windows and Doors Closed (dBA CNEL)
R-1	52.8	40.8	27.8
R-2	56.1	44.1	31.1
R-3	58.6	46.6 ²	33.6
R-4	65.4	53.4	40.5
R-5	66.4	54.4	41.4
R-6	68.3	56.3	43.3
R-7	68.4	56.4	43.4
R-8	68.8	56.8	43.8
R-9	69.2	57.2	44.2
R-10	68.1	56.1	43.1
R-11	61.1	49.1	36.1
R-12	58.1	46.1	33.1
R-13	56.9	44.9	31.9
R-14	38.0	-- ³	--

Source: Compiled by LSA Associates, Inc. (2022).

¹ Interior noise levels were calculated using an exterior-to-interior noise reduction of 12 dBA based on the EPA’s Protective Noise Levels (EPA 1978) and standard construction in California (warm climate) with a combination of exterior walls, doors, and windows.

² Numbers shown in bold exceed the interior noise standard of 45 dBA CNEL.

³ Interior noise levels with windows and doors open and the noise reduction to meet the 45 dBA CNEL interior noise standard was not calculated because this receptor represent the courtyard/pool area of the proposed project.

CNEL = Community Noise Equivalent Level

dBA = A-weighted decibels

EPA = United States Environmental Protection Agency

Threshold B: *Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?*

Short-Term Construction Vibration Impacts

This construction vibration impact analysis discusses the level of human annoyance using vibration levels in VdB and assesses the potential for building damage using vibration levels in PPV (in/sec). Vibration levels calculated in RMS velocity are best for characterizing human response to building vibration, whereas vibration levels in PPV are best for characterizing damage potential.

The greatest vibration levels are anticipated to occur during the site preparation and grading phase. All other phases are expected to result in lower vibration levels. The distance to the nearest buildings for vibration impact analysis is measured between the nearest off-site buildings and the project boundary (assuming the construction equipment would be used at or near the project boundary) because vibration impacts normally occur within the buildings.

The formula for vibration transmission is provided below:

$$L_{\text{vdB}}(D) = L_{\text{vdB}}(25 \text{ ft}) - 30 \text{ Log}(D/25)$$

$$\text{PPV}_{\text{equip}} = \text{PPV}_{\text{ref}} \times (25/D)^{1.5}$$

Table 5.13-11 lists the projected vibration levels from various construction equipment expected to be used on the Project site in the active construction area to the nearest buildings in the project vicinity. As shown in Table 5.13-11, the closest commercial and residential buildings west and south of the Project site approximately 80 ft and 130 ft, respectively, from the active project construction area near the center of the Project site would experience vibration levels of up to 72 VdB and 66 VdB, respectively. These vibration levels would not result in community annoyance because they would not exceed the FTA community annoyance threshold of 84 VdB for uses that are not as sensitive to vibration and 78 VdB for daytime residences. Other building structures that surround the Project site would experience lower vibration levels because they are farther away.

Table 5.13-11: Potential Construction Vibration Annoyance

Land Use	Direction	Equipment/ Activity	Reference Vibration Level (VdB) at 25 ft	Distance to Structure (ft) ¹	Vibration Level (VdB)
Commercial (383 E Alessandro Boulevard)	North	Large bulldozers	87	110	68
		Loaded trucks	86	110	67
Commercial (7562 Mission Grove Parkway)	East	Large bulldozers	87	135	65
		Loaded trucks	86	135	64
Residence (Foxtail Lane)	South	Large bulldozers	87	130	66
		Loaded trucks	86	130	65
Commercial (Mission Grove Plaza)	West	Large bulldozers	87	80	72
		Small bulldozers	58	80 ²	43
		Loaded trucks	86	80 ³	71

Source: Compiled by LSA Associates, Inc. (2022).

Note: The FTA-recommended annoyance threshold of 84 VdB for offices (and other similar areas) and 78 VdB for residential homes was used to assess potential construction vibration annoyance.

- ¹ Distance from the active construction area near the center of the project site to the building structure.
- ² Small rubber-tired dozers will be used near the existing commercial building located immediately west of the project construction boundary as a project feature.
- ³ Loaded trucks would not operate near the existing commercial building located immediately west of the project construction boundary as a project design feature.

ft = foot/feet

FTA = Federal Transit Administration

VdB = vibration velocity decibels

Similarly, Table 5.13-12 lists the projected vibration levels from various construction equipment expected to be used on the Project site at the project construction boundary to the nearest buildings in the project vicinity. As shown in Table 5.13-12, the closest commercial and residential buildings to the west and south of the Project site are immediately west of the project construction boundary and approximately 80 ft, respectively, from the project construction boundary and would experience vibration levels of up to 0.191 PPV (in/sec) and 0.014 PPV (in/sec), respectively. Vibration levels at the closest commercial and residential building would not result in building damage because the commercial and residential buildings would be constructed equivalent to non-engineered timber and masonry, and vibration levels would not exceed the FTA vibration damage threshold of 0.20 PPV (in/sec).

Other building structures that surround the Project site would experience lower vibration levels because they are farther away and would be constructed equivalent to non-engineered timber and masonry. Therefore, construction vibration impacts would be **less than significant**. No vibration reduction measures are required.

Table 5.13-12: Potential Construction Vibration Damage

Land Use	Direction	Equipment/ Activity	Reference Vibration Level at 25 ft PPV (in/sec)	Distance to Structure (ft) ¹	Vibration Level PPV (in/sec)
Commercial (383 E Alessandro Boulevard)	North	Large bulldozers	0.089	40	0.044
		Loaded trucks	0.076	40	0.038
Commercial (7562 Mission Grove Parkway)	East	Large bulldozers	0.089	120	0.008
		Loaded trucks	0.076	120	0.007
Residence (Foxtail Lane)	South	Large bulldozers	0.089	85	0.014
		Loaded trucks	0.076	85	0.012
Commercial (Mission Grove Plaza)	West	Large bulldozers	0.089	15 ²	0.191
		Small bulldozers	0.003	2 ³	0.133
		Loaded trucks	0.076	15 ⁴	0.164

Source: Compiled by LSA Associates, Inc. (2022).

Note: The FTA-recommended building damage threshold is 0.20 PPV [in/sec] at the receiving non-engineered timber and masonry building.

¹ Distance from the project construction boundary to the building structure.

² Large tracked dozers will not operate within 15 ft of the existing commercial building located immediately west of the project construction boundary as a project feature.

³ Small rubber-tired dozers will be used within 15 ft of the existing commercial building located immediately west of the project construction boundary as a project feature.

⁴ Loaded trucks will not operate within 15 ft of the existing commercial building located immediately west of the project construction boundary as a project design feature.

ft = foot/feet

PPV = peak particle velocity

FTA = Federal Transit Administration

VdB = vibration velocity decibels

in/sec = inches per second

Long-Term Ground-Borne Noise and Vibration from Vehicular Traffic

Once operational, the proposed Project would not generate vibration. In addition, vibration levels generated from project-related traffic on the adjacent roadways (i.e., Mission Grove Parkway and Mission Village Drive) would be unusual for on-road vehicles because the rubber tires and suspension systems of on-road vehicles provide vibration isolation. Therefore, vibration impacts from project-related traffic on the adjacent roadways would be **less than significant**, and no vibration reduction measures are required.

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

The closest airports to the Project site are the March Air Reserve Base/Inland Port Airport (MARB/IPA), Riverside Municipal Airport, and Flabob Airport, which are located 3.2 miles southeast, 6.7 miles northwest, and 6.8 miles northwest of the project site, respectively. Although the Project site is located in Zone C2 based on the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan (MARB/ IPA LUCP), the Project site is outside the 60 dBA CNEL noise contour. Therefore, the Project site would not be exposed to aircraft noise exceeding the exterior noise standard of 65 dBA CNEL based on the MARB/ IPA LUCP Countywide Policy 4.1.5. In addition, the exterior noise level would not be more than 20 dBA above the interior standard of 40 dBA CNEL based on the MARB/ IPA LUCP Countywide Policy 4.1.6 and standard building

construction, which would provide an exterior-to-interior attenuation of 20 dBA. Also, the Project site is outside the 55 dBA CNEL noise contours of Riverside Municipal Airport and Flabob Airport. Figures showing the airport noise contours and the location of the Project site are provided in Appendix B. There are no private airstrips located within the vicinity of the Project site. Therefore, the proposed Project would not expose people residing or working in the project area to excessive noise levels and impacts would be **less than significant**.

5.13.6 Proposed Mitigation Measures

The Project would not exceed any of the noise thresholds of significance and potential Project-related impacts would be less than significant. Additionally, the mitigation measures related to construction noise in the Mission Grove Specific Plan (outlined below as **MM NOISE-1** and **MM NOISE-2**) requiring the use and proper maintenance of noise-reducing devices on construction equipment would minimize construction-related noise and ensure construction noise would not be generated during the more sensitive nighttime hours. The mitigation measures related to aircraft noise in the Mission Grove Specific Plan (outlined below as **MM NOISE-3** and **MM NOISE-4**) require prospective purchasers of dwelling units be informed of high aircraft noise levels and appropriate avigation and noise easements for all residentially developed property. Therefore, no additional noise related mitigation measures are proposed.

MM NOISE-1: The use and proper maintenance of noise reducing devices on construction equipment will minimize construction-related noise.

MM NOISE-2: Construction activities will take place only during those days and hours specified in the City Noise Ordinance to reduce noise impacts during more sensitive time periods.

MM NOISE-3: A program to inform prospective purchasers of dwelling units within the Specific Plan area of high aircraft noise levels shall be submitted by the developer of City review and approval prior to issuance of any residential building permits. This program shall include a letter to be provided to the purchaser prior to completion of the sale.

MM NOISE-4: Appropriate avigation and noise easements for all residentially developed property shall be prepared for City and U.S. Air Force review and approval and recorded prior to approval of implementing land division proposals or issuance of any individual building permits if no land division is proposed.

5.13.7 Cumulative Environmental Effects

Cumulative development in the City and the surrounding area would modify existing land use patterns through the development of vacant lots or through redevelopment. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects consisting of residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public). The cumulative projects range in distance from the Project site from the closest project approximately 800 feet north, across Alessandro Boulevard, to approximately 1 mile southwest of the Project site,

approximately 1.2 miles southeast of the site, to the farthest project site, approximately 1.75 miles east, on Alessandro Boulevard (refer to Figure 4.0-1 – Cumulative Project Locations).

Each of the proposed developments would generate temporary noise during construction. Construction activities at the related projects and developments in the area would generate similar noise levels as the Project. Construction noise and vibration are localized and rapidly attenuate with distance from the source. Only the closest cumulative project, which is a commercial vehicle wash facility, located approximately 800 feet north, across Alessandro Boulevard, would have the potential to result in cumulative construction noise and vibration in the project area. The remaining cumulative projects are located far enough away that construction noise and vibration from the proposed Project and from the cumulative project sites would be attenuated with the distance between them such that they would not result in a cumulative effect. The commercial vehicle wash facility is currently under construction (at the time of preparation of this DEIR) and would be expected to be completed prior to the start of construction of the proposed Project. As the commercial vehicle wash facility and the proposed Project would not be under construction at the same time, they would not have a cumulative effect. Therefore, the Project would not contribute considerably to temporary cumulative construction noise and vibration impacts.

Because noise dissipates as it travels away from its sources, noise impacts associated with on-site activities and other stationary sources would be limited to the Project site and vicinity. Only the closest cumulative project, which is a commercial vehicle wash facility, located approximately 800 feet north, across Alessandro Boulevard, would have the potential to result in cumulative operational noise in the project area. Similar to construction, the remaining cumulative projects are located far enough away that operational noise from the proposed Project and from the cumulative project sites would be attenuated with the distance between them such that they would not result in a cumulative effect. As the commercial vehicle wash facility and the proposed Project would not be under construction at the same time, they would not have a cumulative effect. The commercial vehicle wash facility operational noise would be primarily generated from the washing and drying machinery in the car wash tunnel. The commercial vehicle wash facility was required to incorporate design features to reduce the operational noise impacts to adjacent residential uses such that the existing ambient noise levels, at the quietest measure time and level, are not exceeded. (PR-2021-001023 IS/MND 2022) As outlined in the *Noise and Vibration Impact Analysis* for the proposed Project, operational traffic noise levels for the existing condition, opening year, and cumulative with project scenarios were evaluated using worst-case scenario, which assumes that no shielding is provided between the traffic and the location where the noise contours are drawn, and determined to result in increase of up to 0.6 dBA in the project vicinity. This noise level increase is below 3 dBA and would not be perceptible to the human ear in an outdoor environment. The *Noise and Vibration Impact Analysis* also determined the Project would not generate vibration once operational. Therefore, on-site operation activities at the Project site, in combination with other planned and pending development, would not contribute considerable to long-term, cumulative noise or vibration impacts.

As discussed, the Project does not exceed any of the applicable noise significance criteria or significance thresholds; therefore, cumulative impacts would be **less than significant**.

5.13.8 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>General Plan 2025</i> , certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
LSA 2023	LSA, <i>Noise and Vibration Impact Analysis</i> . April 2023. (Appendix H)
MARB/IPA LUCP	Mead & Hunt, March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan, adopted by Riverside County Airport Land Use Commission November 13, 2014. Available at https://rcaluc.org/current-compatibility-plans , accessed September 2023.
PR-2021-001023 IS/MND 2022	City of Riverside, <i>PR-2021-001023 Initial Study/ Mitigated Negative Declaration (IS/MND)</i> . June 2022. Available at City of Riverside, Community & Economic Development Department, Planning Division, 3900 Main Street 3 rd Floor, Riverside, CA 92522.
RMC, Title 7	City of Riverside, Code of Ordinances, Title 7 Noise Control https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT7NOCO , accessed September 2023)

5.14 Population and Housing

This section analyzes the effects of the proposed project on population and housing. The following discussion and analysis include information about population and housing from the City's General Plan 2025 and EIR and the Housing Element Sixth Cycle 2021-2029.

5.14.1 Setting

According to the General Plan 2025, following World War II, the City experienced significant development, resulting in an 8 percent annual increase in population. Increasing suburbanization resulted in a 6.6 percent annual growth rate during the 1960s. Population growth continued at a more modest rate during the 1970s and 1980s, increasingly at 2.2 and 3.3 percent annually. The City's population growth rate slowed during the 1990s to 1.3 percent as the region recovered from military base realignments and other economic changes. With the economic recovery in the late 1990s, the City's population increased to approximately 275,000 as of 2003. (GP 2025 PEIR)

Within the City boundaries, the housing demand was pent up during the mid-1990s due to the downturn in the economy. However, improvements in the regional and local economy during the late 1990s led to a significant increase in housing demand. Single-family and multi-family housing construction averaged 700 units and 600 units, respectively, during a 2-year period of 1998 and 1999. Beginning in 2000, however, housing construction significantly increased. From 2000 to 2003, more than 4,000 residential units were permitted for construction. The construction boom of the early 2000s continued through 2005. (GP 2025 EIR)

According to the GP 2025 2021-2029 Housing Element Sixth Cycle, the City's population is expected to grow an estimated 17.8% by 2040, to 386,600 residents. The City's population growth has been a steady, adding approximately 40,000 new residents each decade since the 1960s. Even during times of economic recession, Riverside has continued to grow. The City of Riverside was ranked the 13th most populous city in California in 2013 with approximately 311,955 residents. (Housing Element 6th Cycle)

5.14.2 Regulatory Setting

5.14.2.1 Federal Regulations

There are no applicable Federal Regulations related to population and housing.

5.14.2.2 State Regulations

Housing Element Law (Government Code, § 65580 et seq.)

State law recognizes the vital role local governments play in the supply and affordability of housing. Each governing body (City Council or Board of Supervisors) of a local government in California is required to adopt a comprehensive, long-term general plan for the physical development of the city or county. The housing element is one of the seven mandated elements of the local general plan. Housing element law, enacted in 1969, mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The law acknowledges that, in order for the private market to adequately address

housing needs and demand, local governments must adopt land use plans and regulatory systems which provide opportunities for, and do not unduly constrain, housing development. As a result, housing policy in the State rests largely upon the effective implementation of local general plans and, in particular, local housing elements. Housing element law also requires the Department of Housing and Community Development review local housing elements for compliance with State law and to report its written findings to the local government.

5.14.2.3 Regional Regulations

Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA) is a key tool to plan for growth. California law requires that local governments plan for projected population and employment growth. To assist in this effort, Southern California Association of Governments (SCAG) prepares housing construction goals for each city in southern California as part of the RHNA. SCAG determines the total housing need for each community based on the number of housing units needed to accommodate future population and employment growth. The housing needs calculation also accounts for replacement of housing units demolished over the planning period and student housing needs for jurisdictions that have a large student population.

The existing need assessment examines variables from the most recent Census to measure ways in which the housing market is not meeting the needs of current residents. These variables include the number of low-income households paying more than 30% of their income for housing, as well as severe overcrowding.

The future need for housing is determined primarily by the forecasted growth in households in a community. Each new household, created by a child moving out of a parent's home, by a family moving to a community for employment, and so forth, creates the need for a housing unit. The housing need for new households is then adjusted to account for an ideal level of vacancy needed to promote housing choice, moderate cost and acceptable levels of housing upkeep and repair. In the SCAG region, many communities currently have more than the ideal number of vacancies, and thereby the vacancy adjustment is, in those cases, subtracted from the total housing need. Finally, a second adjustment is made to account for units expected to be lost due to demolition, natural disaster, or conversion to non-housing uses. The sum of these factors, household growth, vacancy need (generally a negative number), and replacement need, form the construction need for a community.

Finally, the RHNA considers how each jurisdiction might grow in ways that will decrease the concentration of low-income households in certain communities. The need for new housing is distributed among income groups so that each community moves closer to the regional average income distribution.

5.14.2.4 Local Regulations

The General Plan Land Use and Urban Design and Air Quality Elements maintains current land use pattern within outlying areas of the City and includes the following policies to encourage infill

and revitalization of vacant and underutilized areas in the established core and along major travel corridors to reduce displacement:

Policy LU-8.1: Ensure well-planned infill development Citywide, allow for increased density in selected areas along established transportation corridors.

Policy LU-8.3: Allow for mixed-use development at varying intensities at selected areas as a means of revitalizing underutilized urban parcels.

Preservation of Industrial Land

Policy LU-25.4: Identify opportunities to redevelop older, underutilized properties.

Housing Strategies

Policy AQ-1.5: Encourage infill development projects within urbanized areas that include job centers and transportation nodes.

Policy AQ-1.6: Provide mixed-use development that allows the integration of retail, office, institutional and residential uses for the purpose of reducing costs of infrastructure construction and maximizing the use of land.

Policy AQ-1.7: Support planned residential developments and infill housing, which reduce vehicle trips.

Business Near Transit

Policy AQ-1.12: Support mixed-use land use patterns, but avoid placing residential and other sensitive receptors in close proximity to businesses that emit toxic air contaminants to the greatest extent possible. Encourage community centers that promote community self-sufficiency and containment and discourage automobile dependency.

Housing Opportunities

Policy H-2.1: Provide adequate sites and supporting infrastructure to accommodate housing through land use, zoning, specific plan designations and infill programs to encourage a broad range of housing opportunities.

Policy H-2.2: Encourage the production and concentration of quality mixed use and high density housing in the Downtown Specific Plan, commercial corridors and major activity centers and nodes.

5.14.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to population and housing.

5.14.4 Project Design Considerations

There are no Project-specific design considerations related to population and housing.

5.14.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed project would:

- (Threshold A) induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- (Threshold B) displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;

5.14.6 Environmental Impacts before Mitigation

Threshold A: *Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);*

According to the City’s 6th Cycle Housing Element Update the population is expected to grow to 386,600 by 2040. . The proposed Project includes a General Plan Amendment from C – Commercial to MU-U – Mixed Use Urban to allow for the multi-family development with 347 units. The expected number of tenants is 829 persons, and therefore the estimated population growth from the Project is 829 persons. Per the 6th Cycle Housing Element Technical Background Report, the City of Riverside had an estimated population of 328,155 in 2020. This represents a growth of 58,445 people from 2020 to 2040. Therefore, the Project is anticipated to contribute approximately 1.4 percent of the anticipated population growth.

The General Plan 2025 was designed to accommodate anticipated growth by providing adequate services, access and infrastructure. The Project area is currently served by existing roads and other infrastructure and the Project would only require minor extensions or laterals from nearby roads and utilities to the site. Also, the Project would result in a very small incremental increase in population growth, approximately 1.4 percent. Thus, the Project is within the City’s anticipated growth projections. The Project’s estimated 829 persons to the total population would be a minuscule incremental increase of the anticipated growth. Moreover, per the City’s General Plan EIR, the maximum population projection with build out of the General Plan would be 444,308 persons, which would result in the Project’s generated residents of 829 person to be approximately 0.2 percent of the GP 2025 maximum population growth. The approximately 1.4 percent incremental increase is anticipated to be a less than significant increase and would not exceed both the estimated projection and the maximum projection of the City’s General Plan 2025 EIR growth projections. Therefore, the project would have a **less than significant** impact, both directly and indirectly.

Threshold B: *Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed Project would not displace existing people or housing, necessitating the construction or replacement housing elsewhere because the Project site is proposed on developed land that has no existing housing that will be removed or affected by the proposed Project. Therefore, there will be **no impact** on existing housing either directly, indirectly or cumulatively.

5.14.7 Proposed Mitigation Measures

Impacts were found to be **less than significant**; therefore, no mitigation measures are necessary.

5.14.8 Cumulative Environmental Effects

As there are no impacts related to displacing existing housing and people, there are also **no cumulative impacts related to displacement of people**. The General Plan 2025 was designed to accommodate anticipated growth under the typical development scenario by providing adequate services, access and infrastructure. The Project is an infill project as the area is currently served by existing roads and other infrastructure and the Project would only require minor extensions or laterals from nearby roads and utilities to the buildings. The Project would result in a very small incremental increase in population growth, approximately 1.4 percent, of anticipated growth in the City from 2020-2040. Thus, the Project is within the City’s anticipated 2025 growth projection and the Project would not result in any cumulative impacts beyond those that were already analyzed and disclosed in the GP 2025 PEIR. The project would result in **less than significant cumulative impacts related to inducing substantial unplanned population growth**.

5.14.9 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)

<p>Housing Element 6th Cycle</p>	<p>City of Riverside, <i>Housing Element Sixth Cycle 2021-2029</i> adopted October 2021. (Available at https://riversideca.gov/cedd/planning/riverside-housing-public-safety-element-and-environmental-justice-approach, accessed March 15, 2023)</p>
<p>Housing Element 6th Cycle Technical Background Report</p>	<p>City of Riverside, <i>Housing Element Sixth Cycle 2021-2029 Technical Background Report</i> adopted October 2021. (Available at https://riversideca.legistar.com/View.ashx?M=F&ID=10435965&GUID=42661109-B223-4BBE-89DF-874060A14236, accessed January 8, 2024)</p>
<p>Housing and Public Safety Element Updates EIR</p>	<p>City of Riverside, <i>Housing and Public Safety Element Updates and Environmental Justice Policies Environmental Impact Report (EIR) (SCH# 2021040089)</i> adopted October 2021. (Available at https://riversideca.gov/cedd/planning/riverside-housing-public-safety-element-and-environmental-justice-approach, accessed March 15, 2023)</p>

5.15 Public Services

This section analyzes the effects of the proposed Project on public services. The following discussion and analysis include findings about Public Services from the City's General Plan 2025, the Housing and Public Safety Element *Updates and Environmental Justice Policies Environmental Impact Report* EIR, and the Mission Grove Specific Plan.

5.15.1 Setting

This section addresses public services in the City and the Mission Grove Specific Plan (MGSP) area, and includes fire protection, police protection, schools, parks, and other public facilities such as libraries and community centers.

Fire Protection

The Riverside Fire Department (RFD) provides fire protection for the City. RFD is an all-hazard emergency service agency that provides fire protection, emergency medical services, fire safety inspections, community education, and emergency preparedness planning and training for the City. RFD's major facilities include 14 fire stations throughout the City, administration and prevention offices, an Emergency Operations Center, and a training center. In addition to the 14 stations that serve the City, the Riverside County Fire Department (RCFD) provides service to the unincorporated territory within the City's Sphere of Influence. RFD has a mutual aid agreement with all fire agencies surrounding Riverside City limits. Each agency has agreed to offer like resources upon request and availability of the requested resources. RCD has an automatic aid agreement with RCFD for the March JPA area where the closest resource, regardless of jurisdiction, responds.

RFD's Fire Department Operations Division responds to more than 46,000 calls for service annually, as of 2022 RFD has established a performance goal for emergency response to arrive within 6 minutes of dispatch over 90 percent of the time. Ensuring that a high level of service can be provided over the long-term is a community goal. (Housing and Public Safety Element Updates EIR)

For purposes of underwriting fire insurance, communities are classified with respect to their fire defenses and physical characteristics. These classifications are referred to as ISO ratings and range on a scale of 1 to 10. ISO Class 1 represents the highest level of fire protection and ISO Class 10 represents the lowest level of protection. A community's ISO rating takes into account water supply, fire department capabilities, communities, regulations, hazards, and climate. The availability of an adequate water supply and delivery system is a major consideration. In 2019 RFD was awarded the highest available ISO rating of Class 1. (Housing and Public Safety Element Updates EIR)

Police Protection

The Riverside Police Department (RPD) provides police protection services to the City and includes approximately 560 personnel. Four RPD stations serve the City: Orange Station at 4102 Orange St., Lincoln Station at 8181 Lincoln Ave., Magnolia Station at 10540 Magnolia Ave., and

Aviation at 7020 Central Ave. RPD police officers strive to respond within 7 minutes to Priority 1 calls (life-threatening) and to less-urgent Priority 2 calls (non-life-threatening) within 12 minutes. The City has reconsidered RPD's centralized form of organization, and RPD has implemented a decentralized Neighborhood Policing Center model in an effort to provide more equitable and responsive services across the City. Additionally, RPD does not use a formula for calculating the number of officers per capita, but instead utilizes adequate staffing to meet operational needs. (Housing and Public Safety Element Updates EIR)

Schools

The City is served by two public school districts: the Riverside Unified School District (RUSD) and the Alvord Unified School District (AUSD). The proposed Project site is located in the RUSD, which is the fourteenth largest school district in California. RUSD has 47 schools, including 30 elementary schools, one special-education preschool, six middle schools (grades 7–8), five comprehensive high schools, two continuation high schools, and the Riverside Virtual School. Approximately 42,000 students are enrolled in grades K–12 at RUSD. In addition, RUSD has nearly 7,000 adult education students enrolled in its district. (Housing and Public Safety Element Updates EIR)

Parks

Refer to Section 5.16, Recreation for the Project's potential impacts to parks.

Other Public Facilities

The Riverside Public Library system provides library service to the City. The City has nine existing libraries that serve the City. Four university and college libraries also serve the City. Library service needs and standards are determined by the following methods: volumes by population; community need/service gaps (including services provided/not provided by other area departments and agencies); customer requests; and innovation/success of pilot projects. The City does not collect assessed development impact fees on the library's behalf. Library funding sources include the General Fund, trust funds, gift funds/donations, and grants. (Housing and Public Safety Element Updates EIR)

5.15.2 Regulatory Setting

5.15.2.1 Federal Regulations

Fire Protection

National Fire Protection Association 1710

The National Fire Protection Association recommends that fire departments respond to fire calls within 6 minutes of receiving the request for assistance for 90 percent of incidents. These time recommendations are based on the demands created by a structural fire. It is crucial to attempt to arrive and intervene at a fire scene prior to the fire spreading beyond the room of origin. Total structural destruction typically starts within 8 to 10 minutes after ignition. Response time is generally defined as 1 minute to receive and dispatch the call, 1 minute to prepare to respond to the fire station or field, and 4 minutes (or less) travel time.

Police Protection

There are no federal regulations directly applicable to police protection with respect to the Project.

Schools

There are no federal regulations directly applicable to schools with respect to the Project.

Other Public Facilities

There are no federal regulations directly applicable to schools with respect to the Project.

5.15.2.2 State Regulations**Fire Protection***California Code of Regulations Title 24, Parts 2 and 9 – Fire Codes*

California Code of Regulations (CCR) Part 2 of Title 24 refers to the California Building Code (CBC), which contains complete regulations and general construction building standards of state adopting agencies, including administrative, fire and life safety, and field inspection provisions. Part 2 was updated in 2008/2022 to reflect changes in the base document from the Uniform Building Code to the International Building Code. CBC Part 9 refers to the California Fire Code (CFC), which contains other fire safety-related building standards. In particular, the 2022 CBC Chapter 7A, Materials and Construction Methods for Exterior Wildfire Exposure, addresses fire safety standards for new construction. The 2022 CBC, Title 24 went into effect January 1, 2023.

Police Protection

There are no state regulations directly applicable to police protection with respect to the Project.

Schools*California Government Code 66000*

According to California Government Code 66000, a qualified agency, such as a local school district, may impose fees on developers to compensate for the impact that a project will have on existing facilities or services. The California legislature passed Senate Bill 50 in 1998, which inserted new language into the Government Code (Sections 65995.5–65995.7) that authorized school districts to impose fees on developers of new residential construction in excess of mitigation fees authorized by Government Code 66000. School districts must meet a list of specific criteria, including the completion and annual update of School Facility Needs Analysis, in order to be legally able to impose the additional fees.

Leroy F. Green School Facilities Act

California Government Code Section 65995 (The Leroy F. Green School Facilities Act of 1998) set base limits and additional provisions for school districts to levy development impact fees and to help fund expanded facilities to house new pupils that may be generated by the development project. Sections 65996(a) and (b) state that such fees collected by school districts provide full and complete school facilities mitigation under CEQA. These fees may be adjusted by the district over time as conditions change.

Other Public Facilities

There are no state regulations directly applicable to other public facilities with respect to the Project.

5.15.2.3 Regional Regulations**Fire Protection**

There are no regional regulations directly applicable to fire protection with respect to the Project.

Police Protection

There are no regional regulations directly applicable to police protection with respect to the Project.

Schools

There are no regional regulations directly applicable to schools with respect to the Project.

Other Public Facilities

There are no regional regulations directly applicable to other public facilities with respect to the Project.

5.15.2.4 Local Regulations**Fire Protection***City of Riverside Fire Department Strategic Plan*

The City of Riverside Fire Department Strategic Plan 2023-2028 identifies RFD's key goals and objectives and articulates the agency's core responsibilities, mission, and guiding principles. The plan includes emergency planning goals and objectives for RFD's Emergency Services Division.

*City of Riverside Municipal Code***16.32.020 – International Fire Code adopted – Filed with Fire Marshall**

The 2021 International Fire Code as adopted with amendments by the California Buildings Standards Commission, also known as the 2022 California Fire Code ("this Code"), including Appendices B, C, E, F, G, I, M, N, and O are adopted in its entirety with the following amendments by this chapter. This code prescribes regulations consistent with nationally recognized good practice for the safeguarding, to a reasonable degree, of life and property from the hazards of fire and explosion arising from the storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life or property in the use or occupancy of buildings or premises. One copy of this Code has been certified as a true copy, is on file and open to public inspection in the Office of the Fire Marshal.

*Riverside General Plan 2025*Public Safety Element

The GP 2025 Public Safety Element includes objectives and policies to address the City's fire protection needs, including:

Policy PS-6.1: Ensure that sufficient fire stations, personnel and equipment are provided to meet the needs of the community as it grows in size and population.

Policy PS-6.2: Endeavor to meet/maintain a response time of five minutes for Riverside's urbanized areas.

Policy PS-6.3: Integrate fire safety considerations in the planning process.

Policy PS-6.4: Promote the use of buildings, setbacks, walls, landscaping, and other design features to buffer and reduce conflicts between adjacent properties.

Policy PS-6.5: Promote green building design.

Policy PS-6.6: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

Policy PS-6.7: Continue to involve the City Fire Department in the development review process.

Policy PS-6.9: Provide outreach and education to the community regarding fire safety and prevention.

Police Protection

Riverside General Plan 2025

Public Safety Element

The GP 2025 Public Safety Element includes objectives and policies to address the City's police protection needs, including:

Policy PS-7.1: Deploy human and financial resources to ensure adequate and equitable distribution of police services.

Policy PS-8.5: Continue to encourage residents and apartment managers to become involved in the Crime Free Multi-Housing Program as a way to reduce crime in apartment communities.

Policy PS-10.3: Ensure that public safety infrastructure and staff resources keep pace with new development planned or proposed in Riverside and the Sphere of Influence.

Policy PS-10.4: Continue to ensure that each development or neighborhood in the City has adequate emergency ingress and egress, and review neighborhood access needs to solve problems, if possible.

Schools

City of Riverside Municipal Code – School Development Fee

Chapter 16.56, School Development Fee, of the RMC establishes coordination between the City and the applicable school district to develop a school development fee for mitigating the impact of residential development on local school districts.

Riverside Unified School District

Property owners and developers pay developer fees to RUSD to mitigate the impact created by new development within RUSD boundaries on its school facilities. Level I and Level II fees are primarily applied to industrial and commercial buildings, and residential additions above 500 square feet. Level II fees are for all new residential developments. RUSD is not currently authorized to collect Level III fees.

Other Public Facilities

Local Measure C and Measure I

In 2002, the City placed a \$19 annual parcel tax (i.e., Measure C) on the ballot to secure a dedicated funding source for local libraries. The measure passed but had a 10-year term that expired in June 2012. In 2011, Measure I was placed on the ballot to extend the \$19 annual parcel tax for another 10 years. The measure also passed. The library parcel tax was collected and used for library services in the City through June 2022. In the past, the Riverside Public Library used Measure C and I funds (along with general funds) to serve City residents through extended hours of operation, books, electronic resources, homework and reading programs, new programming, and acquisitions of new computers.

5.15.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to public services.

5.15.4 Project Design Considerations

There are no Project-specific design considerations proposed that relate to public services.

5.15.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental

impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- fire protection,
- police protection,
- schools,
- parks,
- other public facilities.

5.15.6 Environmental Impacts

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

- ***Fire protection?***

The Riverside City Fire Department provides fire protection for the Mission Grove area from two facilities that are closest to the project site:

- Station No. 11 at the corner of Orange Terrace Parkway and Silk Oak Drive, across from Franklin School at 19595 Orange Terrace Parkway. From Station No. 11 to the Mission Grove Shopping Center is a three-minute response time.
- Station No. 9 is located within a five-minute response time at 6674 Alessandro Boulevard.

These stations are staffed with four full-time firefighters each and have the capability to respond to industrial as well as residential fires. (Housing and Public Safety Element Updates EIR)

The Riverside Municipal Code (RMC), Chapter 16.52, Development Fees for Fire Stations, provides the City with the ability to collect development fees for the construction and purchase of land for fire stations as well as for the acquisition of equipment and furnishings to equip fire stations. However, to date, the City has not adopted a resolution establishing those development fees, so no fees are currently being collected. RFD implemented service improvements through application of Riverside Measure Z funding and achieved an ISO Rating of ISO Class 1—the highest awarded level—in December 2019. Measure Z also continues to provide funding for RFD staff positions, training, and vehicle replacement and maintenance. (Housing and Public Safety Element Updates EIR)

The proposed Projects includes a total of 347 residential apartment units and is anticipated to house approximately 829 tenants. The proposed Project would increase demands of fire services. However, as outlined in Section 5.14 Population and Housing, the Project is anticipated to contribute approximately 1.5 percent of the total anticipated population growth to buildout of GP 2025. Due to its small proportion of the GP 2025 buildout population, the proposed Project is unlikely to contribute toward a need for additional facilities, equipment, or staff. GP 2025 Public

Safety Element, Policy PS-6.1, ensures that sufficient fire stations, personnel, and equipment are provided to meet the needs of the community as it grows in size and population. Additionally, the project is an infill project, in which the project site is served by two existing nearby fire stations, and current response times to the proposed Project area (within 5 minutes for Station 9 and within 3 minutes for Station 11) are lower than the City's average response time of 8 minutes. The proposed Project would not increase response times and would be consistent with GP 2025 Public Safety Element, Policy PS-6.2, meet/maintain a five-minute response time for the City's urbanized areas. Furthermore, in accordance with Policy PS-6.7: Continue to involve the City Fire Department in the development review process, the proposed Project would be reviewed as part of the review of all proposed development projects. Finally, the proposed Project would be constructed in accordance with current building and fire/life/safety ordinances and codes, including all applicable RMC code requirements related to construction, access, water mains, fire flows, and hydrants.

Compliance with the above-mentioned state and local regulations would ensure that there would be sufficient fire protection service and facilities to accommodate the additional population resulting from the proposed Project. As such, impacts related to fire protection services would be **less than significant**.

▪ ***Police protection?***

The GP 2025 Public Safety Element, Policy PS-7.5 provides for response time of within 7 minutes to Priority 1 calls (life-threatening) and within 12 minutes for Priority 2 calls (non-life-threatening). The proposed Project would increase demands of police services; however, this increase would be relatively minor as the Project would be developed in a generally urbanized area already served by RPD and within an area currently consisting of both commercial and residential uses. Additionally, RPD would evaluate its budget annually to provide adequate police services, including police staffing increases, to accommodate additional growth associated with development within the City, including the Project. Further, any incremental impacts on the level of police services would be offset from revenue generated for the City from the Project's property taxes per the City's General Plan EIR. RPD would continue to meet the recommended police response times, and there would be sufficient police protection service and facilities to accommodate additional population resulting from the proposed Project. (Housing and Public Safety Element Updates EIR)

As there would be sufficient police protection service and facilities to accommodate the additional population resulting from the proposed Project, impacts related to police protection services would be **less than significant**.

▪ ***Schools?***

The proposed Project would increase the demand for RUSD school facilities. However, the proposed Project will comply with RMC Chapter 16.56, School Development Fee, which establishes coordination between the City and the applicable school district to develop a school development fee for mitigating the impact of residential development on local school districts. In addition, legislation allows school districts to collect impact fees from developers of new

residential and commercial uses. Pursuant to Government Code Section 65996, school fees imposed through the Education Code are deemed to be full mitigation for new development projects; the City cannot impose additional mitigation measures. RUSD collects Level II fees for new residential construction based on the square footage of new developments. (Housing and Public Safety Element Updates EIR)

Fees paid by the developer would be used to offset the impact of the number of new students generated by the Project and would ensure that the development contributes to a fair-share amount to help maintain adequate school facilities and levels of service. Therefore, the provision of schools is the responsibility of the school district. Senate Bill 50 provides that the statutory fees found in the Government and Education Codes are the exclusive means of considering and mitigating for school impacts. Imposition of the statutory fees constitutes full and complete mitigation.

Compliance with the above-mentioned state and local regulations would ensure that there would be sufficient facilities and service to accommodate additional students resulting from the Project. As such, impacts related to schools would be **less than significant**.

- ***Parks?***

Refer to Section 5.16, Recreation, of this EIR.

- ***Other public facilities?***

The proposed Project would increase the demand for other public services. The City has nine existing libraries, and service expansion would be evaluated regularly. Library service needs and standards are determined by the following methods: volumes by population, community need/service gaps (including services provided/not provided by other area departments and agencies), customer requests, and innovation/success of pilot projects.

The Riverside library system provides books, multimedia, sound recordings, magazine subscriptions, internet access, and other resources. The Riverside library system also includes two (2) cyber libraries (cybraries) that provide a collection of virtual materials and educational resources. Additionally, the Riverside Public Library has established online library services, which allow residents to access library data remotely.

At the time of publication (2007), GP 2025 Section 5.13 – Public Services reported that within the City, approximately 50,000 residents were students at the University of California Riverside, Riverside Community College, California Baptist University, and La Sierra University. The most current available student population information from these campuses provides an estimate of approximately 70,000 students. Per GP 2025 Section 5.13, libraries are provided at these colleges and students attending the colleges primarily use the library facilities provided at the campuses.

Per GP 2025 Education Element, Policy ED-5.1, the City is required to help provide ample and convenient library facilities. While there are no development impact fees that would fund the Riverside Public Library system, the Project would not affect the City's ability to provide adequate libraries. As described, there are number of existing library facilities within the City and the

Riverside library system provides online and virtual library services, materials, and resources that residents can access remotely. Additionally, the college campuses within the City provide library facilities for resident students, which further aids in reducing the dependence on public library space and content. The proposed Projects includes a total of 347 residential apartment units and is anticipated to house approximately 829 tenants. The proposed Project would increase demands of libraries. However, as outlined in Section 5.14 Population and Housing, the Project is anticipated to contribute approximately 1.4 percent of the total anticipated population growth from 2020 to 2040, as outlined in the City's 6th Cycle Housing Element Update. Due to its small proportion of the GP anticipated population growth, the proposed Project is unlikely to contribute toward a need for additional facilities, equipment, or staff. GP 2025 Education Element, Policy ED-5.1, ensures that sufficient libraries are provided to meet the needs of the community as it grows in size and population. Therefore, the Project would not significantly increase the demand for library services and/or facilities and development of the Project would result in **less than significant** impacts on library services; no mitigation is required.

5.15.7 Proposed Mitigation Measures

There were found to be **less than significant impacts** to public services from the proposed Project; therefore, no Mitigation Measures are necessary.

5.15.8 Cumulative Environmental Effects

The geographic context for an analysis of cumulative impacts with regards to public services is the local service area within the City for fire and police services, schools, and libraries. As discussed in Chapter 4 Environmental Setting of this DEIR, cumulative development in the City and surrounding cities and county would include residential development, warehouses, commercial, office, mixed-use and public facilities (parks). Past and present development has resulted in increased population, which in turn has resulted in an increase in demand for all public services. Growth in the City to date has been consistent with the growth projections in the City's GP 2025. In addition, each of the public service providers conducts an annual budgeting process where future facility/staffing needs are identified. Because past and present development is consistent with growth identified in the GP 2025 and there are mechanisms in place to ensure provision of adequate service, there would be **no significant cumulative environmental impact on public services** from Project implementation.

5.15.9 References

The following references were used in the preparation of this section of the DEIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
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GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
Housing Element 6 th Cycle	City of Riverside, <i>Housing Element Sixth Cycle 2021-2029</i> adopted October 2021. (Available at https://riversideca.gov/cedd/planning/riverside-housing-public-safety-element-and-environmental-justice-approach , accessed March 15, 2023)
Housing and Public Safety Element Updates EIR	City of Riverside, <i>Housing and Public Safety Element Updates and Environmental Justice Policies Environmental Impact Report (EIR)</i> (SCH# 2021040089) adopted October 2021. (Available at https://riversideca.gov/cedd/planning/riverside-housing-public-safety-element-and-environmental-justice-approach , accessed March 15, 2023)
MGSP 1985	City of Riverside, <i>Mission Grove Specific Plan</i> , Adopted 1985, as Amended 1986 to 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed on March 15, 2023)

5.16 Recreation

This section analyzes the effects of the proposed project related to recreational facilities. The following discussion and analysis includes information about the City's parks from the City of Riverside Comprehensive Park, Recreation & Community Services Master Plan 2030.

5.16.1 Setting

Parks can provide value to a community through green spaces, visual enhancement, physical and mental health, and providing juvenile and senior amenities. The City of Riverside has 59 parks totaling 2,591.56 acres of developed parkland. There are an additional 9 parks that are undeveloped totaling 349.05 acres. Parks within the system include pocket parks, neighborhood parks, community parks, regional parks, joint use, and special use facilities. Across the various park types there are numerous recreational opportunities including active sports fields, playgrounds, recreation centers, passive recreation amenities as well as access to 12 community centers, 3 senior centers, 8 swimming pools (including one joint-use pool), and 23.7 miles of beautiful trails and 94.5 miles of bike lanes. (City of Riverside Comprehensive Park, Recreation & Community Services Master Plan 2030)

The City has many different types of parks, including population-based parks (neighborhood and community), resource-based parks that include natural or man-made resources intended to serve the citywide population, and open space parks that allow public access to undeveloped natural spaces. Table 5.16-1 lists parks and their associated acreages located within approximately 1.5 mile of the proposed Project site.

Table 5.16-1: Community Parks Located Near the Proposed Mission Grove Apartments

Park	Address	Park Acreage
Castleview Park	6306 West View Drive	31.51
Taft Park	6826 New Ridge Drive	7.19
Orange Terrace Park	20010 Orange Terrace Parkway	29.94
Sycamore Canyon Wilderness Park	400 Central Avenue	1335.45

5.16.2 Regulatory Setting

5.16.2.1 Federal Regulations

There are no applicable Federal regulations regarding recreation.

5.16.2.2 State Regulations

Quimby Act

California Government Code, Section 66477 (Quimby Act) was enacted in 1975 to promote the availability of park and open space areas, in response to the need for such facilities generated by residential development and the incumbent demand placed by new residents to the state. The Quimby Act authorizes cities and counties to enact ordinances requiring the dedication of land and/or the payment of fees for park and/or recreational facilities for projects involving residential subdivisions. The Quimby Act seeks to mitigate impacts of development that bring new park users to recreation facilities.

Revenue generated under the Quimby Act can only be used to purchase new parkland and may not be used for the operation or maintenance of existing parkland. The Quimby Act states that:

the dedication of land or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide three acres of park area per 1,000 persons residing within a subdivision subject to this section, unless the amount of existing neighborhood and community park area, as calculated pursuant to this subdivision, exceeds that limit, in which case the legislative body may adopt the calculated amount as a higher standard not to exceed five acres per 1,000 persons residing in a subdivision subject to this section.

In addition to Quimby Act fees, facilities can be provided by grants, donations, user fees, community fund raising events, joint ventures, and joint use agreements.

5.16.2.3 Local Regulations

City of Riverside General Plan 2025

Park and Recreation Element

Objective PR-1: Provide a diverse range of park and recreational facilities that are responsive to the needs of Riverside residents.

Policy PR-1.3: Encourage private development of recreation facilities that complement and supplement the public recreational system.

Objective PR-3: Engage Riverside residents and the business community in planning for recreation and service needs.

Policy PR-3.1 Consider the needs of all age groups, abilities, disabilities and special interest groups in park and recreation planning and design.

Policy PR-3.2 Establish programs that allow local residents and neighborhood organizations to "adopt" and take pride in protecting and maintaining local parks.

Open Space and Conservation Element

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations, including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Policy OS-1.8

Policy OS-1.9: Promote open space and recreation resources as a key reason to live in Riverside.

Riverside Municipal Code Chapter 16

Riverside Municipal Code (RMC) Chapter 16 contains several sections specific to development fees for City parks. The City of Riverside adopted regulations of the Quimby Act under RMC

Section 16.44, which established development fees for the acquisition and development of regional parks and reserve parks. Fees are established by City Council resolution and required of all development not exempt under Subsection 16.44.060.

RMC Section 16.60 designates the Local Park Development Fee that enables the acquisition, development, and/or improvement of neighborhood and community parks in order to provide for adequate passive and active recreational opportunities to City residents. The fee is not used solely for the acquisition and development of new parks, but also to improve existing parks. RMC Section 16.76 establishes the Trails Development Fee for the acquisition and development of trails. The trail fees are only to be used for the purpose for which they are collected.

City of Riverside Comprehensive Park, Recreation & Community Master Plan

The Riverside Park, Recreation & Community Services Master Plan (Master Plan) adopted in 2020 serves as a guide and implementation tool for the management and development of parks and recreational facilities within the city boundaries. The Master Plan builds on previous planning efforts and provides an up-to-date understanding of the current and future recreation facility and program needs and opportunities within the city. Neighborhood Parks should be located within a 0.5-mile radius of every residence in the City, and Community Parks should be located within 3.0 miles. The city has a standard of 2 acres per 1,000 residents for community parks and 1 acre per 1,000 residents for neighborhood parks. The Master Plan recommends a more modern goal of 5 acres per 1,000 residents. As outlined in the 2020 Master Plan, the City's existing resources include 59 parks totaling 2,591.56 acres of developed parkland and an additional 9 parks that are undeveloped totaling 349.05 acres, for a combined total of 2,940.61 acres of parkland. As outlined in Section 5.14 Population and Housing, per the 6th Cycle Housing Element Technical Background Report, the City of Riverside had an estimated population of 328,155 in 2020. Therefore, were approximately 8.96 acres of existing park per each 1,000 residents in Riverside in 2020 and the City's existing parks exceeded the Master Plan recommendation of 5 acres per 1,000 residents.

5.16.3 Comments Received in Response to NOP

There were no comments received in response to the NOP related to recreation.

5.16.4 Project Design Considerations

The proposed Project includes indoor amenities including a leasing office, clubroom, fitness center, and outdoor amenities including a pool and spa, outdoor seating and dining areas, and a dog park. The private open space required for Mixed Use-Urban zones is 50 square feet per unit, for a total of 17,350 square feet or 0.40 acres. The proposed private open space provided is 21,523 square feet or 0.49 acres. The Zoning Code requires 150 square feet of common usable open space per unit for projects in the Mixed-Use – Urban Zone, for a total of 52,050 square feet of required open space. The applicant is proposing a Specific Plan Amendment to require 75 square feet of common usable open space per unit for the Mixed-Use – Urban designation, for a total of 26,025 square feet of required usable open space. The common open space provided totals 28,611 square feet or 0.66 acres.

5.16.5 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. Impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed project would:

- (Threshold A) 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; or
- (Threshold B) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

5.16.6 Environmental Impacts

Threshold A: *Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

The proposed Project includes a multi-family development with 347 units. The expected number of tenants is 829 persons (assuming all residents of the Project were new to the City), and therefore the estimated population growth from the Project is 829 persons. The proposed Project will incrementally increase the use of existing neighborhood and regional parks and recreational facilities from its estimated population growth of 829 persons. As outlined in Section 5.14 Population and Housing, per the 6th Cycle Housing Element Technical Background Report, the City of Riverside had an estimated population of 328,155 in 2020. This represents a growth of 58,445 people from 2020 to 2040. Therefore, the Project is anticipated to contribute approximately 1.4 percent of the anticipated 2020-2040 population growth. As the Project’s population growth is a small percentage of the total City growth from 2020-2040, the Project’s incremental increase in use of existing recreational facilities would also be small.

The Project includes onsite recreational amenities, including a clubroom, fitness center, pool and spa, outdoor seating and dining areas, and a dog park) for its residents. In addition to onsite facilities, the Mission Grove Plaza, in which the Project site is located, offers the following existing recreational amenities: LA Fitness, club pilates, and a movie theatre. The onsite amenities and those nearby within the surrounding Mission Grove Plaza would supplement existing nearby park facilities, located within 1.5 miles of the Project, which include Castlevue Park, Taft Park, Orange Terrace Park, and Sycamore Canyon Wilderness Park. As the proposed Project’s population growth is only a small percentage of the City’s anticipated 2020-2040 population growth and the Project includes onsite recreational amenities and there are other amenities within the surrounding Mission Grove Plaza, the Project is not anticipated to result in an increased demand for existing park and recreation facilities, such that substantial physical deterioration of existing facilities may occur or be accelerated.

In addition, as outlined in the 2020 Master Plan, the City's existing resources include 59 parks totaling 2,591.56 acres of developed parkland and an additional 9 parks that are undeveloped totaling 349.05 acres, for a combined total of 2,940.61 acres of parkland. As outlined in Section 5.14 Population and Housing, per the 6th Cycle Housing Element Technical Background Report, the City of Riverside had an estimated population of 328,155 in 2020. Therefore, there were approximately 8.96 acres of existing park per each 1,000 residents in Riverside in 2020 and the City's existing parks exceeded the Master Plan recommendation of 5 acres per 1,000 residents.

The Project would be required to pay impact fees, including the Trail Development Fee, Local Park Development Fee, Aquatic Facility Fee, and Regional Parks and Reserve Parks Development Fee per the Riverside Municipal Code Chapters (RMC) 16.44, 16.60, and 16.76. As detailed in RMC Chapter 16.44 and 16.76, the trail and regional park fees would be used solely for the acquisition of new parkland or trails. Local park fees could be used by the City to purchase new parkland and for upgrading existing neighborhood and community park facilities. Payment of applicable park development impact fees would mitigate impacts to parks and recreational facilities from its associated population increase. With payment of Park Development Impact Fees (local, aquatic, regional/reserve and trail fees) per Title 16, Chapters 16.60, 16.44 and 16.76 of the Municipal Code, with the Project's onsite recreational amenities, and the number and size of available parks within 1.5 miles of the Project (Castleview Park, Taft Park, Orange Terrace Park, and Sycamore Canyon Wilderness Park, which combined total 1,404.08 acres), there would be **less than significant impacts** on the demand for additional park facilities or services.

Threshold B: *Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

Although the proposed Project would result in a small incremental increase in use of existing neighborhood and regional parks and recreational facilities, from its estimated population growth of 829 persons (assuming all residents of the Project were new to the City), the onsite recreational amenities and the nearby neighborhood, community and regional parks are anticipated to accommodate the Project's residents without requiring the construction or expansion of recreational facilities. As stated previously, there were approximately 8.96 acres of existing park per each 1,000 residents in Riverside in 2020 and the City's existing parks exceeded the Master Plan recommendation of 5 acres per 1,000 residents. Payment of applicable park development impact fees would mitigate any impacts to parks and recreational facilities from its associated population increase. With payment of Park Development Impact Fees (local, aquatic, regional/reserve and trail fees) per Title 16, Chapters 16.60, 16.44 and 16.76 of the Municipal Code, with the Project's onsite recreational amenities, and the number and size of available parks within a few miles of the Project, the Project would not require the construction or expansion of recreational facilities which might have an adverse effect on the environment. Therefore, the project would result in **less than significant impacts**.

5.16.7 Proposed Mitigation Measures

As impacts to recreation would be less than significant, no mitigation measures are required.

5.16.8 Cumulative Environmental Effects

The proposed Project would incrementally increase the population in the City, which would nominally increase the demand for and use of the existing park system. The proposed Project would be required to pay multiple park impact fees toward the purchase of new parkland, the development of trails, and the maintenance of existing facilities. These measures would reduce impacts of the population increase caused by implementation of the proposed Project and associated use of parks in the City. Furthermore, future development would also be required to pay park impact fees to accommodate the associated population growth. Therefore, the project would result in **less than significant** cumulative impacts to recreation.

5.16.9 References

The following references were used in the preparation of this section of the DEIR:

RMC, Title 16	City of Riverside, Code of Ordinances, Title 16 Building and Construction https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIICOOR_TIT16BUCO accessed September 2023)
Park Development Fees Information Sheet	Parks, Recreation, and Community Services Department Park Development Fees Information Sheet (Available at https://riversideca.gov/park_rec/park_rec/park_rec/park_rec/park_rec/park_rec/sites/riversideca.gov.park_rec/files/pdf/Park%20Development%20Impact%20Fee%20Handout_2022.pdf , accessed September 2023)
Parks Master Plan Vision 2030	City of Riverside Parks Master Plan Vision 2030. (Available at https://riversideca.gov/park_rec/planning-projects/parks-master-plan-vision-2030 , accessed September 2023)

5.17 Transportation

This section analyzes potential impacts related to the local transportation and circulation system and vehicle miles traveled. The following discussion is based on the *Vehicle Miles Traveled Analysis* prepared by LSA (April 2023) and the *Traffic Operational Analysis*, also prepared by LSA (December 2022); these analyses are contained in Appendix I.

5.17.1 Setting

Study Area

The Vehicle Miles Traveled (VMT) Analysis and the Traffic Operational Analysis (TOA) were prepared in accordance with the City of Riverside Public Works Department *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (July 2020) and consultation with City staff during the traffic study scoping process.

Existing Circulation Network

Within the City of Riverside, all major roadways are classified based on the Master Plan of Roadways provided in the Circulation and Community Mobility Element of the City of Riverside General Plan 2025. Following is a brief description of major roadways surrounding the Project site:

Alessandro Boulevard: Alessandro Boulevard is designated as a 120-foot Arterial in the City's General Plan. Between Via Vista Drive and Northrop Drive, Alessandro Boulevard is a six-lane divided Arterial with a raised median. There are bike lanes and sidewalks along both directions of this segment. However, there is no provision for on-street parking on either side of this segment.

Trautwein Road: Trautwein Road is designated as a 110-foot Arterial in the City's General Plan. Between Alessandro Boulevard and Mission Grove Parkway, Trautwein Road is a four-lane divided Arterial with a raised median. There are bike lanes and sidewalks along both directions of this segment. However, there is no provision for on-street parking on either side of this segment.

Mission Village Drive: Mission Village Drive serves as a collector street but has no designation in the City's General Plan. Therefore, for purposes of this analysis, Mission Village Drive has been considered as a Collector street. Between Trautwein Road and Northrop Drive, Mission Village Drive is a two-lane, undivided road. There are no bike facilities along either direction of this segment but there are sidewalks. However, there is provision for on-street parking on both sides of this segment except for the north side of the segment between Trautwein Road and Mission Grove Parkway.

Mission Grove Parkway South: Mission Grove Parkway is designated as a 100-foot Arterial in the City's General Plan. Between Port Royal Way and Sydney Harbour Drive, Mission Grove Parkway is a four-lane divided Arterial with a raised median. There are no bike facilities along either direction of this segment but there are sidewalks. There is no provision for on-street parking on either side of this segment between Port Royal Way and Mission Village Drive. However, there is provision for on-street parking on both sides of this segment between Mission Village Drive and Sydney Harbour Drive.

Bicycle Facilities

The City promotes bicycling for recreation and mobility. Bicycling can be a viable alternative to local work commutes and offers children a healthy way to get to school. To facilitate and encourage bicycle trips, the City has adopted a Bicycle Master Plan that includes a network of proposed facilities and a three-tier implementation plan for the recommended improvements.

According to the City of Riverside, the 2007 Bike Master Plan Update Addendum has been replaced with the Riverside 2021 P.A.C.T. document. Per Chapter 4 of the P.A.C.T. (pps. 4-31 to 4-35), the bikeway network within the City is classified into four categories: Class I – Shared Use Paths, Class II – Bicycle Lanes, Class III – Bicycle Routes, and Class IV – Separated Bikeways. Class I bikeways use paths and paved trails completely separated from the street that allow two-way travel by people bicycling and walking. Class II bikeways are striped preferential lanes on the roadway for one-way bicycle travel. Class III bikeways are signed routes where people bicycling share a travel lane with people driving and are primarily used on select low-speed streets. Class IV separated bikeways are on-street bicycle facilities that are physically separated from motor vehicle traffic by a vertical element or barrier, such as a curb, bollards, or vehicle parking aisle.

As part of the City's Bikeway Network, Class II bike lanes have been added to both directions of Alessandro Boulevard and Trautwein Road. Proposed future Class III bike routes will be added along the northbound and southbound directions of Mission Grove Parkway north of Alessandro Boulevard.

Pedestrian Facilities

The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability of the City. Citywide, sidewalks are generally provided on both sides of the streets. Additionally, standard paved trails and non-standard unpaved trails are frequently used by bicyclists and pedestrians in the City. Some trails are also available for equestrian riders. The existence of trails and sidewalks provides accessible facilities, provides safety features, and improves walkability in the City of Riverside. According to the City's General Plan, there is a proposed Regional Trail planned to intersect through Alessandro Boulevard, Mission Grove Parkway, and Trautwein Road just south of the Project site. Although there are no current trails within the Project area, paved sidewalks are provided on both sides of Alessandro Boulevard, Trautwein Road south of Mission Village Drive, Mission Village Drive, and Mission Grove Parkway. Furthermore, paved sidewalks are provided on the west side of Trautwein Road north of Mission Village Drive. Sidewalks provide direct and convenient access for visitors arriving at the proposed Project area on foot.

Transit Service

Riverside Transit Agency (RTA) is the Consolidated Transportation Service Agency for western Riverside County and is responsible for coordinating transit services throughout the approximately 2,500-square-mile service area. RTA provides both local and regional services throughout the region with 33 fixed routes, five CommuterLink Express routes, and Dial-A-Ride services using 334 vehicles.

RTA Local Bus Routes 20 and 22 operate within the Project area. Route 20 has stops on Alessandro Boulevard and Mission Grove Parkway. Route 22 has stops on Alessandro Boulevard, Mission Grove Parkway, and Trautwein Road. Route 20 has connections to communities in Perris while Route 22 has connections to communities in Moreno Valley. Specifically, bus stops are located within walking distance of the Project site, including the Mission Grove NS Mission Village stop (located on the west side of Mission Grove Parkway South directly adjacent to the proposed Project) and the Alessandro FS Mission Grove Parkway stop (located on the north side of Alessandro Boulevard, just west of the Alessandro Boulevard & Mission Grove Parkway South intersection).

VMT Assessment

Changes to CEQA Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based Level of Service (LOS) as the new measure for identifying transportation impacts for land use Projects. This statewide mandate took effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (Technical Advisory). Based on OPR's Technical Advisory, the Western Riverside Council of Governments (WRCOG) prepared a WRCOG Senate Bill (SB) 743 Implementation Pathway Document Package (March 2019) to assist its member agencies with implementation tools necessary to adopt analysis methodology, impact thresholds and mitigation approaches for VMT. To add to the previous work effort, WRCOG in February 2020 released its Recommended Traffic Impact Analysis Guidelines for VMT and LOS Assessment (WRCOG Guidelines), which provides each of its member agencies with specific procedures for complying with the CEQA requirements for VMT analysis.

The City adopted updated Traffic Impact Analysis Guidelines for VMT and LOS Assessment (City Guidelines). The City Guidelines include VMT thresholds that were reviewed and adopted by City Council on June 16, 2020. Based on the adopted VMT thresholds, a significant impact would occur if the following condition is met:

- For new residential Projects, utilizing a threshold consistent with 15 percent below the City's current baseline VMT Per Capita.

5.17.2 Related Regulations

This section includes a discussion of the applicable State, regional, and local laws, ordinances, regulations, and standards governing transportation and traffic, which must be adhered to before and during project implementation.

5.17.2.1 State Regulations

State Senate Bill 743

SB 743 was signed into law by Governor Brown on September 27, 2013 and tasked the State Office of Planning and Research (OPR) with establishing new criteria for determining the significance of transportation impacts under the California Environmental Quality Act (CEQA). SB

743 requires the Governor's OPR to identify new metrics for identifying and mitigating transportation impacts within CEQA and requires the new criteria to "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." It also states that alternative measures of transportation impacts may include "vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

In January 2018, OPR transmitted its proposed CEQA Guidelines implementing SB 743 to the California Natural Resources Agency for adoption. On December 28, 2018 the updated guidelines were made effective. As of July 1, 2020 the CEQA Guidelines promulgated under SB 743 changed the way that public agencies evaluate the transportation impacts of Projects under CEQA, recognizing that roadway congestion, while an inconvenience to drivers, is not itself an environmental impact (Public Resource Code, § 21099, subd. (b)(2)). In addition to new exemptions for projects consistent with specific plans, the updated CEQA Guidelines proposed by OPR replace congestion-based metrics, such as auto delay and LOS, with Vehicle Miles Traveled as the basis for determining significant impacts, unless the Guidelines provide specific exceptions.

5.17.2.2 Regional Regulations

Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency (RTPA) and a Council of Governments (COG). The SCAG region encompasses six (6) counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy (SCS) and associated growth forecasts, regional transportation improvement programs, and regional housing needs allocations.

SCAG's Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura. (SCAG 2020)

Riverside County Integrated Project

In 2003, Riverside County completed a comprehensive planning program called the Riverside County Integrated Project (RCIP). The Riverside County Board of Supervisors initiated the RCIP to deal with environmental issues as part of regional land use and infrastructure planning. The RCIP comprises the Community Environmental Transportation Corridor Acceptability Process (described below), the Western Riverside County Multiple Species Habitat Conservation Plan

(MSHCP; see Section 5.3 *Biological Resources*), and the Riverside County General Plan Update. Riverside County's Strategic Vision, which is included in its General Plan, incorporates a set of 15 consensus planning principles intended to guide the work of the RCIP.

Community Environmental Transportation Corridor Acceptability Process

The Community Environmental Transportation Corridor Acceptability Process is a coordinated regional transportation planning effort included in the RCIP. It identified potential transportation corridors in western Riverside County that would benefit commuters and serve the County's growing economy.

Riverside County Congestion Management Program

The Riverside County CMP was established in 1990 to directly link land use, transportation, and air quality planning and to prompt reasonable growth management programs that would more effectively utilize new and existing transportation funds, alleviate traffic congestion and related impacts, and improve air quality. The CMP includes growth management programs to utilize transportation funds in order to alleviate traffic congestion and improve air quality. The RCTC adopted the current version of the Riverside County CMP in December 2011.

Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the cities of Riverside, Corona, Moreno Valley, and Riverside County, agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) Program. TUMF is a multi-jurisdictional impact fee program that funds transportation improvements associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF, based on the proposed intensity and type of development. The City of Riverside also has a Development Impact Fee (DIF) program that funds a variety of public transportation facilities, namely, traffic and railroad signals and transportation for dwelling and mobile homes.

5.17.2.3 Local Regulations

City of Riverside General Plan 2025

The GP 2025 contains goals and policies for transportation within the Circulation and Community Mobility Element. The GP 2025 includes numerous goals and policies related to transportation and circulation. The following goals and policies apply to the Project:

Objective CCM-2: Build and maintain a transportation system that combines a mix of transportation modes and transportation system management techniques, and that is designed to meet the needs of Riverside's residents and businesses, while minimizing the transportation system's impacts on air quality, the environment and adjacent development.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-2.4: Minimize the occurrence of streets operating at LOS F by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

Policy CCM-2.7: Limit driveway and local street access on Arterial Streets to maintain a desired quality of traffic flow. Wherever possible, consolidate driveways and implement access controls during redevelopment of adjacent parcels.

Policy CCM-2.8: Design street improvements considering the effect of aesthetic character and livability of residential neighborhoods, along with traffic engineering criteria.

Policy CCM-2.9: Design all street improvement projects in a comprehensive fashion to include consideration of street trees, pedestrian walkways, bicycle lanes, equestrian pathways, signing, lighting, noise and air quality wherever any of these factors are applicable.

Policy CCM-2.10: Emphasize the landscaping of parkways and boulevards.

Objective CCM-6: Cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the regional transportation system.

Policy CCM-6.1: Encourage the reduction of vehicle miles, reduce the total number of daily peak hour vehicular trips, increase the vehicle occupancy rate and provide better utilization of the circulation system through the development and implementation of transportation demand management (TDM) programs contained in the SCAQMD and County of Riverside TDM Guidelines.

Objective CCM-10: Provide an extensive and regionally linked public bicycle, pedestrian and equestrian trails system.

Policy CCM-10.2: Incorporate bicycle and pedestrian trails and bicycle racks in future development projects.

Policy CCM-10.3: Provide properly designed pedestrian facilities for the disabled and senior population to ensure their safety and enhanced mobility as users of streets, roads and highways emphasizing “complete streets” principles.

Policy CCM-10.6: Encourage pedestrian travel through the creation of sidewalks and street crossings.

Policy CCM-10.11: Provide sufficient paved surface width to enable bicycle traffic to share the road with motor vehicles where traffic volumes and conditions warrant.

Objective CCM-11: Promote and support an efficient public multi-modal transportation network that connects activity centers in Riverside to each other and to the region.

Policy CCM-11.1: Protect flight paths from encroachment by inappropriate development using the Riverside County Airport Land Use Compatibility Plan and the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan to determine the consistency of proposed development.

Policy CCM-11.2: Limit Building heights and land use intensities beneath airport approaches and departure paths to protect public safety consistent with the Riverside County Airport Land Use Compatibility Plan, the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, and all other applicable State and Federal regulations.

Objective CCM-13: Ensure that adequate on- and off-street parking is provided throughout Riverside.

Policy CCM-13.1: Ensure that new development provides adequate parking.

Policy CCM-13.2: Accommodate joint use of parking facilities as part of an area plan or site plan, based on the peak parking demands of permitted uses in the planning area.

City of Riverside PACT

The City of Riverside PACT consists of a **Pedestrian Target Safeguarding Plan (PTS)**, an **Active Transportation Plan (AT Plan)**, a **Complete Streets Ordinance (CSO)**, and a **Trails Master Plan (TMP)**. Chapter 4 of PACT, the AT Plan, integrates walking, bicycling, and other transportation modes into a single plan that includes policies, infrastructure recommendations, and supporting programs. The AT Plan builds upon the foundation of the City's 2007 Bicycle Master Plan and the 2012 Bicycle Master Plan Update: Addendum and serves as the current Bicycle Master Plan.

5.17.3 Project Design Considerations

The proposed Project has been designed to facilitate traffic in an efficient manner using the existing roadway network. As discussed, the Project would consist of an in-fill development within a previously developed shopping center. The following discusses Project design considerations that would be implemented that utilize and improve upon the existing roadway network associated with the shopping center area.

Project Driveways

The proposed Project site will be accessed via four driveways from existing roadways:

- Project Driveway 1 located at Plaza Driveway (private road);
- Project Driveway 2 on Mission Grove Parkway (right out only access);
- Project Driveway 3 on Mission Village Drive; and
- Project Driveway 4 within Mission Grove Plaza (private road).

To improve circulation and alleviate potential queuing issues upon implementation of the proposed Project, the following project design improvements will be implemented at the following intersections:

- Upon implementation of the proposed Project, Project Driveway 1, Project Driveway 3, and Project Driveway 4 will be full access driveways. Refer to Figure 5.17-1 for Site Access for the location of driveways and resident and Americans with Disabilities Act (ADA) paths of travel.
- Project Driveway 2 will be converted from a right-in-right-out (RIRO) driveway to a right-out egress only driveway. Retail customers would no longer be able to enter and exit

Mission Grove Plaza via Project Driveway 2 and Project Driveway 3 on Mission Village Drive upon implementation of the proposed Project, as these driveways will be gated for resident access only.

- The existing full access shopping center driveway located on Mission Village Drive between Project Driveway 3 and Mission Grove Parkway South will also be removed as the Project is constructed.

Relocate Bus Stop

RTA local bus Routes 20 and 22 serve the Project area with stops along Alessandro Boulevard and Mission Grove Parkway South adjacent to the proposed Project site. There is currently an existing bus stop located approximately 265 feet north of the intersection of Mission Grove Parkway/Mission Village Drive for the southbound directions of the routes. Based on coordination with RTA, the proposed Project will relocate the bus stop approximately 200 feet north of the existing location as part of its project design considerations. This relocation of the bus stop will enhance pedestrian connectivity and access to public transit to and from the proposed Project site and the existing commercial/retail. The current bus stop consists of a bench, trash receptacle, and bus service sign; it is anticipated each of these bus stop amenities would be relocated as part of implementing this project design consideration.

Additionally, the following amenities are proposed as part of the Project's design. While these amenities were not specifically included in the Project's design for the purposes of VMT reduction, the inclusion of these Project design considerations may aid in reducing Project-generated VMT.

Parcel Lockers

A package locker system, which would include 75 package lockers, will be implemented at the property. Parcels will be delivered to these secure lockers via an integrated touch screen. Deliveries can be accepted by all delivery services including UPS, FedEx, etc. Lockers will be provided in a variety of sizes to accommodate different parcel sizes. Once a parcel has been delivered into a locker, the system will notify residents via an app. The resident could pick up the parcel at their convenience using their phone or a secure passcode to unlock the locker. The presence of locker system could potentially help reduce VMT by reducing the amount of driving by delivery trucks; delivery of parcels to a single known location would help reduce delivery truck trips within the development. Additionally, the presence of a secure locker system could minimize the types of deliveries where the recipient should be present to receive the mail/shipment. At least one (1) parking space near the parcel lockers will be designated for delivery vehicles (UPS, FedEx, Amazon, etc.) during normal business hours.

Bike Racks

The Project proposes to include 32 short term bike racks and 35 long term bike racks at the proposed Project site. These bike racks could potentially encourage increased use of bikes as a mode of transportation for short trips, such as to the adjacent existing shopping center, which could reduce the number of resident vehicle trips and VMT. A bike repair station will be provided as part of the bike program.

Further, the Threshold B analysis under Section 5.17.5 – Thresholds of Significance discusses a number of TDM measures analyzed to be feasible for Project implementation that would help in reducing Project-generated VMT.

5.17.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. Impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed Project would:

- (Threshold A) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- (Threshold B) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);
- (Threshold C) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- (Threshold D) Result in inadequate emergency access.

5.17.5 Environmental Impacts

Threshold A: *Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Project Trip Generation

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

The trip generation for the proposed Project was developed using rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) for Land Use 221–“Multifamily Housing (Mid-Rise) Not Close to Rail Transit.” The proposed Project is a partial redevelopment of a retail shopping plaza located at an existing vacant store building, and it is estimated that a certain percentage of trips between the existing land uses and adjacent land uses will be made on site and through alternative modes of travel such as walking and biking. These internal trips and localized trips would not utilize the major street system. The internal capture rates were obtained using the Riverside County Transportation Model (RIVCOM). The net project trip generation is anticipated to generate 1,464 net daily trips, with 128 net trips occurring during the a.m. peak hour, and 124 net trips occurring during the p.m. peak hour. It is assumed that this amount of estimated net project trips generated would be less than the number of net project trips generated for the previous retail store use (K-Mart retail store), which would have generated individual vehicle trips from consumers visiting the store and shopping center as

well as vehicle trips for product shipments to and from the store. The Project would place residential uses in close, walkable/bikeable proximity to existing retail and commercial uses in the shopping center, which would lessen the need for individual resident vehicle trips to access these shopping center uses.

General Plan Circulation Element

While the TOA examined LOS within the Project vicinity, a deficiency in LOS is no longer considered as a significant transportation related impact pursuant to updated CEQA guidelines. Instead, the assessment of LOS is intended to identify key access, circulation, and operational issues within the Project area, and to confirm consistency with the City's General Plan. Consistency with General Plan policies are addressed in Section 5.11 Land Use, Table 5.11-1 Summary of Consistency with Applicable General Plan Policies, and the Project's LOS analysis and accompanying tables can be found in Appendix I – Traffic Operational Analysis.

Queuing Analysis

An intersection and driveway queuing analysis was requested by City staff during the scoping agreement process to ensure that adequate queuing is provided at proposed Project driveways and adjacent intersections. In case queuing deficiencies are identified, the proposed Project would need to alleviate potential queuing issues. As such, the queuing analysis was performed at the following six intersections/driveways:

- Mission Grove Parkway/Alessandro Boulevard;
- Mission Grove Parkway/Mission Village Drive;
- Project Driveway 1/Plaza Driveway 2;
- Mission Grove Parkway/Plaza Driveway 2;
- Mission Grove Parkway/Project Driveway 2; and
- Project Driveway 3-Bayou Lane/Mission Village Drive.

Queues for some of the movements are projected to exceed the existing available turn-pocket storage length under Opening Year and Cumulative with Project scenarios. The queues that exceed the available storage lengths are as follows:

- Mission Grove Parkway South/Alessandro Boulevard: Southbound left-turn (a.m. peak hour)
- Mission Grove Parkway South/Mission Village Drive: Westbound left-turn (both a.m. and p.m. peak hours)
- Mission Grove Parkway South/Plaza Driveway 2: Northbound left-turn (a.m. peak hour), and eastbound left-turn (both a.m. and p.m. peak hours).

It should be noted that the proposed Project does not add any Project trips for the movements that exceed the storage lanes at the intersections of Mission Grove Parkway South/Alessandro Boulevard and Mission Grove Parkway South/Mission Village Drive. The proposed Project does add Project traffic at the movements that are forecast to exceed the storage lengths at the intersection of Mission Grove Parkway South/Plaza Driveway 2 (under Opening Year and

Cumulative With Project scenarios), for the northbound left turn and eastbound left turn movements.

Therefore, improvements were identified at this intersection to alleviate the respective queuing deficiencies. Recommended improvements include retiming the signal timing and extending the northbound left turn pocket 15 feet by cutting into the median to accommodate the forecast queues. For the eastbound left-turn pocket, it should be noted that a 25-foot taper along with a 90-foot storage length may be sufficient to accommodate the deficient queue, although the queue would extend into the taper. However, this queue is not expected to block the eastbound through-right turn traffic or any of the internal driveways on-site. Improvements, including signing and striping, at this intersection would be fully implemented by the proposed Project.

As previously discussed, the Project additionally proposed to provide pedestrian improvements, including the creation of sidewalks to connect the proposed residential development to existing surrounding retail land uses. As shown in Figure 5.17-1 – Site Access and previously shown in Figure 3.0-6 – Conceptual Site Plan, the Project would provide paved sidewalks and marked crosswalks within the Project site, between the residential uses and commercial uses to serve as resident paths of travel. As also shown in Figures 3.0-6 and 5.17-1, these resident paths of travel would connect to existing public pedestrian paths of travel, such as those along Mission Grove Parkway and Mission Village Drive.

There is currently an existing bus stop located approximately 265 feet north of the intersection of Mission Grove Parkway/Mission Village Drive for the southbound directions of RTA local bus Routes 20 and 22. Based on coordination with RTA, the proposed Project will relocate the bus stop approximately 200 feet north of the existing location as part of its project design considerations. This relocation of the bus stop will enhance pedestrian connectivity and access to public transit to and from the proposed Project site and the existing commercial/retail. The Project will not conflict with any existing or proposed transit facilities. Therefore, the Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities and potential impacts are **less than significant**.



FIGURE 9-3

Anton Mission Grove Project
Traffic Operational Analysis

Residential Path of Travel and Bicycle Storage Locations

MISSION GROVE APARTMENTS PROJECT



Threshold B: *Would the Project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?*

The City’s guidelines provide guidance regarding VMT analysis based on land use types. The Project would consist of a multifamily development, which falls under the “residential land use project” category. Thus, pursuant to the City’s VMT analysis guidelines for “residential projects,” a significant VMT impact would occur according to the following criteria:

- The project would result in a significant project-generated VMT impact if the baseline or cumulative project-generated VMT per capita exceeds 15% below the current jurisdictional baseline VMT per capita.
- The project’s effect on VMT would be considered significant if the baseline or cumulative link-level boundary VMT per capita (City) were to increase under the with project condition compared to the no project condition.

The most recent version of the regional travel demand model, the Riverside County Transportation Model version 3.0 (RIVCOM 3), was used to estimate the Project and jurisdictional VMT per capita. Both baseline (2018) and cumulative (2045) scenarios were analyzed to estimate project generated VMT and the project’s effect on VMT, as recommended in the City’s guidelines. The baseline year of 2018 was used as it was the readily available information at the time the VMT analysis was initiated. The K-Mart retail store was still open and in operation at that time, closing its doors in October 2020.

Outputs from the above-mentioned model runs (with proposed land use changes) were used to develop project generated VMT and the project’s effect on VMT for both baseline and cumulative scenarios. No project model runs were also conducted for baseline and cumulative scenarios, and outputs from the no project model runs were used to estimate jurisdictional (City) specific thresholds. As shown in Table 5.17-1, Regional and Project VMT Per Capita, the Project VMT per capita is higher than jurisdictional threshold or 85% of baseline or cumulative jurisdictional VMT per capita. Therefore, the proposed Project would result in a **significant impact** for project generated VMT.

Table 5.17-1: Regional and Project VMT Per Capita

2018	Mission Grove Apts. (Project)	City of Riverside Threshold (85% of baseline)*	Difference	% Difference
VMT per capita	24.8	13.9	10.9	78.7%

2045	Mission Grove Apts. (Project)	City of Riverside Threshold (85% of baseline)*	Difference	% Difference
VMT per capita	22.9	13.6	9.3	68.1%

Source: RIVCOM 3

* VMT per capita threshold for City of Riverside was obtained from LSA No Project model runs

The link-level jurisdictional boundary VMT was compared for With and Without Project Conditions for both baseline and cumulative scenarios. As shown in Table 5.17-2, Proposed Project’s Effect



on VMT – City of Riverside, the link-level boundary VMT is higher under With Project Conditions compared to Without Project Conditions in the cumulative scenario. Therefore, pursuant to the criteria contained in the City’s VMT analysis guidelines, the proposed Project’s effect on VMT would be considered **significant**.

Table 5.17-2: Proposed Project’s Effect on VMT – City of Riverside

Roadway VMT within City of Riverside	With Project	Without Project	Difference
2018	7,501,672	7,503,620	(1,948)
2045	8,766,524	8,762,685	3,839

Source: RIVCOM 3

When a lead agency identifies a significant CEQA impact, the agency must identify feasible mitigation measures in order to avoid or substantially reduce that impact. The City’s TIA Guidelines state that to mitigate VMT impacts, the following may be considered for implementation:

- *Modify the project’s built environment characteristics to reduce VMT generated by the project. (See 5.17.3 Project Design Considerations above)*
- *Participate in a VMT fee program and/or a VMT mitigation exchange/banking program (if they exist) to reduce VMT from the project or other land uses to achieve acceptable levels. At this time a VMT fee program and/or a VMT mitigation exchange/banking program do not exist within the City. Therefore, the project would not be subject to any VMT fees as part of a VMT fee program and/or a VMT mitigation exchange/bank.*
- *Implement Transportation Demand Management (TDM) measures to reduce VMT generated by the project.*

The City’s TIA Guidelines identify a WRCOG study that lists appropriate TDM measures for the region. There are seven measures identified in the WRCOG guidance that are identified as likely to be effective in a rural or suburban setting, such as the WRCOG area. The measures include both modifications to the project’s built environment and TDM measures and are taken from Quantifying Greenhouse Gas Mitigation Measures. It should be noted that Quantifying Greenhouse Gas Mitigation Measures has been updated as of December 2021. Some of the measures identified in the 2010 California Air Pollution Control Officers Association (CAPCOA) guidance have been removed or reclassified in the updated 2021 CAPCOA guidance. In order to maintain consistency with the City’s TIA Guidelines, the mitigation strategies discussed below are taken from the WRCOG and 2010 CAPCOA documents. However, the calculation methodology from the 2021 CAPCOA guidance was used to determine the effectiveness of the mitigation measures that are determined to be feasible. The following strategies were considered for mitigation of proposed Project VMT impacts:

1. Increase Diversity of Land Uses (LUT-3). This measure recognizes that VMT can be reduced by including different types of land uses within or near a development, since trips between land use types are shorter and may be accommodated by non-automotive modes of transportation.

For example, when residential areas are proximate to employment uses, then a resident could make the commute trip via walking or bicycling. The need for external trips in a mixed-use development can be reduced by including services and facilities such as day care, banking/ATM, restaurants, vehicle refueling, and shopping.

The Project proposes construction of 347 multifamily residential units, which by itself does not include a mix of land uses within the proposed Project site. However, the proposed Project is an infill development that would be located within an existing shopping center that currently includes restaurants, a day care center, movie theater, drug/grocery stores, banking/ATM, gas stations, and other commercial uses. The proposed Project would include the creation of paved sidewalks and marked crosswalks within the Project site that would serve as resident paths of travel. These resident paths of travel within the Project site would connect to existing public pedestrian paths of travel, such as existing sidewalks along Mission Grove Parkway South and Mission Village Drive (see Figure 5.17-1), which would provide walkable and bikeable access to surrounding shopping center uses. Therefore, the proposed Project location increases the potential for people to walk and bike to surrounding retail and commercial uses and thereby aids in promoting connectivity to these nearby destinations. According to the WRCOG guidance, this TDM measure could provide a maximum reduction of 4 percent. However, this measure is not included in the 2021 CAPCOA guidance; as noted, these mitigation strategies are taken from the WRCOG and 2010 CAPCOA documents. However, the calculation methodology from the 2021 CAPCOA guidance was used to determine the effectiveness of the mitigation measures. As this LUT-3 measure is not included in the 2021 CAPCOA guidance, the measure's level of effectiveness was determined based on the level of effectiveness of a similar measure, T 31-A Locate Project in Area with High Destination Accessibility, which is included in the 2021 guidance. The T 31-A measure is noted as a "Supporting or Non-Quantified GHG Reduction Measure" in the 2021 CAPCOA guidance, meaning that it would be a complementary measure and could increase the effectiveness of other measures, but would not result in a quantifiable reduction in GHG or VMT by itself.

2. Provide Pedestrian Network Improvements (SDT-1). Creating a connected pedestrian network with the development and connecting to nearby destinations could encourage walking for local trips. This leads to a reduction in VMT due to a mode shift from driving to walking for shorter trips (typically less than ¼ mile and no greater than ½ mile). This measure is also included in the 2021 CAPCOA guidance as Measure T-18, Provide Pedestrian Network Improvement, and was used to estimate the VMT reduction due to Project related enhancements in pedestrian access and connectivity. The CAPCOA methodology requires existing sidewalks in the project study area in addition to the sidewalks being provided by the project. As the proposed Project is infill development, infrastructure already exists in the area and this strategy can be implemented. As previously discussed, the proposed Project would include the creation of paved sidewalks and marked crosswalks within the Project site that would serve as resident paths of travel. These resident paths of travel within the Project site would connect to existing public pedestrian paths of travel, such as the existing sidewalks along Mission Grove Parkway and Mission Village Drive (see Figure 5.17-1), which would provide walkable access and connectivity to the existing retail and commercial shopping center. As discussed in the Project's VMT Analysis (LSA April 2023),

the Project would add approximately another 0.57 mile of sidewalk/pedestrian access to the existing pedestrian network in the area. This may reduce the Project's VMT by approximately 0.14%.

3. Provide Traffic Calming Measures (SDT-2). This measure would encourage walking and bicycling instead of using a vehicle through the implementation of traffic calming measures. Traffic calming would reduce motor vehicle speeds through features such as marked crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, count-down signal timers, curb extensions, speed tables, raised crosswalks, on-street parking, planter strips with street trees, chicanes/chokers, and similar improvements. This measure is also in the 2021 CAPCOA guidance as Measure T-35 – Provide Traffic Calming Measures, which requires projects to include pedestrian/bicycle safety and traffic calming measures above jurisdictional requirements. Measure T-35 similarly notes that traffic calming features may include marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others. Although the 2010 guidance notes a potential decrease in VMT of up to 1%, the 2021 guidance includes traffic calming as a supporting, non-quantified measure.

4. Implement Car-Sharing Program (TRT-9). A car-sharing program would allow residents to have on-demand access to a shared fleet of vehicles on an as-needed basis. Costs are typically paid by the user via an annual membership or on a per-use basis. This method is applicable to the proposed Project because car-sharing programs could be more effective when implemented in high-density residential areas. The maximum reduction in VMT that could be achieved by a car-sharing program in the WRCOG region is 1.6 percent. This measure is included in the 2021 Guidance as Measure T-21-A – Implement Conventional Carshare Program. The 2021 CAPCOA description of this measure states that carsharing offers people convenient access to a vehicle for personal or commuting purposes, which helps encourage transportation alternatives and reduces vehicle ownership, thereby avoiding VMT and associated GHG emissions. However according to the 2021 update, the maximum reduction in VMT is reduced to 0.15%. The Project doesn't propose implementing a car-sharing program and as such, no VMT reduction has been estimated.

5. Increase Transit Service Frequency/Speed (TST-4). This measure is achieved through the addition of additional busses along an existing bus route, the addition of additional routes, or by adding rapid/express bus service that would provide service to activity areas with fewer local stops. This measure is included in the 2021 CAPCOA guidance as Measure T-26 – Increase Transit Service Frequency. The 2021 CAPCOA description of this measure states that increased transit frequency reduces waiting and overall travel times, which improves the user experience, increases the attractiveness of transit service, and thereby results in a mode shift from single occupancy vehicles to transit, which reduces VMT and associated GHG emissions.

Implementation of this measure would be by the local transit authority with funding from local developments. This measure is not as applicable to a single development, but would be achieved through multiple funding sources, including development fees. According to the 2021 CAPCOA

guidance a maximum VMT reduction of 11.3% can be achieved. However, the maximum achievable VMT reduction in the WRCOG area from this measure is 6.3%. As indicated in CAPCOA, this measure is not applicable to single development projects and as such no VMT reduction has been estimated for this measure.

6. Encourage Telecommuting and Alternative Work Schedules (TRT-6). This measure would encourage employers to allow employees to work from home or work a flexible schedule or compressed work week, thereby reducing the number of days that residents would commute to their workplace.

This measure is commonly implemented by employers as part of a commute trip reduction program, so it is not applicable for the proposed residential Project. The maximum achievable reduction in VMT in the WRCOG region due to telecommuting and alternative work schedules is 4.5%. It should be noted that this measure is included in the 2021 CAPCOA guidance as Measure T-42 – Implement Telecommute and/or Alternative Work Schedule Program. The 2021 CAPCOA description of this measure states that while this measure would reduce commute-related VMT, research has shown that total VMT from telecommuters can exceed VMT from non-telecommuters (CAPCOA, 2021). The 2021 CAPCOA guidance recommends that the latest literature be reviewed before implementing a telecommute program for VMT reduction.

7. Provide Ride-Sharing Programs (TRT-3). A ride-sharing program would increase vehicle occupancy by matching commuters with others who live and work within close proximity to one another. This strategy is generally implemented by employers through a Transportation Management Association or on a regionwide basis through a regional ride-share matching program. The maximum achievable VMT reduction from ridesharing programs in the WRCOG region is 8.3%. This measure is also included in the 2021 CAPCOA guidance as Measure T-8 – Provide Ridesharing Program, which would encourage carpooled vehicle trips in place of single-occupied vehicle trips, thereby reducing the number of trips, VMT, and GHG emissions. According to the latest guidance, the maximum VMT reduction from ride-sharing programs is 8%. The Project does not propose to implement ride sharing program; therefore, no VMT reduction has been estimated for this measure.

In addition to these 7 TDMs from WRCOG, applicable measures from CAPCOA and measures recommended by the City were used to analyze and estimate VMT reductions that could be achieved through additional TDMs.

8. Provide EV Parking and EV Charging Infrastructure. The latest California Green Building Standards (CALGreen), California Building Code, requires the provision of electric vehicle infrastructure for new construction projects such as apartments, condos, hotels, and motels. While it is understood that the provision of electric charging stations might not reduce VMT, it would reduce GHG, which can be considered equivalent to a reduction in VMT. CALGreen code requires apartments to provide EV charging stations for 5% of the total project parking with an additional 35% that would be EV capable and EV ready. The Project proposes to include a total of 604 parking spaces and would therefore be required to provide a minimum of 26 electric charging stations and another 180 EV capable and EV ready spaces per CALGreen code. Additional

electric charging stations, in addition to CALGreen requirements, can be considered as a GHG/VMT mitigation measure according to CAPCOA. In order to achieve maximum GHG reduction, and therefore VMT reduction, it was estimated that an additional 15 electric charging stations would achieve 11.9% reduction in GHG/VMT, the maximum allowable reduction for the measure. Therefore, as a Project Design Consideration, the Project proposes to provide a total of 41 electric charging stations (26 CALGreen requirement + 15 additional), which may help in achieving a VMT reduction of up to 11.9%.

9. Unbundle Residential Parking Costs from Property Cost. According to CAPCOA, increasing the cost of owning a vehicle will decrease or discourage vehicle ownership and therefore reduce VMT and GHG. CAPCOA transportation Measure T-16, Unbundle Residential Parking Costs from Property Cost, was used to estimate the amount of VMT reduction that can be achieved by charging for additional parking stalls. The Project proposes to provide 1 parking stall to every apartment unit within the rental unit fee (no additional charge) and charge \$75 per month for any and each additional parking spaces, which may reduce Project VMT by up to 3.9%.

10. Implement Subsidized or Discounted Transit Program (TRT-4). A bus pass program would generally be implemented as part of an employer commute trip reduction program. However, implementation of a bus pass subsidy for a multi-family residential development could be implemented by the leasing office/property management. At the City's request, a transit pass subsidy program to mitigate the proposed Project's VMT impact was evaluated. Riverside Transit Routes 20 and 22 serve the proposed Project site with a stop at the corner of Mission Village Drive and Mission Grove Parkway South. Because the site is served by transit, a subsidized or discounted transit program could be effective in reducing project VMT. To encourage the use of public transit and reduce the VMT per capita of the project, the proposed Project would implement a subsidized transit pass program. The Project Applicant would establish an account and deposit the amount of \$136,000 over a 10-year period, to be administered by the apartment property owner through the leasing office/property management to provide free or reduced cost transit passes to Project residents. The program would provide up to \$60 for an RTA monthly bus pass or up to \$100 for a Metrolink monthly pass to residents who request transit reimbursement from the leasing office/property management on a first-come, first-served basis until the available funds are depleted for that year. Residents who participate in the subsidized transit pass program would also be eligible to receive reimbursement for use of a ride sharing service (i.e., Uber or Lyft) for an emergency ride home.

The leasing office/property management shall provide an annual report of the transit pass program that includes the number of reimbursement requests, the amount disbursed to residents, and the remaining amount, if any, in the transit pass account at the end of each year. Any funds remaining in the account at the end of the year would roll over into the next year's account and funds available for the program. If the City deems the program experiences low participation, (more than 25% of the funds each year are not utilized and remain in the account), the City shall have the discretion to implement another measure intended to reduce vehicle miles traveled by project residents. Such measures could include, but are not limited to, offsite or onsite pedestrian,

bicycle, or public transit improvements, funding toward a bikeshare station on or near the site, implementation of further traffic calming measures, or other feasible and implementable TDMs.

The measure is included in the 2021 CAPCOA guidance as T-9 and indicates that up to a 5.5% reduction in VMT can be achieved. The maximum VMT reduction for the proposed Project from implementing a transit pass subsidy program is approximately 2.55%.

11. Implement Commute Trip Reduction Marketing (2010 Guidance TRT-7, 2021 Guidance T-7). This measure would implement a marketing strategy intended to reduce commute trips through promotion of an employer's commute trip reduction program (CTR). CTR marketing would educate employees (or residents) about their travel choices beyond driving, such as carpooling, transit, walking and bicycling. A CTR Marketing program is generally implemented by an employer and could result in a reduction in VMT of up to 4%. There is no guidance for calculating the benefit when implemented by a residential project, therefore this measure would be considered a supportive measure to other resident-based programs, such as the subsidized/discounted transit program. The Project doesn't propose implementation of a CTR marketing program and therefore no VMT mitigation was estimated for the proposed Project.

12. Implement a School Pool Program (2010 Guidance TRT-10, 2021 Guidance T-41). This measure is not included in the WRCOG guidance but was included at the request of the City. A School Pool program would entail creating a ridesharing program for school children and is generally implemented on a District-wide basis. Implementation of a school pool by an individual development project would not be effective due to the limited number of potential school students utilizing the program. According to the 2021 CAPCOA guidance, school pool program would help match parents to transport students to private schools or to schools where students cannot walk or bike and do not meet the requirements for bussing. While implementation of a School Pool Program has the potential to reduce VMT for residential projects, the 2021 CAPCOA guidance indicates School Pool programs as a supporting measure and does not provide a method for calculating the reduction in VMT for School Pool programs. The Project doesn't propose implementation of a school pool program and therefore no VMT mitigation was estimated for the proposed Project.

Table 5.17-3, Potential VMT Reduction Strategies, summarizes the VMT reduction strategies considered for the proposed Project, the maximum VMT reduction achievable for each strategy, and the feasibility of each for the proposed Project.

Additionally, as discussed in Section 5.17.3, the Project would include the following project design considerations that could result in additional reductions to Project-generated VMT:

Parcel Lockers. A parcel locker system that includes 75 package lockers would be implemented at the property as a Project Design Consideration. At least one (1) parking space near the parcel lockers will be designated for delivery vehicles during normal business hours. (see Section 5.17.3 above). The presence of locker system could potentially help reduce VMT by reducing the amount of driving by delivery trucks; delivery of parcels to a single known location would help reduce delivery truck trips within the development. Additionally, the presence of a secure locker system

could minimize the types of deliveries where the recipient should be present to receive the mail/shipment. While this Project Design Consideration has the potential to reduce proposed Project VMT, no quantification methodology is available and therefore, no VMT reductions are calculated as a conservative approach.

Bike Racks. As discussed, the Project would include 32 short-term bicycle racks and 35 long-term bicycle racks at the Project site. CAPCOA includes mitigation measure T-10 - Provide End-of-Trip Bicycle Facilities, which quantifies the VMT reduction due to inclusion of bicycle facilities. CAPCOA includes this measure for employment related land uses. While employment related uses will mainly reduce commuter VMT, the provision of bicycle facilities may have the potential to reduce VMT irrespective of destination land use. The provision of bike racks as part of the Project would provide residents the incentive to use bikes for local travel, such as to surrounding retail and commercial uses, rather than vehicles, thereby resulting in some reduction in the proposed Project's VMT. As this measure is applicable only to employment related uses, no quantification of VMT reduction for this Project Design Consideration was considered as a conservative approach.

Table 5.17-3: Potential VMT Reduction Strategies

VMT Reduction Strategy	Maximum Achievable VMT Reduction	Feasible for the Project?
Land Use/Location Strategies (Maximum Reduction 65%)¹		
Increase Diversity of Land Uses	0%, Supportive Measure	No
Neighborhood Site Enhancements (Maximum Reduction 10%)²		
Provide Pedestrian Network Improvements	0.14%	Yes
Provide Traffic Calming Measures	0%, Supportive Measure	No
Implement Car-Sharing Program	1.6%	No
Transit System (Maximum Reduction 15%)²		
Increase Transit Service Frequency/Speed	6.3%	No
Implement Subsidized or Discounted Transit Program	2.6%	Yes
Commute Trip Reduction (Maximum Reduction 45%)¹		
Encourage Telecommuting and Alternative Work Schedules	4.5%	No
Provide Ride-Sharing Programs	8.3%	No
Implement Commute Trip Reduction Marketing	0%, Supportive Measure	No
Implement a School Pool Program	0%, Supportive Measure	No
Parking or Road Pricing/ Management (Maximum Reduction 35%)¹		
Provide Electric Vehicle (EV) Parking and EV Charging Infrastructure (41 electric charging stations)	11.9%	Yes
Unbundle Residential Parking Costs from Property Cost	3.9%	Yes

Total VMT Reduction from All Subsectors (Assumes Maximum Reduction where Calculated Reduction is Greater)³	17.7%	
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Source: Handbook for Analyzing Greenhouse Gas Emission Reduction, Assessing Climate Vulnerabilities, and Advancing Health and Equity, California Air Pollution Control Officers Association (CAPCOA), December 2021.

1 Maximum Reduction per Sector for the Project/site level from CAPCOA 2021.

2 Maximum Reduction per Sector for the plan/community level from CAPCOA 2021.

3 Per CAPCOA, total VMT reduction for multiple strategies within same subsector is calculated using the equation:

1-(1-A)*(1-B)*(1-C)... where A, B, C are equal to individual mitigation strategy reduction percentages. This equation is applied to measures within a sector as well as the totals across all sectors. When applied to the Project, the calculation would be:

$$1-(1-0.0014)*(1-0.026)*(1-0.039) = 0.1765, \text{ or } 17.7 \text{ percent}$$

As shown in Table 5.17-1 – Regional and Project VMT Per Capita, the Project’s calculated VMT per capita for baseline year 2018 is 24.8. A 17.7 percent reduction to the Project’s baseline VMT per capita results in a reduced Project VMT of 20.4¹. As previously discussed, a project would result in a significant project-generated VMT impact if the baseline or cumulative project-generated VMT per capita exceeds 15 percent below the current jurisdictional baseline VMT per capita. Table 5.17-1 indicates that 85 percent of the jurisdictional baseline VMT per capita for future year 2045 is 13.6. Thus, even with the assumed maximum 17.7 percent VMT reduction as a result of implementing Project-applicable VMT reduction strategies, the Project’s baseline per capita VMT would still exceed 15 percent below the 2045 jurisdictional baseline VMT per capita, resulting in a significant project-generated VMT impact.

In conclusion, while the previously discussed TDM measures may help offset some of the VMT impacts of the proposed Project by up to 17.7 percent, these measures would not reduce the Project-generated VMT impact to a less than significant level.

Therefore, the proposed Project would have **significant and unavoidable impacts** related to transportation.

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

The proposed Project would be served by existing, improved streets, Mission Grove Parkway South and Mission Village Drive. Mission Village Drive is built to its ultimate half-section width as collector (66-foot right-of-way). Mission Grove Parkway South is built to its ultimate half-section width as an arterial (100-foot right-of-way). The project will install driveway approaches, curb and gutter, and sidewalk along the Mission Grove Parkway South and Mission Village Drive frontage in compliance with applicable City standards. The proposed Project’s internal drive aisles would be designed to meet the Public Works and Fire Departments’ specifications. All of the proposed Project’s improvements would be in compliance with applicable City of Riverside General Plan Circulation Element and City design standards and thus will not cause any incompatible use or

¹ The reduced Project VMT was calculated by subtracting the result of the following from the calculated Project baseline year 2018 VMT: [(Project per capita VMT)*(maximum VMT reduction percentage)]. When applied to the Project: 24.8 – [(24.8)*(0.177)] = 20.4

any additional hazards to the surrounding area or general public. The proposed Project will have a **less than significant** impact on increasing hazards through design or incompatible uses.

Threshold D: *Would the Project result in inadequate emergency access?*

The proposed Project would be served by existing, fully improved streets, Mission Grove Parkway South and Mission Village Drive. The proposed Project's internal drive aisles would be designed to meet the Public Works and Fire Departments' specifications. The Project plans include a Fire Access Plan and the Project will provide adequate fire access to ensure the safety of the residents. The fire access will leave room for the fire trucks to come in and out of the Project site and will allow them to reach all areas of the site in case of a fire. As RFD requires a minimum 20-foot-wide fire lane, the Project's fire access will have a clear fire lane/fire access to allow room for the fire trucks to navigate through the Project. For these reasons, the proposed Project is not anticipated to result in inadequate emergency access, and potential impacts would be **less than significant**.

5.17.6 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). The City considered modifications to the Project's built environment characteristics and to implement TDM measures in order to reduce VMT generated by the Project to the greatest extent feasible. The following mitigation measures are the TDM measures identified in Table 5.17-3: Potential VMT Reduction Strategies, that are feasible for the Project to implement. While successful implementation of these measures would aid in reducing Project-generated VMT, there are no feasible mitigation measures that would reduce impacts to below the City of Riverside threshold of 85% of baseline or cumulative City VMT per capita and to less than significant levels.

MM TRANS-1: Provide Pedestrian Network Improvements. The Project shall provide pedestrian improvements, including the creation of sidewalks, to connect the residential development to the retail land uses in the surroundings. These pedestrian improvements shall also connect to the existing sidewalk infrastructure..

MM TRANS-2: Provide Electric Vehicle (EV) Parking and EV Charging Infrastructure. The Project shall provide a total of 41 electric charging stations.

MM TRANS-3: Unbundle Residential Parking Costs from Property Cost. The proposed Project includes different types of apartments – studios, 1 bedroom, 1 bedroom plus Den, 2 bedroom, and 3 bedroom apartments. The Project shall provide 1 parking stall for each apartment at no cost and charge tenants a monthly fee of \$75 for studio and 1 bedroom apartments for an extra parking space.

MM TRANS-4: Implement Subsidized or Discounted Transit Program. To encourage the use of public transit and reduce the VMT per capita of the project, the proposed Project shall implement a subsidized transit pass program. The Project Applicant shall establish an account and deposit the amount of \$136,000, annually for a period of at least 10 years to be administered by the apartment property owner through the leasing office/property management to provide free

or reduced cost transit passes to Project residents . The program shall provide up to \$60 for an RTA monthly bus pass or up to \$100 for a Metrolink monthly pass to residents who request transit reimbursement from the leasing office/property management on a first-come, first-served basis, until the available funds are depleted for that year. Residents who participate in the subsidized transit pass program would also be eligible to receive reimbursement for use of a ride sharing service (i.e., Uber or Lyft) for an emergency ride home.

The leasing office/property management shall provide an annual report of the transit pass program that includes the number of reimbursement requests, the amount disbursed to residents, and the remaining amount in the transit pass account at the end of each year. Any funds remaining in the account at the end of the year would roll over into the next years account and funds available for the program. If the program experiences low participation (more than 25% of the funds each year are not utilized and remain in the account), the City shall have the discretion to implement another measure intended to reduce vehicle miles traveled by project residents. Such measures could include, but are not limited to, offsite or onsite pedestrian, bicycle, or transit improvements, funding toward a bikeshare station on or near the site, implementation of further traffic calming measures, or other feasible and implementable TDMs.

5.17.7 Cumulative Environmental Effects

The Project will not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Additionally, the Project would not result in significant impacts regarding inadequate emergency access as the Project would be designed to meet Public Works and RFD specifications for providing adequate fire access. Therefore, cumulatively considerable potential impacts are **less than significant** and no mitigation is required.

A project would result in a significant project-generated VMT impact if the baseline or cumulative project-generated VMT per capita exceeds 15 percent below the current jurisdictional baseline VMT per capita. Table 5.17-1 indicates that 85 percent of the jurisdictional baseline VMT per capita for future year 2045 is 13.6. Thus, even with the assumed maximum 17.7 percent VMT reduction as a result of implementing Project-applicable VMT reduction strategies, the Project's baseline per capita VMT would still exceed 15 percent below the 2045 jurisdictional baseline VMT per capita, resulting in a significant project-generated VMT impact.

The planned and pending projects near the Project site, listed in Table 4.0-1 of this EIR, include residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public). These planned and pending projects would also increase VMT in the City. Cumulatively, the Project VMT impact is therefore considered **significant and unavoidable**.

5.17.8 References

The following references were used in the preparation of this section of the EIR:

CAPCOA 2021	California Air Pollution Control Officers Association, <i>Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity</i> . Final Draft, December 2021. Available at: https://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf . Accessed December 2023.
CAPCOA 2010	California Air Pollution Control Officers Association, <i>Quantifying Greenhouse Gas Mitigation Measures</i> . August 2010. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/capcoa-quantifying-greenhouse-gas-mitigation-measures.pdf . Accessed January 2024.
GP 2025	City of Riverside General Plan – Circulation and Community Mobility Element. Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023.
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
OPR VMT Technical Advisory	State of California, Governor’s Office of Planning and Research, <i>Technical Advisory on Evaluating Transportation Impacts in CEQA</i> . December 2018. Available at https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf , accessed September 2023.
PACT	City of Riverside, <i>Pedestrian Target Safeguarding Plan (PTS), Active Transportation Plan (AT Plan), Complete Streets Ordinance (CSO), and Trails Master Plan (TMP)</i> . Available at: https://riversideca.gov/pact . Accessed December 2023.
SCAG 2020	Southern California Association of Governments (SCAG), <i>Connect SoCal 2020 (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy)</i> . September 3, 2020. Available at https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020 , accessed September 2023.

<p>TIA Guidelines for VMT and LOS</p>	<p>City of Riverside, <i>Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment</i>. July 2020. Available at https://riversideca.gov/publicworks/sites/riversideca.gov/publicworks/files/docs/Traffic/TIA%20Guidelines%20-%20July%202020-Final.pdf, accessed September 2023)</p>
<p>TOA</p>	<p>LSA, <i>Traffic Operational Analysis: Anton Mission Grove, City of Riverside, Riverside County, California</i>. December 2022. (Appendix I)</p>
<p>VMT Analysis</p>	<p>LSA, <i>Vehicle Miles Traveled Analysis: Anton Mission Grove, City of Riverside, Riverside County, California</i>. April 2023. (Appendix I)</p>

5.18 Tribal Cultural Resources

This section analyzes the effects of the Project on tribal cultural resources. This analysis is based on the City's consultation with tribes pursuant to Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) and the *Cultural Resources Assessment* prepared by LSA in April 2023 (Appendix D).

5.18.1 Setting

Existing Tribal Resource Setting

The project area is near the intersection of the traditional cultural territories of the Cahuilla, Gabrielino, and Luiseño. Section 5.5 Cultural Resources and the *Cultural Resources Assessment* (Appendix D) provide an ethnographic overview of these four Native American groups.

On January 27, 2023, LSA personnel conducted an archaeological field survey of the unpaved portions of the project area and landscaping on the southern and eastern edges of the project area. The purpose of this survey was to identify and document, prior to the beginning of ground-disturbing activities, any cultural resources and thus also to identify any area(s) that might be sensitive for buried cultural resources. The entirety of the Project site has been subject to grading activities and construction, which have completely altered the native landscape. The survey revealed that the project area has sustained severe disturbance from development. Visibility was effectively nil, with the surface completely obscured by the commercial building, parking lot, and landscaping. Native soils were alluvium. No native soil surface remains, and no cultural resources were identified.

Though there are no known tribal cultural resources present on the Project site, the Project requires discretionary review by the City of Riverside and includes a request for a General Plan Amendment to change the land use designation. A General Plan Amendment requires SB 18 consultation. As part of CEQA compliance, the Project requires AB 52 consultation. Therefore, notification of Native American tribes in the vicinity of the Project site was required for this Project under both SB 18 and AB 52.

5.18.2 Regulatory Setting

5.18.2.1 Federal Regulations

Native American Involvement

Several Federal and State laws address Native American involvement in the development review process. The most notable of these are the Federal Native American Graves Protection and Repatriation Act (1990) and the California Native American Graves Protection and Repatriation Act (2001). These acts ensure that Native American human remains and cultural items be treated with respect and dignity.

5.18.2.2 State Regulations

Senate Bill 18

Enacted on March 1, 2005, Senate Bill (SB) 18 (California Government Code Sections 65352.3 and 65352.4) requires cities and counties to notify and consult with California Native American tribal groups and individuals regarding proposed local land use planning decisions for the purpose of protecting traditional tribal cultural places (sacred sites), prior to adopting or amending a General Plan or designating land as open space. Tribal groups or individuals have 90 days to request consultation following the initial contact.

Senate Bill 18 Consultation Process

Pursuant to SB 18 consultation, the City sent letters on December 6, 2022 to the nineteen (19) Tribes identified by the Native American Heritage Commission (NAHC) whose ancestral territory includes the area of project site. None of the Tribes requested government-to-government consultation under SB 18.

Assembly Bill 52

California Assembly Bill (AB) 52 of 2014, effective July 1, 2015, expanded the California Environmental Quality Act (CEQA) by defining a new resource category: “tribal cultural resources.” AB 52 establishes that “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Public Resource Code [PRC] Section 21084.2). It further states the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and that are either:

- a) 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)
- b) 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

In recognition of California Native American tribal sovereignty and the unique relationship of California local governments and public agencies with California Native American tribal governments, and to respect the interests and roles of project proponents, it is the intent AB 52 to:

1. Recognize that California Native American prehistoric, historic, archaeological, cultural, and sacred places are essential elements in tribal cultural traditions, heritages, and identities.

2. Establish a new category of resources in CEQA called “tribal cultural resources” that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigation.
3. Establish examples of mitigation measures for tribal cultural resources that uphold the existing mitigation preference for historical and archaeological resources of preservation in place, if feasible.
4. Recognize that California Native American tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated. Because CEQA calls for a sufficient degree of analysis, tribal knowledge about the land and tribal cultural resources at issue should be included in environmental assessments for projects that may have a significant impact on those resources.
5. In recognition of their governmental status, establish a meaningful consultation process between California Native American tribal governments and lead agencies, respecting the interests and roles of all California Native American tribes and project proponents, and the level of required confidentiality concerning tribal cultural resources, at the earliest possible point in CEQA environmental review process, so that tribal cultural resources can be identified, and culturally appropriate mitigation and mitigation monitoring programs can be considered by the decision making body of the lead agency.
6. Recognize the unique history of California Native American tribes and uphold existing rights of all California Native American tribes to participate in, and contribute their knowledge to, the environmental review process pursuant to CEQA.
7. Ensure that local and tribal governments, public agencies, and project proponents have information available, early in CEQA environmental review process, for purposes of identifying and addressing potential adverse impacts to tribal cultural resources and to reduce the potential for delay and conflicts in the environmental review process.
8. Enable California Native American tribes to manage and accept conveyances of, and act as caretakers of, tribal cultural resources.
9. Establish that a substantial adverse change to a tribal cultural resource has a significant effect on the environment.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. AB 52 requires lead agencies to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.”

Assembly Bill 52 Consultation Process

Pursuant to AB 52, the City sent letters on October 18, 2022 to the nine (9) Tribes who identified their affiliation with the area requesting for information on the Project site. Three of the Tribes

requested actual government-to-government consultation under AB 52. See Table 5.18-1 – AB 52 Response Log, below for additional AB 52 consultation details.

Table 5.18-1 – AB 52 Response Log

Native American Tribe (Individual Responding)	Comments
Gabrieleno Band of Mission Indians	<ul style="list-style-type: none"> • Consultation not requested
Soboba Band of Luiseño Indians	<ul style="list-style-type: none"> • Response for tribal consultation initiated on 11/3/2022. • Consultation meeting 4/18/2023 • Follow up emails were sent on 12/6/2022, 2/9/2023, 4/12/2023
Cahuilla Band of Indians	<ul style="list-style-type: none"> • Consultation not requested
Pechanga	<ul style="list-style-type: none"> • Consultation not requested
Rincon Band of Luiseño Indians	<ul style="list-style-type: none"> • Consultation not requested
Yuhaaviatam of San Manuel Nation, formerly San Manuel Band of Mission Indians	<ul style="list-style-type: none"> • Consultation not requested
Morongo Band of Mission Indians	<ul style="list-style-type: none"> • Consultation requested on 11/7/2022 • Consultation meeting on 6/1/2023 • Requested tribal monitoring • Follow up emails were sent on 2/9/2023, 4/12/2023, 7/2/2023, & 8/14/2023 • Consultation concluded on 4/9/2024
San Gabriel Band of Mission Indians	<ul style="list-style-type: none"> • Consultation not requested
Agua Caliente Band of Cahuilla Indians	<ul style="list-style-type: none"> • Consultation requested on 10/25/2022 • Consultation meeting 4/14/2023 • Follow-up emails sent on 12/6/2022, 2/9/2023, 4/12/2023 • Consultation concluded on 4/14/2023

5.18.2.3 Regional Regulations

There are no regional regulations that relate to tribal cultural resources and this Project.

5.18.2.4 Local Regulations

City of Riverside General Plan 2025

The Historic Preservation Element of the General Plan 2025 contains policies related to the historic and prehistoric cultural resources in the City of Riverside (City). In addition to the objectives and policies relevant to cultural resources provided in Table 5.4-A in Section 5.4, Cultural Resources, the following policy of the Historic Preservation Element would also apply to the Project:

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting, and development activities.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

5.18.3 Project Design Considerations

The Project does not include specific design considerations related to reducing potential impacts to tribal cultural resources as no existing resources have been identified within the Project site (described in further detail below). Nonetheless, appropriate mitigation measures as agreed upon between the City and consulting tribes have been recommended and will be implemented as part of the Project to ensure any potential impacts to previously unidentified tribal cultural resources would be minimized and/or avoided. Mitigation measures **MM CUL-1** through **MM CUL-4** are described in Section 5.5 Cultural Resources.

5.18.4 Methodology

In accordance with the City requirement for discretionary tribal notification ("scoping"), LSA requested a review of the Sacred Lands File and a list of Native American contacts from the Native American Heritage Commission (NAHC) for the project. The results of a Sacred Lands File search were obtained from the NAHC on June 16, 2022, which reported negative results. A list of Native American contacts recommended for notification was also received from the NAHC; LSA contacted all individuals on the list.

The results of an SLF search with negative results was obtained from the NAHC on June 16, 2022, along with a list of Native American contacts recommended for notification (see *Cultural Resources Assessment*, Appendix D). LSA contacted all individuals on the list June 16 and July 1, 2022. Responses were received from four tribes:

- The Quechan Tribe of the Fort Yuma Reservation (Ms. McCormick) responded on June 20, 2022, indicating the tribe has no comment on this project, defers to the more local tribes, and supports their decisions with regard to the project.

- Pechanga Band of Indians (Paul Macarro, Cultural Coordinator) responded on June 23, 2022, indicating the project site is within ancestral territory, in the vicinity of multiple previously recorded impacted sites, nearby ancestral remains, a blue-line drainage, and that sensitivity for subsurface resources is extremely high. The tribe requests notification once the project begins the entitlement process, if it has not already; copies of all applicable archaeological reports, site records, proposed grading plans and environmental documents (e.g., Mitigated Negative Declaration/Environmental Impact Report); government-to-government consultation with the Lead Agency; and monitoring by a Riverside County-qualified archaeologist and a professional Pechanga Tribal Monitor during earthmoving activities.
- The Agua Caliente Band of Cahuilla Indians (Arysa Gonzalez Romero, Cultural Resources Analyst) responded on July 6, 2022, indicating the project area is within the tribe's traditional use area and requested copies of any cultural resource documentation (report and site records) generated in connection with this project, a map that clearly delineates the project area, and a cultural resources inventory of the project area (survey) by a qualified archaeologist prior to any development activities.
- Augustine Band of Cahuilla Indians (Victoria Martin, Tribal Secretary) responded on July 6, 2022, indicating the tribe is unaware of specific cultural resources that may be affected by the proposed project and requested immediate notification in the event any cultural resources are discovered.

No response was received from any of the other individuals contacted. Please see the attached record of the scoping and related correspondence.

Potential impacts on tribal cultural resources are analyzed based on the potential for a project to impact any tribal cultural resources during construction or operation. The significance of a tribal cultural resource and subsequent significance of any impact is determined by, among other things, consideration of whether or not that resource has heritage value to California Native Americans. Further, this impact analysis is also based on the City's consultations with the interested consulting Tribes.

On October 18th 2022, the City of Riverside sent out AB 52 consultation notices to Tribes. The following tribes requested to consult with the City pursuant to AB 52:

- Soboba Band of Luiseno Indians
- Morongo Band of Mission Indians
- Aqua Caliente Band of Cahuilla Indians

On December 6th 2022, the City of Riverside sent out SB 18 consultation notices to Tribes. No Tribes requested to consult with the City pursuant to SB 18. The Soboba Band of Luiseno Indians and Aqua Caliente Band of Cahuilla Indians agreed with the City's proposed mitigation measures described below in Section 5.5.7 as mitigation measures **MM CUL-1** through **MM CUL-4**. These

mitigation measures are the City's standard mitigation measures, which were previously developed between the City and 9 consulting tribes pursuant to AB 52.

5.18.5 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. Impacts related to the Mission Grove Apartments Project may be considered potentially significant if the proposed Project:

- (Threshold A) Would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.18.6 Environmental Impacts

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

- i. listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? or*
- ii. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, would the lead agency consider the significance of the resource to a California Native American tribe?*

No known significant tribal cultural resources are located on the Project site based on the findings of the Project-specific Cultural Resources Assessment (Appendix D) and on consultation with the Native American tribes who requested consultation. An archaeological field survey of the Project site was conducted on January 27, 2023. The survey was conducted on the unpaved portions of

the project area in landscaping on the southern and eastern edges of the project area. The unpaved portions of the project make up less than ~90% of the proposed Project site. The Project site is already graded and in a fully developed area. During the field survey, LSA archaeologists did not identify any cultural resources within or adjacent to the Project site. No cultural resources have been previously recorded within the site's boundary. Although no resources were previously documented within or adjacent to the project area, which is completely developed, it is surrounded by 129 resources (consisting of granitic milling features, lithic scatter, ancillary buildings, building foundations, privies, and various prehistoric resources unlisted in the record search) within 1 mile and the only previous survey of the project area was almost 40 years ago and was not specific to the project area but of the surrounding 637 acres. Considering the surrounding recorded resources that encircle the Project site there is a moderate to high likelihood to the unanticipated discovery of cultural resources during the construction process below previously disturbed depths. Therefore, based on the available information, the project area could have moderate to high sensitivity for potential impacts to cultural resources, and standard regulatory compliance measures regarding buried cultural resources are required in conformance with Section 15064.5(e) of the *State CEQA Guidelines*, Public Resources Code Section 5097.98, and State Health and Safety Code Section 7050.5.

The City and the Soboba Band of Luiseno Indians and Aqua Caliente Band of Cahuilla Indians agreed that, in the event of the inadvertent discovery of previously unknown cultural resources of tribal or Native American importance during construction activities, appropriate mitigation measures would be implemented and followed. The Soboba Band of Luiseno Indians and Aqua Caliente Band of Cahuilla Indians accepted the City's standard mitigation measures (**MM CUL-1** through **MM CUL-4**), to ensure that potential impacts in the event of an inadvertent discovery of resources remain at less than a significant level. Therefore, potential Project impacts to tribal cultural resources would be **less than significant with mitigation measures MM CUL-1 through MM CUL-4**.

5.18.7 Proposed Mitigation Measures

Refer to mitigation measures **MM CUL-1** through **MM CUL-4** in Section 5.5 Cultural Resources, 5.5.7 Proposed Mitigation Measures.

A Standard Condition of Approval will include the following – Consistent with State Law:

Discovery of Human Remains: In the event that human remains (or remains that may be human) are discovered at the Project site during grading or earthmoving, the construction contractors, Project Archaeologist, and/or designated Native American Monitor shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Riverside Community & Economic Development Department immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b) unless more current State law requirements are in effect at the time of the discovery. Section 7050.5 requires that excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If human remains are determined as those of Native American origin, the Applicant shall comply with the state relating to the disposition of Native American burials that fall within the jurisdiction of the NAHC (PRC Section 5097). The coroner shall contact the NAHC to

determine the most likely descendant(s). The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The Disposition of the remains shall be overseen by the most likely descendant(s) to determine the most appropriate means of treating the human remains and any associated grave artifacts.

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The County Coroner will notify the Native American Heritage Commission in accordance with California Public Resources Code 5097.98. **No photographs are to be taken except by the coroner, with written approval by the consulting Tribe(s).**

According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). The disposition of the remains shall be determined in consultation between the Project proponent and the MLD. In the event that the Project proponent and the MLD are in disagreement regarding the disposition of the remains, State law will apply and the median and decision process will occur with the NAHC (see Public Resources Code Section 5097.98(e) and 5097.94(k)).

5.18.8 Cumulative Environmental Effects

The Project, in conjunction with other planned and pending projects in the Project vicinity, would cumulatively increase the potential to encounter sensitive tribal cultural resources. There would be cumulatively considerable impacts to tribal cultural resources if the project level impacts were significant for any of the cumulative projects. The planned and pending projects in the Project vicinity, listed in Table 4.0-1 include about 6 projects consisting of residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public).

No tribal cultural resources were identified within the Project site. Potential impacts to tribal cultural resources are site-specific and would be reduced to a less-than-significant level due to implementation of mitigation measures **MM CUL-1** through **MM CUL-4** that would protect tribal cultural resources. In the event that tribal cultural resources are discovered, each individual project would be required to comply with the applicable regulatory requirements and the consultation requirements of AB 52, and SB 18 if applicable, to determine and mitigate any potential impacts to tribal cultural resources. Therefore, cumulative impacts to tribal cultural resources would be **less than significant with mitigation** and would not be cumulatively considerable.

5.18.9 References

The following references were used in the preparation of this section of the EIR:

LSA 2023	LSA Associates, Inc., <i>Cultural Resources Assessment: Anton Mission Grove Project Riverside, Riverside County, California</i> , February 2023. (Appendix D)
GP 2025 FPEIR	City of Riverside, <i>General Plan 2025 Program Environmental Impact Report</i> (SCH# 2004021108), certified November 2007. (Available at https://www.riversideca.gov/planning/gp2025program/ .)

5.19 Utilities and Service Systems

This section analyzes the Project's potential impacts related to utilities and service systems. The following discussion and analysis also include findings about Utilities and Service Systems from the City's General Plan PEIR (GP 2025 PEIR), the City's 2022 Mission Grove Specific Plan (MGSP 1985), Western Municipal Water District's 2020 Urban Water Management Plan (UWMP), the 2022 *Mission Grove Apartments – City of Riverside: Sewer Study* prepared by Carollo Engineering (Appendix J), and the Project Specific Water Quality Management Plan (Appendix G) prepared by Rick Engineering Company.

5.19.1 Setting

Existing Setting

The following section discusses existing setting with respect to solid waste, dry utilities, wastewater services, stormwater, water supply, demand, and distribution in the City. A description follows of water supplies available to Western Municipal Water District (WMWD), including groundwater, imported water, and recycled water. Current and projected future water demand based on existing use, anticipated growth, and water conservation efforts, is detailed as well.

Solid Waste

Athens, which is one of three of the City's franchise haulers (Burrtec, Athens, and CR&R) will provide solid waste disposal services for the Project. All non-hazardous solid waste collected is taken to the Robert A. Nelson Transfer Station, which is owned by the County of Riverside and operated by Agua Mansa Materials Recovery Facility (MRF), LLC. Waste is then transferred to the Badlands Landfill for disposal. However, local trash haulers may dispose of collected waste at other County landfills in the area, such as the Lamb Canyon Landfill and El Sobrante landfill. All Riverside County landfills are Class III disposal sites permitted to receive non-hazardous municipal solid waste. See Table 5.19-1, Existing Landfills for information about the five landfills operated by the Riverside County Department of Waste Resources that serve Riverside County residents. (rcwaste.org)

Public Resources Code Section 41780 requires every city and county in the State to divert from landfills at least 50 percent of the quantity of waste generated within their jurisdiction in 2000. The Legislature amended this status in 2000, requiring jurisdictions to sustain their waste diversion efforts into the future. In 2004, the City's waste diversion rate was 60 percent, in compliance with Section 41780. (GP 2025) This diversion rate data had been obtained from the California Integrated Waste Management Board, now CalRecycle, in 2007. Beginning with reporting year 2007 jurisdiction annual reports, diversion rates are no longer determined. For 2007 and subsequent years, CalRecycle compares reported disposal tons to population to calculate per capita disposal expressed in pounds/person/day.

Table 5.19-1 – Existing Landfills

Landfill	Maximum Permitted Daily Load (tons/day)	Maximum Permitted Capacity (cubic yards)	Current Remaining Capacity (cubic yards)	Ceased Operation Date
Badlands	5,000	82,300,000	7,800,000	1/1/2059
Lamb Canyon	5,000	38,681,513	19,242,950	4/1/2032
El Sobrante (privately owned)	400	6,229,670	3,834,470	8/1/2047
Blythe	400	6,229,670	3,834,470	8/1/2047
Desert Center	60	409,112	127,414	8/1/2107
Oasis	400	1,097,152	433,779	9/1/2055

Source: CalRecycle

Dry Utilities*Energy*

The City is the primary distribution provider for electricity in the entire City. Riverside Public Utility Department (RPU) is a municipally owned electrical utility and as such, maintains electrical facilities and infrastructure within the City. Electricity will be provided to the Project by RPU. Southern California Edison (SCE) serves electrical customers outside of the City limits. Per the Power Content Label, designed by the California Energy Commission, RPU derives electricity from varied sources including natural gas, coal, nuclear, geothermal, solar, wind, and hydroelectric. Table 5.19-2 – RPU 2022 Power Content Mix, identifies RPU's specific proportional shares of electricity sources in 2022. As indicated in Table 5.19-2, the 2022 RPU Power Mix has renewable energy at 45.4% of the overall energy resources. Power content mixes are generally released in July each year.

Table 5.19-2 – RPU 2022 Power Content Mix

Energy Resources	2022 RPU Power Mix
<i>Eligible Renewable</i>	45.4%
Biomass & Biowaste	0.0%
Geothermal	33.4%
Eligible Hydroelectric	0%
Solar	10.5%
Wind	1.5%
<i>Coal</i>	19.4%
<i>Large Hydroelectric</i>	1.2%
<i>Natural Gas</i>	4.5%
<i>Nuclear</i>	4.7%
<i>Other</i>	0%
Unspecified Sources of power ²	24.8%
Total	100%

¹The eligible renewable percentage above does not reflect RPS compliance, which is determined using a different methodology.

²Unspecified power is electricity that has been purchased through open market transactions and is not traceable to a specific generation source.

Telecommunication

Telephone and cable utilities for the Project can be provided by existing providers such as Spectrum and AT&T.

Wastewater Services

Per the City of Riverside 2019 Sewer Master Plan, the City Wastewater Division is responsible for the collection and treatment of wastewater flows generated within the City as well as the community services districts of Jurupa, Rubidoux, Edgemont, and the community of Highgrove. The City's collection system consists of over 800 miles of gravity sewers ranging from 4 to 51 inches in diameter, 414 miles of sewer laterals, and 20 wastewater pump stations. The wastewater pump stations range in size from less than 100 gallons per minute (gpm) to over 11,000 gpm. Treatment occurs at the Riverside Regional Water Quality Control Plant (RWQCP), which provides preliminary, primary, secondary, and tertiary treatment for a hydraulic rated capacity of approximately 46 million gallons per day (mgd) average dry weather flow (ADWF).

Stormwater

Per the WQMP, the existing drainage pattern at the site is in a southwesterly overland flow. The storm water drainage system would be installed concurrently with the construction of the proposed Project and will be adequately sized to accommodate the drainage created by this Project. On-site storm water and non-stormwater runoff will be treated with onsite BMPs identified in the Preliminary Project Specific WQMP (modular wetlands biofiltration systems) and then discharged to the existing drainage facilities that extend off-site, thus retaining the overall drainage pattern of the site.

Water Supply

RPU provides the majority of the City's water service, mostly in the Riverside City limits. Western Municipal Water District (WMWD) and Eastern Municipal Water District serve all other portions of the City, including the proposed Project site. Domestic water services will be provided to the Project by WMWD. The proposed Project site is located within the WMWD Improvement District No. 3. Major distribution facilities are currently available within this District to serve the needs of the land uses within this district.

WMWD divides its services between Wholesale and Retail and analyzes them separately in the UWMP. Retail refers to customers that directly purchase and use water from WMWD, such as single-family residences or commercial businesses. WMWD provides water to nearly 25,000 connections within the retail service area, including the Riverside Retail Service Area, Murrieta Retail Service Area, and Rainbow Retail Service Area. These three service areas are collectively referred to as Western Retail and cover a total of 104 square miles and serve water to an estimated population of nearly 100,000. The Riverside Service Area includes a portion of the City of Riverside and unincorporated areas of Riverside County, including the communities of El

Sobrante, Eagle Valley, Temescal Creek, Woodcrest, Lake Matthews and March Air Reserve Base.

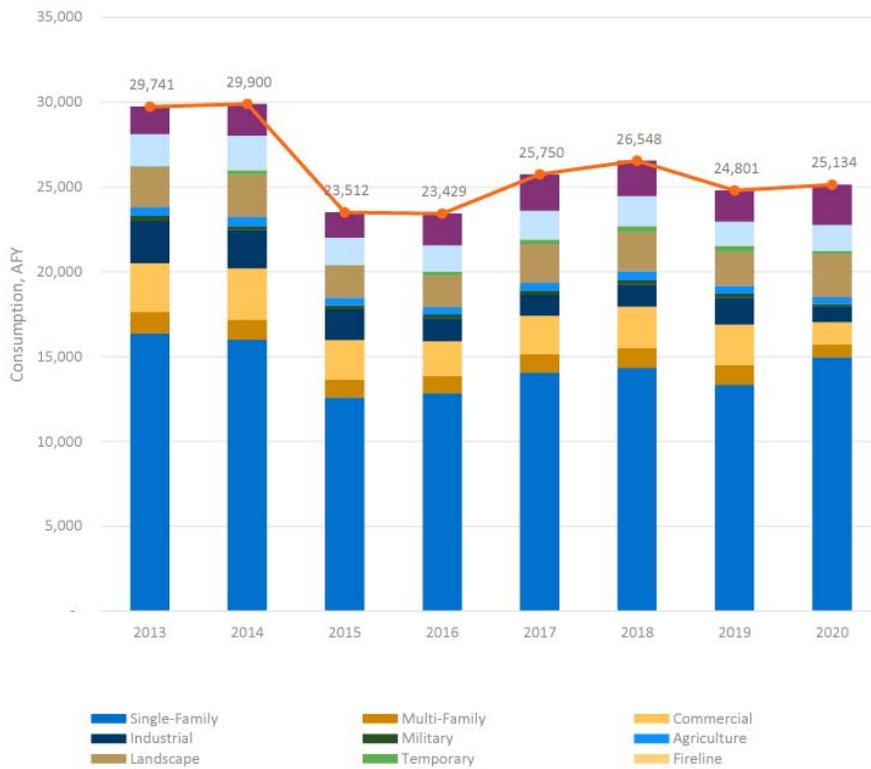
WMWD Retail currently obtains approximately 60% of its supply from Metropolitan and 40% of its supply from local groundwater sources. Groundwater supplies are obtained from several local groundwater basins, including groundwater from the Chino Basin that is treated and distributed by the Chino Desalter Authority (CDA), of which WMWD is a member. Each of the groundwater sources are closely managed by Watermasters, Groundwater Sustainability Agencies or Groundwater Sustainability Councils. Western plays a key role in the management of the groundwater basins it relies on to meet retail demands and participates in ongoing water conservation measures and regional recharge projects to enhance and protect the reliability of local groundwater. (UWMP)

WMWD's Riverside retail service area uses water for both potable and non-potable uses. Potable uses include agriculture, commercial, single-family residential, multi-family residential, landscape, industrial, military, temporary (which includes meters issued for construction water use), and Fireline uses. Non-potable water is also used for agriculture and landscape and is tracked separately. The non-potable system uses a blend of recycled water, non-potable groundwater, and non-potable imported water. (UWMP)

Past Water Use

According to the UWMP, water use in WMWD's retail systems has varied from 2013 to 2020. There was a notable decline in 2015 following the State's 2014 declaration of a drought emergency and implementation of statewide mandatory demand reductions. After the statewide restrictions ended in 2016, demands rebounded slightly but have not returned to 2013 levels, despite adding nearly 1,600 new customer connections from 2013 to 2020. WMWD also implemented water budget rates for indoor and outdoor uses which has helped to limit total consumption and conserve water. This is an indication that WMWD's aggressive conservation program has been effective at achieving some permanent demand reductions. Per WMWD's UWMP, between 2016 and 2020, WMWD customers used an average of 23,000 Acre-feet per year (AFY) of water. Total WMWD Retail use is summarized in Figure 10-4 of the UWMP and reproduced below: (UWMP)

Figure 10-4. Western Retail Historical and Current Water Use, AFY

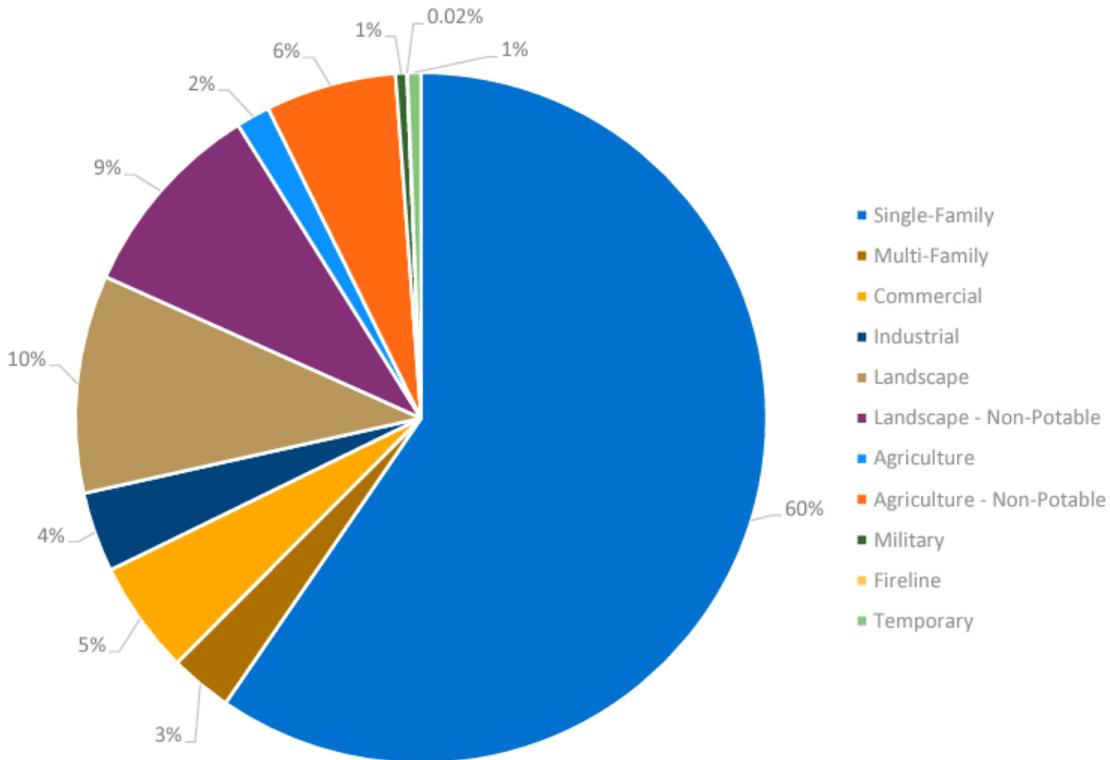


Source: WMWD 2020 UWMP

Current Water Use

WMWD Retail (Riverside, Murrieta, and Rainbow service areas combined) used 25,134 acre-feet (AF) of water in 2020. Single family residences consumed 60% of the total water used. The second largest customer category was landscape, using 10% of the total water demand. Please note 3% of the water used was by multi-family residences. The breakdown of water use by customer category is illustrated in Figure 10-5 of WMWD’s UWMP, and is shown below:

Figure 10-5. Western Retail 2020 Water Use by Customer Category



Source: WMWD 2020 UWMP

The following table summarizes the various water supply sources used in 2020 (Table 9-4 of the WMWD UWMP):

Table 5.19-3 – WMWD 2020 Water Supply, Acre-feet per year (AFY)

Supply Source		Supply (AFY)
Potable	Metropolitan	12,004
	Groundwater (San Bernardino Basin, Western Meeks and Daley)	226.52
	Groundwater (San Bernardino Basin, Leased Meeks and Daley)	4,208
	Groundwater (RPU Surplus)	3,163
	Groundwater (Temecula Valley Basin)	399
	Eastern (Murrieta)	1,834
TOTAL		21,834
Non-Potable	Metropolitan	1,819
	EVMWD (Riverside-Arlington Groundwater)	944
	RPU (Riverside-Arlington Groundwater)	388
	WWRF	1,758
TOTAL		4,909
TOTAL SUPPLY		26,743

Future Water Use

The following table (Table 9-5 of the UWMP) summarizes projected water supplies through the year 2045:

Table 5.19-4 – WMWD Projected Water Supply

Supply Source		2025	2030	2035	2040	2045
<i>Potable</i>	Metropolitan ¹	14,680	19,306	22,293	26,181	31,928
	Chino Desalter ²	3,534	3,534	3,534	3,534	3,534
	Temecula Valley Basin Groundwater ³	1,452	1,452	1,452	1,452	1,452
	Leased Meeks and Daley ⁴	4,680	4,680	4,680	4,680	4,680
	Western Owned Meeks and Daley ⁵	226.52	226.52	226.52	226.52	226.52
	City of Riverside Surplus ⁶	2,000				
	Eastern North Perris Agreement ⁷	500	1,000	1,500	1,500	
TOTAL	27,073	30,199	33,686	37,574	41,821	
<i>Non-Potable</i>	Metropolitan ⁸	1,671	1,300	1,300	1,300	1,681
	Riverside-Arlington Basin Groundwater ⁹	2,500	3,131	3,104	3,465	4,100
	WWRF ¹⁰	1,940	2,598	3,481	4,032	4,032
	WRCWRA ¹¹	920	997	1,079	1,169	1,266
	TOTAL	7,031	8,066	8,964	9,966	11,079
TOTAL SUPPLY		34,104	38,265	42,650	47,540	52,900

¹ Available supply from Metropolitan determined as the remaining demand not met by local supply sources with a 10% buffer.

² Western's shares of the Chino Desalter, currently leased to Jurupa Community Services District.

³ Planned groundwater extractions to serve the Murrieta service area.

⁴ Agreement with EVMWD to lease Meeks and Daley groundwater rights.

⁵ Western-owned Meeks and Daley groundwater rights.

⁶ Based on the 2017 Agreement, surplus water sales. Additional surplus supply may be available in the future but is not guaranteed.

⁷ Eastern Perris North Project.

⁸ Non-potable supply from Metropolitan is assumed to meet the remaining demand not met by local supply sources.

⁹ Expected supply used from local non-potable groundwater and delivered through the Riverside Canal, including Western's planned non-potable well and purchases from RPU and EVMWD's Palm Well.

¹⁰ Projected 2030 WWRF effluent determined in the Riverside Non-Potable Facilities Master Plan. The rate of growth was calculated between 2030 and average 2017-2019 data (2018 used to determine rate of growth) and applied for years 2025 and 2030-2045. Based on this growth rate, the WWRF is expected to reach buildout between 2035 and 2040.

¹¹ WRCWRA supply is not currently available to Western Retail customers as no infrastructure currently exists to convey recycled water from the plant to Western Retail. This supply is currently considered surplus supply but Western is evaluating opportunities to make use of it.

The Water Shortage Contingency Plan (WSCP) is a strategic plan that WMWD uses to prepare for and respond to foreseeable and unforeseeable water shortages. A water shortage occurs

when available water supply is insufficient to meet the normally expected customer water use at a given point in time. A shortage may occur due to a number of reasons, such as water supply quality changes, climate change, drought, regional power outage, and catastrophic events (e.g., earthquake). Additionally, the State may declare a statewide drought emergency and mandate that water suppliers reduce demands, as occurred in 2014. The WSCP serves as the operating manual that WMWD will use to address catastrophic service disruptions through proactive, rather than reactive, mitigation of water shortages. The Western WSCP provides a process for an annual water supply and demand assessment and structured steps designed to respond to actual conditions. This level of detailed planning and preparation provide accountability and predictability and will help WMWD maintain reliable supplies and reduce the impacts of any supply shortages and/or interruptions. The WSCP was originally prepared in conjunction with WMWD's 2020 UWMP and is compliant with the California Water Code (CWC) Section 10632 and incorporates guidance from the State of California Department of Water Resources (DWR) UWMP Guidebook 2020. (UMWP)

In the 2020 UWMP, WMWD conducted a Water Reliability Assessment to compare the total water supply sources available to long-term projected water use over the next 25 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. WMWD also conducted a Drought Risk Assessment to evaluate a drought period that lasts five consecutive water years starting in 2021. An analysis of both assessments determined that WMWD is reliable and anticipates meeting retail demands through local and imported water sources. WMWD Wholesale expects to have sufficient supplies available to meet the demands of Western Retail and its other wholesale customers, even in dry years, based on Metropolitan's 2020 UWMP.

5.19.2 Related Regulation

5.19.2.1 Federal Regulations

Clean Water Act

The Clean Water Act (CWA), enacted by Congress in 1972, requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). The California State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCB) administer NPDES permitting authority. The Project site is within RWQCB Region 8 (Santa Ana Region).

5.19.2.2 State Regulations

Public Resource Code

The California Integrated Waste Management Act of 1989 requires that each county prepare a new Integrated Waste Management Plan. The Act further required each city to prepare a Source Reduction Plan and Recycling Element (SRRE) by July 1, 1991. Each source reduction element includes a plan for achieving a solid waste goal of 25% by January 1, 1995, and 50% by January

1, 2000. A number of changes to the municipal solid waste diversion requirements under the Integrated Waste Management Act were adopted, including a revision to the statutory requirement for 50% diversion of solid waste. Under these provisions, local governments shall continue to divert 50% of all solid waste on and after January 1, 2000.

State Water Resources Control Board

The SWRCB regulates water quality in California for human uses and environmental protection. The SWRCB, along with nine RWQCBs, regulates wastewater, stormwater, and irrigation discharges, dredge and fill activities, and alteration of Federal water bodies under the CWA's 401 program. Additionally, the SWRCB implements the Federal NPDES program under the CWA, including issuance of the NPDES Construction General Permit for regulation of construction stormwater discharges.

Senate Bill X7-7

California adopted Senate Bill (SB) X7-7, or the Water Conservation Act of 2009, in November 2009. The legislation requires urban water retailers to set urban water use targets to achieve a 20 percent reduction in per capita urban water use by December 31, 2020. Additionally, the law requires agricultural water suppliers to prepare, adopt, and regularly update agricultural water management plans. Agricultural and urban water providers are ineligible for certain State grants and loans if they do not adhere to water conservation requirements outlined in the law.

Senate Bill No. 7

California adopted Senate Bill (SB) SB-7, the California Water Submeter Requirements for Multi-Family Housing, in 2018. The legislation requires owners of new multi-unit residential properties built after January 1, 2018, to include water submetering systems in the building's design when submitting an application for water service connection to measure the quantity of water supplied to each individual. This will ensure each tenant will be appropriately billed for their individual water use.

Senate Bills 610 and 221

In 2001, California adopted SB 610 and SB 221, thereby amending the California Water Code. Under these new laws, certain types of development projects are now required to provide detailed water supply assessments (WSAs) to planning agencies. The primary purpose of a WSA is to determine if the identified water supply or water supplier will be able to meet projected demands for the project, in addition to existing and planned future uses, over a 20-year projection and with consideration to normal, dry, and multi-dry water years. Thresholds requiring the preparation of a WSA include residential developments of more than 500 dwelling units, shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space, commercial office buildings employing more than 1,000 persons or having more than 250,000 square feet of floor space, and projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project. As the Project consists of the development of 347 apartment units, the Project falls below the threshold of more than 500 dwelling units that would trigger the need for a project-specific WSA.

Senate Bill 1305

SB 1305, the Power Source Disclosure requires suppliers of electricity to disclose to consumers “accurate, reliable, and simple to understand information on the sources of energy that are being used...” (Public Utilities Code Section 398.1 (b)) The law requires that these suppliers tell consumers about what type of resources is used to generate the electricity being used.

Regional Water Management Planning Act

Adopted by the state legislature in 2002, the Regional Water Management Planning Act, or SB 1672, authorizes preparation of integrated regional water management plans. Such plans are developed by regional water management groups, defined as three or more local public agencies, at least two of which have statutory authority over water supply. Integrated regional water management plans address qualified programs and projects relating to water supply, water quality, flood protection, or other water-related topics undertaken by the participating public agencies. Qualified projects, as detailed in the legislation, include but are not limited to groundwater, urban, and agricultural water management planning efforts, levee or flood control infrastructure maintenance or construction, water recycling projects, and water conservation programs.

5.19.2.3 Regional Regulations**Riverside County Waste Resources Department Construction and Demolition Recycling**

The Riverside County Waste Resource Department (RCWRD) requires that projects that have the potential to generate construction and demolition waste complete a Waste Recycling Plan (WRP) to identify the estimated quality and location of recycling of construction and demolition waste from the project. A waste recycling report is then required upon completion of the project that demonstrates that the project recycled a minimum of 50 percent of its construction and demolition waste per its WRP.

2020 Urban Water Management Plan for Western Municipal Water District

The California Water Code requires any municipal water supplier serving over 3,000 connections or 3,000 acre feet per year (AFY) to prepare an Urban Water Management Plan (UWMP). Water suppliers are required to update their UWMPs every five years. WMWD is a water service provider serving both retail and wholesale customers. WMWD’s 2020 UWMP forecasts demand through 2050 and details normal, dry year, and multiple dry year supplies needed to meet demand. Additionally, the UWMP describes water supply reliability, conservation and demand management strategies, and WMWD’s current and anticipated water infrastructure projects.

5.19.2.4 Local Regulations**Riverside General Plan 2025**

The Riverside General Plan 2025 guides land use, development, and strategic planning decision-making in the City. The Public Facilities and Infrastructure Element and the Open Space and Conservation Element include objectives and policies intended to support well-designed and maintained infrastructure, and to provide adequate water supply and water quality to

accommodate the needs of the community now and into the future (City of Riverside 2007). Objectives and policies applicable to utilities and service systems are presented below:

Public Facilities and Infrastructure Element

Objective PF-1: Provide superior water service to customers.

Policy PF-1.1: Coordinate the demands of new development with the capacity of the water system.

Policy PF-1.2: Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.

Policy PF-1.3: Continue to require that new development fund fair-share costs associated with the provision of water service.

Policy PF-1.4: Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.

Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.

Policy PF-1.7: Protect local groundwater resources from localized and regional contamination sources such as septic tanks, underground storage tanks, industrial businesses and urban runoff.

Objective PF-3: Maintain sufficient levels of wastewater service throughout the community.

Policy PF-3.1: Coordinate the demands of new development with the capacity of the wastewater system.

Policy PF-3.2: Continue to require that new development fund fair-share costs associated with the provision of wastewater service.

Policy PF-3.3: Pursue improvements and upgrades to the City's wastewater collection facilities consistent with current master plans and the City's Capital Improvement Program.

Policy PF-3.4: Continue to investigate and carry out cost-effective methods for reducing stormwater flows into the wastewater system and the Santa Ana River.

Objective PF-5: Minimize the volume of waste materials entering regional landfills.

Policy PF-5.4: Implement more severe fines for dumping bio-solids into the City's sewer and storm drain system.

Objective PF-4: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.

Policy PF-4.1: Continue to fund and undertake storm drain improvement projects as identified in the City of Riverside Capital Improvement Plan.

Policy PF-4.2: Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System Program.

Policy PF-4.3: Continue to routinely monitor and evaluate the effectiveness of the storm drain system and make adjustments as needed.

Open Space and Conservation Element

Objective OS-10: Preserve the quantity and quality of all water resources throughout Riverside.

Policy OS-10.1: Support the development and promotion of water conservation programs.

Policy OS-10.2: Coordinate plans, regulations and programs with those of other public and private entities which affect the consumption and quality of water resources within Riverside.

Policy OS-10.4: Develop a recommended native, low-water-use and drought-tolerant plant species list for use with open space and park development. Include this list in the landscape standards for private development.

Policy OS-10.5: Establish standards for the use of reclaimed water for landscaping.

Policy OS-10.9: Evaluate development projects for compliance with NPDES requirements and require new development to landscape a percentage of the site to filter pollutant loads in stormwater runoff and provide groundwater percolation zones.

Policy OS-10.11: Monitor the quality and quantity of groundwater and surface water resources and consider revisions to the General Plan's policies if monitoring identifies significant reductions in water quality.

City of Riverside Water Conservation Ordinance

Chapter 14.22, Water Conservation, of the Riverside Municipal Code (RMC) establishes procedures for implementing and enforcing water conservation measures. Section 14.22.010 establishes unreasonable water uses in the City, including, among others, application of potable water to outdoor landscapes in a manner that causes runoff to adjacent property, non-irrigated areas, or walkways; non-recirculating fountains or water features which use potable water; and application of potable water to outdoor landscaping within 48 hours of measurable rainfall.

The ordinance also establishes a four-stage Water Conservation Program, where stages increase with the severity of the water shortage. The four stages of the Water Conservation Program are as follows:

Stage One – Normal Water Supply. The City can meet all water demands, but baseline conservation measures, such as time restrictions on non-agricultural irrigation, still apply.

Stage Two – Minimum Water Shortage. There is a reasonable probability that the City will not be able to meet all of its water demands. Stage One restrictions apply, as well as other restrictions on irrigation and plumbing leaks. Customers will be asked to reduce monthly water consumption by up to 15 percent, and construction operations are not authorized to use water unnecessarily for any purpose, other than those required by regulatory agencies.

Stage Three – Moderate Water Shortage. All measures from preceding stages apply and more restrictive irrigation measures are implemented. Water customers will be asked to reduce monthly consumption by up to 20 percent.

Stage Four – Severe Water Shortage. The City's ability to meet water demand is seriously impaired. Stage Four includes the most restrictive irrigation measures, including a prohibition on outdoor lawn watering, as well as prohibitions on automobile washing, and pool filling.

Concurrently with a Stage Three or Stage Four declaration, the City Council may proclaim a Water Shortage Emergency. During such time, no new construction meters may be issued, no construction water may be used for earthwork including dust control, and no new building permits may be issued unless such projects meet certain water conservation requirements. RPU is operating currently under Stage One of the Water Conservation Program (RPU 2018).

Water Efficient Landscaping and Irrigation Ordinance

Chapter 19.570 of the RMC contains the City's Water Efficient Landscaping and Irrigation Ordinance, which is intended to promote quality landscaping as well as efficient use of water within the City. The ordinance requires preparation and implementation of a planting plan that identifies the Maximum Applied Water Allowance and the Estimated Annual Water Use of the project's landscaping, as well as irrigation design and soil management plans.

Riverside Municipal Code Title 6 – Health and Sanitation

The City's Health and Sanitation Code (Municipal Code, Title 6, Section 6.04 et seq.) specifies the requirements for handling solid waste and recycling materials.

5.19.3 Project Design Considerations

The Project landscape design includes quality landscaping and efficient use of water in compliance with the City's Water Efficient Landscaping and Irrigation Ordinance (Chapter 19.570 of the RMC). The Project will adhere to CALGreen building code standards which include water conserving plumbing fixtures and fittings, outdoor potable water use in landscaped areas,

management of construction waste, reuse or recycling of excavated soil and land clearing debris, and recycling by occupants. Additionally, the Project would include solar panels with the capacity to generate approximately 1,275,500 kWh per year.

5.19.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G (“Environmental Checklist”) of the State CEQA Guidelines. According to the Appendix G significance thresholds, impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- (Threshold B) have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- (Threshold C) result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;
- (Threshold D) generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;
- (Threshold E) comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.19.5 Environmental Impacts

Threshold A: *Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

Water

As outlined in 5.19.1 Setting, domestic water services will be provided to the Project by WMWD. The proposed Project site is located within the WMWD Improvement District No. 3. Major distribution facilities are currently available within this District to serve the needs of the Project and surrounding area. WMWD has 12-inch domestic water mains located in Mission Village Drive and Mission Grove Parkway to provide connections for service to the Project. Additionally, domestic and fire services once serving the previous K-Mart building still exist and may be used for the project if they are determined to be adequately sized for the demands of the Project. The Project will be required to relocate existing 8-inch onsite WMWD mainlines and appurtenances

within the Project footprint to locations that will allow for access and maintenance. All onsite WMWD facilities shall be within easements dedicated to WMWD.

WMWD's 2014 Master Plan shows a proposed 36-inch waterline fronting this property on Mission Grove Parkway. The Project may be required to construct this master planned facility. Western provides recycled water, however, is currently not available within the limits of this project.

The Project will construct water main extensions from the existing water lines in City street rights-of-way (Mission Village Drive and Mission Grove Parkway) to the Project and within the Project site to ensure they are located to allow for access and maintenance. Because the construction of water main extensions, relocation of 8-inch mainlines within the Project site, and construction of 36-inch waterline would be within already developed areas for retail, parking, and public roadways, do not contain sensitive natural resources and have a relatively small construction footprint with associated minimal construction impacts, construction of these facilities would not cause significant environment effects. No additional improvements or relocations are needed to serve the proposed Project.

Wastewater

A Sewer Capacity Evaluation (Sewer Study 2022, Appendix J) was conducted to assess the impact the Project could have on the City's wastewater collection system. The Project will connect to an existing 8-inch diameter gravity sewer pipeline in Mission Village Drive, south of the Project site, which connects to an existing 10-16-inch diameter gravity sewer line in Trautwein Road.

The Sewer Capacity Evaluation included an existing hydraulic evaluation to verify that the existing system improvements were appropriately sized to convey existing peak wet weather flows (PWWFs) in addition to Project flows and to identify new locations of sewers that cannot convey the increased flows. The evaluation showed that the City's existing collection system has sufficient capacity to convey proposed PWWFs downstream of the Project without exceeding the established flow depth criterion. Additionally, the hydraulic analysis showed that the City's *2020 Update of the Integrated Master Plan for the Wastewater Collection and Treatment Facilities*' (Master Plan Updates) proposed existing collection system projects are adequately sized to handle the change in the land use type at the proposed point of connection. (Sewer Study 2022)

Further, the Sewer Capacity Evaluation's future capacity evaluation including the Project did not identify new system deficiencies not already identified in the Master Plan Update. The hydraulic analysis showed that the proposed Master Plan Update's proposed future projects are adequately sized for the change in land use type at the proposed point of connection. (Sewer Study 2022)

The Project's Sewer Capacity Evaluation determined that the City's collection system has sufficient capacity to convey existing PWWFs downstream of the Project without exceeding the established flow depth criteria. Thus, the Project would not result in the relocation or construction of new or expanded wastewater facilities that would cause significant environmental effects.

Stormwater

The Preliminary Project Specific WQMP outlines the LID BMPs required to adequately meet water quality standards and reduce storm water runoff. The proposed Project includes four biotreatment

basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems. These LID BMPs have been incorporated into the site design to fully address all expected pollutant sources and storm water runoff volumes.

Furthermore, the storm water drainage system would be installed concurrently with the construction of the proposed Project and would be adequately sized to accommodate the drainage created by this Project. On-site storm water and non-stormwater runoff would be treated with onsite BMPs identified in the Preliminary Project Specific WQMP and then discharged to the existing drainage facilities that extend off-site, thus retaining the overall drainage pattern of the site. Therefore, the project would not result in storm water runoff from the site that requires the construction of additional stormwater facilities downstream and off-site.

Dry Utilities

As discussed in Section 5.19.1 Setting, RPU will provide electricity to the proposed Project. Telecommunications will be provided by a local provider such as Spectrum or AT&T. The proposed Project does not require upgrades to off-site RPU transmission facilities and does not cause or result in the need for additional energy producing facilities off-site. The proposed Project includes 18 solar photovoltaic (PV) arrays on carport and building rooftops with the capacity to generate approximately 1,275,500 kWh per year, which would lessen the Project's potential of resulting in a substantial increase in demand of energy supply sources. Telecommunication lines will have extensions from existing lines within the City's street Right-of-Way (ROW) into the development. Therefore, the Project would not result in the need for new or expanded electric or telecommunications facilities.

As there are existing dry and wet utility facilities in the adjacent roadways and only extensions into the Project site are required, the Project will not require or result in the relocation or construction of new or expanded facilities offsite, or relocation of facilities. Potential impacts would be **less than significant**.

Threshold B: *Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As discussed in Section 5.19.2.2, under SB 610 and SB 221, certain types of development projects are required to provide detailed WSAs to planning agencies. The threshold requiring the preparation of a WSA for residential developments is over 500 dwelling units. The Project includes a total of 347 residential apartment units, which is below the threshold of 500 dwelling units; therefore, the Project does not trigger the need for the preparation of a project-specific WSA.

Construction Demand

Water would be required for temporary construction activities on the Project site, including dust suppression, grading and grubbing, compaction, construction equipment wheel washing, and concrete mixing and casting. Water consumption by construction workers and cleaning of portable toilets on the Project site may also account for a small portion of overall construction water demand.

Construction water demand would be temporary and, therefore, would not result in long-term strain on water supplies. As discussed in Section 5.19.2.3, Regional Regulations, the City's Water Conservation Ordinance allows the City Council to declare a Water Shortage Emergency, during which no construction water may be used for earthwork, including dust suppression and compaction activities. However, the City is currently in Stage 1 and not experiencing a water emergency.

Given the temporary and minimal nature of construction water demand in addition to the fact that the City would restrict water intensive construction activities through a Water Shortage Emergency declaration if it lacked adequate water supply, impacts related to construction water consumption would be **less than significant**.

Operational Demand – Indoor and Outdoor Use

The Project would introduce a new development consisting of multi-family residential uses. The Project would comply with all requirements of the California Green Building Code, as adopted by the City, pertaining to maximum flow rates for plumbing fixtures, such as toilets, showerheads, and faucets in the residential buildings.

WMWD has various water supply sources available (groundwater, imported water, and recycled water) to meet retail demands during normal, single-dry, and multiple-dry years. These supply sources may be impacted by climatic and hydrologic conditions, water quality, and legal restrictions, as well as potential for interruption of supply driven by catastrophic events. WMWD evaluated supply reliability during a single dry year, multiple dry years, and a multiple year drought that could potentially occur within the next five years (2021-2025). In all cases, WMWD's supplies were sufficient to meet demand without any supply shortages. (UWMP)

WMWD's expected retail water supply reliability for a normal year, single dry year, and five consecutive dry years, including projections for 2025, 2030, 2035, 2040, and 2045 are shown in the following tables (Tables 11-2, 11-3, and 11-4 of the UWMP); WMWD anticipates adequate supplies for years 2025 to 2045 to meet retail demand under normal, single dry and multiple-dry year conditions.

**Table 5.19-5 – WMWD Water Service Reliability – Normal Year
Retail Normal Year Supply and Demand Comparison, AFY**

		2025	2030	2035	2040	2045
<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
	Demand	24,612	27,454	30,624	34,158	38,019
	<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
	Demand	5,555	6,426	7,168	7,997	8,921
	<i>Difference</i>	1,476	1,640	1,796	1,969	2,158

Table 5.19-6 – WMWD Water Service Reliability – Single Dry Year
Retail Single Dry Year Supply and Demand Comparison, AFY

		2025	2030	2035	2040	2045
<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
	Demand	24,612	27,454	30,624	34,158	38,019
	<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
	Demand	5,555	6,426	7,168	7,997	8,921
	<i>Difference</i>	1,476	1,640	1,796	1,969	2,158

Table 5.19-7 – WMWD Water Service Reliability – Five Consecutive Dry Year
Retail Multiple Dry Year Supply and Demand Comparison, AFY

			2025	2030	2035	2040	2045
First Year	<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
		Demand	24,612	27,454	30,624	34,158	38,019
		<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
	<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
		Demand	5,555	6,426	7,168	7,997	8,921
		<i>Difference</i>	1,476	1,640	1,796	1,969	2,158
Second Year	<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
		Demand	24,612	27,454	30,624	34,158	38,019
		<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
	<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
		Demand	5,555	6,426	7,168	7,997	8,921
		<i>Difference</i>	1,476	1,640	1,796	1,969	2,158
Third Year	<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
		Demand	24,612	27,454	30,624	34,158	38,019
		<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
	<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
		Demand	5,555	6,426	7,168	7,997	8,921
		<i>Difference</i>	1,476	1,640	1,796	1,969	2,158
Fourth Year	<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
		Demand	24,612	27,454	30,624	34,158	38,019
		<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
	<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
		Demand	5,555	6,426	7,168	7,997	8,921
		<i>Difference</i>	1,476	1,640	1,796	1,969	2,158
Fifth Year	<i>Potable</i>	Supply	27,073	30,199	33,686	37,574	41,821
		Demand	24,612	27,454	30,624	34,158	38,019
		<i>Difference</i>	2,461	2,745	3,062	3,416	3,802
	<i>Non-Potable</i>	Supply	7,031	8,066	8,964	9,966	11,079
		Demand	5,555	6,426	7,168	7,997	8,921
		<i>Difference</i>	1,476	1,640	1,796	1,969	2,158

Commercial customers account for 5% of WMWD's retail water supply use, while multi-family residential only uses 3% of the supply; these two uses account for a small percentage of the water supplied to the area. While the Mixed-Use – Urban land designation of the proposed Project would result in greater water usage than the current commercial land use designation, a slight increase in water usage would actually only result in a negligible change to water supplies. Therefore, there would be less than significant impacts to water supplies.

Although the Project is changing land use, it would result in a very small incremental increase in population growth, approximately one and a half percent, of what was anticipated under the GP 2025 typical growth scenario (refer to Section 5.14 Population and Housing). Thus, the Project is within the City's anticipated 2025 growth projection. Implementation of the Project would not require new or expanded entitlements for water supplies; potential impacts would be **less than significant**.

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

The City provides sewer services to the proposed Project site. As discussed for Threshold A, a Sewer Capacity Evaluation (Sewer Study 2022, Appendix J) was conducted to assess the impact the Project will have on the City's wastewater collection system. As described for Threshold A above, the Sewer Capacity Evaluation determined that the City's collection system has sufficient capacity to convey existing PWWFs downstream of the Project without exceeding the established flow depth criteria.

As it has been determined that the City's existing collection system has sufficient capacity to convey proposed PWWFs downstream of the Project without exceeding the established flow depth criterion, the Project would result in a determination that the Project's wastewater treatment provider (the City) has adequate capacity to serve the Project's projected demand in addition to the City's existing commitments. Therefore, potential impacts would be **less than significant**.

Threshold D: *Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*

The City of Riverside Public Works Department collects trash from 70 percent of the City's households and the remainder is collected by private contractors. Athens, one of the City's franchise haulers would provide solid waste disposal services for the Project.

The Project would generate both construction and operational solid waste, which would be disposed of at nearby landfills. Per the City of Riverside's General Plan, Public Facilities and Infrastructure Element, all solid waste collected is tipped at the Robert A. Nelson Transfer Station, which is owned by the County of Riverside. The waste is then transferred to either the Badlands Landfill in Moreno Valley, the El Sobrante Landfill located south of the City of Corona or the Lamb Canyon Landfill located between the City of Beaumont and the City of San Jacinto for disposal. Implementation of the General Plan is anticipated to increase solid waste collection and disposal

capacity between 884 tons per day and 2,573 tons per day at buildout. By 2025 the City will contribute 14% of the amount of solid waste. As shown on Table 5.16-M of the City's GP 2025 PEIR, the generation of solid waste for Multi-Family Residents is anticipated to increase between 139.30 tons for typical and 208.90 for maximum. The Project falls under this category as it has more than 15 dwelling units/acre. With the remaining capacity of the current landfills, the proposed Project is not anticipated to exceed capacity of the landfills. In addition, Public Resource Code Section 41780 requires every city and county to divert from landfills at least 50% of waste generated within their jurisdiction, and the City has exceeded its required reduction in recent years. (GP 2025, GP 2025 PEIR)

Per the California Integrated Waste Management Act of 1989, the Project would have access to green waste collection, curbside recycling, newspaper drop-off, car tire amnesty, household hazardous waste and other service which will divert solid waste to the landfills (GP 2025).

As outlined in 5.19.3, Project Design Considerations, the Project will adhere to CALGreen building code standards which include management of construction waste, reuse or recycling of excavated soil and land clearing debris, and recycling by occupants (per Section 5.7.3.3, summary of the CALGreen standards that are applicable to the Project) as further outlined below:

- Construction waste management - Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste or meet a local construction and demolition waste management ordinance, whichever is more stringent.
- Excavated soil and land clearing debris - 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.
- Recycling by Occupants - Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

With compliance with the CALGreen standards, the Project will not 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. Therefore, potential impacts would be **less than significant**.

5.19.6 Proposed Mitigation Measures

A EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Implementation of the proposed Project will not result in any significant impacts related to utilities and service systems, and therefore, no mitigation measures are necessary.

5.19.7 Cumulative Environmental Effects

As discussed in Section 4, Environmental Setting, cumulative development in the City and surrounding cities and County would include residential development, warehouses, commercial, office, and public facilities. As discussed, the Project would not result in any significant impacts related to utilities and service systems, nor would the Project impair the attainment of solid waste reduction goals. Therefore, cumulative impacts would be **less than significant** related to utilities and service systems.

5.19.8 References

The following references were used in the preparation of this section of the EIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
GP 2025 PEIR	City of Riverside, <i>City of Riverside General Plan 2025 Program Environmental Impact Report (PEIR)</i> (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed March 15, 2023)
MGSP 1985	City of Riverside, <i>Mission Grove Specific Plan</i> , Adopted 1985, as Amended 1986 to 1997. (Available at https://riversideca.gov/cedd/planning/city-plans/specific-plans-0 , accessed on March 15, 2023)
rcwaste.org	Riverside County Department of Waste Resources (Available at https://www.rcwaste.org/ , accessed January 2023)
CalRecycle	Available at https://calrecycle.ca.gov/ , accessed January 2023
WQMP 2022	Rick Engineering Company, <i>Project Specific Water Quality Management Plan: 375 Alessandro Boulevard</i> . August 25, 2022 (Appendix G)
UWMP	Western Municipal Water District (WMWD), 2020 Urban Water Management Plan, June 16, 2021, revised March 30, 2022. (Available at https://www.wmwd.com/DocumentCenter/View/5339 , accessed March 2023)
Sewer Study 2022	Carollo Engineering, <i>Mission Grove Apartments Sewer Study</i> . November 23, 2022 (Appendix J).
2019 Sewer Master Plan	City of Riverside Public Works Department, January 2020. <i>UPDATE OF THE INTEGRATED MASTER PLAN FOR THE WASTEWATER COLLECTION AND TREATMENT FACILITIES</i> . (Available at https://riversideca.gov/publicworks/sewer/wqcp.asp , accessed January 2023)

5.20 Wildfire

This section analyzes the Project's potential impacts related to fire protection services, emergency response or evacuation plans, and wildfire risks. The information in this section is based on the architectural plans, including building elevations, section views, visual simulations, and review of aerial photographs, street views, and the General Plan 2025 Public Safety Element and Public Safety Technical Report.

5.20.1 Setting

A wildfire is a nonstructural and unplanned fire that occurs in vegetative fuels. Wildfires can occur in undeveloped areas and spread to urban areas where the landscape and structures are not designed and maintained to be ignition resistant. Wildfires burn in many types of vegetation—forest, woodland, scrub (including chaparral, sage scrub, and desert scrub), and grassland. Many species of native California plants are adapted to fire.

The City's undeveloped hillsides are visually appealing but can provide fuel for a wildfire or mudslides in heavy rains. The Project site is not located within a High or Very High Fire Hazard Severity Zone, nor are there any hillsides or wildland areas within or adjacent to the site, as it is developed. However, while the Project site is within a mostly urbanized area, no part of the City is immune from fire danger. Structural and automobile fires represent the most common types of fire in urbanized areas and can be caused by a variety of human, mechanical and natural factors. Urban fires have the potential to spread to other structures or areas, particularly if not extinguished promptly. Proactive efforts, such as fire sprinkler systems, fire alarms, fire resistant roofing and construction methods, can collectively lessen the likelihood and reduce the severity of urban fires.

Areas of dense, dry vegetation, particularly in canyon areas and on hillsides, pose the greatest potential for wildfire risks. An urban/wildland interface is an area where urban development is in proximity to open space or "wildland" areas. The potential for wildland fires represents a hazard where development is adjacent to open space or within close proximity to wildland fuels or designated fire severity zones. Figure CP-5: Very-High Fire Hazard Severity Zone Areas, of the GP 2025 Public Safety Technical Report identifies Very High Fire Hazard Severity Zones, Local Responsibility Areas and State Responsibility Areas. The proposed Project site is not located in these zones. Furthermore, there are no major urban/wildland interface areas near the proposed Project site.

City of Riverside Fire Department

Delivering and maintaining such a high level of service in the future as the City grows is a major concern to the City of Riverside Fire Department (RFD). RFD's Fire Department Operations Division responds to more than 46,000 calls for service annually, as of 2022. RFD has established a performance goal for emergency response to arrive within 6 minutes of dispatch over 90 percent of the time.

For purposes of underwriting fire insurance, communities are classified with respect to their fire defenses and physical characteristics. These classifications are referred to as ISO ratings and

range on a scale of 1 to 10. ISO Class 1 represents the highest level of fire protection and ISO Class 10 represents the lowest level of protection. A community's ISO rating takes into account water supply, fire department capabilities, communities, regulations, hazards, and climate. The availability of an adequate water supply and delivery system is a major consideration. In 2019 RFD was awarded the highest available ISO rating of Class 1. (General Plan 2025, Public Safety Technical Report)

RFD's major facilities include 14 fire stations throughout the City, Administration/Fire Prevention offices, and a Fire Training Center used for the advanced training of personnel. The 14 fire stations house 212 sworn firefighter personnel and 72 emergency services personnel including Basic Life Support and Advanced Life Support personnel. RFD staff includes 23 civilian personnel including administrative, inspector, engineering, and support staff. (General Plan 2025, Public Safety Technical Report)

The RFD provides fire protection for the Mission Grove area from two facilities that are closest to the project site:

- Orangecrest Station No. 11, located at 19595 Orange Terrace Parkway, is less than 2 miles from the Mission Grove Shopping Center and Project site.
- Canyon Crest Station No. 9, located at 6674 Alessandro Boulevard, is less than 2 miles from the Mission Grove Shopping Center and Project site.

5.20.2 Related Regulations

5.20.2.1 Federal Regulations

No Federal plans, policies, regulations, or laws related to fire response and wildfire hazards apply to the project under consideration.

5.20.2.2 State and Regional Regulations

California Department of Forestry and Fire Protection

The Cal Fire is dedicated to the fire protection and stewardship of over 31 million acres of California's wildlands. The Office of the State Fire Marshal supports the Cal Fire mission to protect life and property through fire prevention engineering programs, law and code enforcement, and education. The State Fire Marshal provides for fire prevention by enforcing fire-related laws in state-owned or -operated buildings, investigating arson fires in California, licensing those who inspect and service fire protection systems, approving fireworks as safe and sane for use in California, regulating the use of chemical flame retardants, evaluating building materials against fire safety standards, regulating hazardous liquid pipelines, and tracking incident statistics for local and state government emergency response agencies. Classification of a zone as moderate, high, or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. Each area of the map gets a score for flame length, embers, and the likelihood of the area burning. Scores are then averaged over the zone areas. Final zone class (moderate, high, and very high) is based on the average scores for the zone (FHSZ Viewer).

The Board of Forestry and Fire Protection (Board) is a government-appointed body within the Cal Fire. It is responsible for developing the general forest policy of the State, determining the guidance policies of the Cal Fire, and representing the State's interest in Federal forestland in California. Together, the Board and the Cal Fire work to carry out the California Legislature's mandate to protect and enhance the State's unique forest and wildland resources.

The Board is charged with protecting all wildland forest resources in California that are not under Federal jurisdiction. These resources include major commercial and non-commercial stands of timber, areas reserved for parks and recreation, woodlands, brush-range watersheds, and all private and State lands that contribute to California's forest resource wealth.

2019 Strategic Fire Plan for California

The Board has adopted Strategic Fire Plans for California since the 1930s and periodically updates them to reflect current and anticipated needs of California's wildland. The Strategic Fire Plan is the State's road map for reducing the risk of wildfire through planning and prevention to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The Strategic Fire Plan is adopted to better respond to the changes of the environmental, social, and economic landscape of California's wildlands and to provide the Cal Fire with appropriate guidance for adequate statewide fire protection of State responsibility areas. The latest Strategic Fire Plan is dated January 22, 2019. Cal Fire implements and enforces the Board's policies and regulations. The 2019 Strategic Fire Plan reflects Cal Fire's focus on (1) improvement of core capabilities (2) enhancement of internal operations (3) ensuring health and safety, and (4) building an engaged, motivated, innovative workforce. Cal Fire is in the process of developing a new 2024 Strategic Plan, building on the 2019 iteration.

California Office of Emergency Services

The California Emergency Management Agency was incorporated into the Governor's Office on January 1, 2009, by Assembly Bill (AB) 38, and merged the duties, powers, purposes, and responsibilities of the Governor's Office of Emergency Services (Cal OES) with those of the Governor's Office of Homeland Security. Cal OES is responsible for the coordination of overall State agency response to major disasters in support of local government. The agency is responsible for ensuring the State's readiness to respond to and recover from all hazards—natural, man-made, emergencies, and disasters—and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts.

The Cal OES Fire and Rescue Division is responsible for the development, implementation and coordination of the California Fire Service and Rescue Emergency Mutual Aid Plan. The Cal OES Operations Division under the Fire and Rescue Branch. The response of fire and rescue personnel and resources, through the Mutual Aid System, includes responses to major fires, earthquakes, tsunamis, hazardous materials and other disasters.

California Building Code

The California Building Standards Code (CBC), in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. The CBC

is based on the International Building Code but has been amended for California conditions. The CBC is updated every three years, and the current 2022 CBC went into effect January 1, 2023. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC related to this Project include the installation of fire sprinklers in all new residential buildings, the establishment of fire resistance standards for fire doors, building materials, and particular types of construction, and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The CFC, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The CFC is updated every three years, and the current 2022 CFC went into effect January 1, 2023. It is effective statewide, but a local jurisdiction may adopt more restrictive standards based on local conditions under specific amendment rules prescribed by the State Building Standards Commission. The CFC regulates building standards in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection.

Very High Fire Hazard Severity Zone

Public Resource Code Sections 4201 to 4204 and Government Code Title 5, Part 1, Chapter 6.8, 51178 to 51179 and 51181 direct Cal Fire to identify areas of very high fire hazard within local responsibility areas. Mapping of Very High Fire Hazard Severity Zones (VHFHSZ) is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities in order to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Local Responsibility Area (LRA) VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005, effective in 2008, the California Building Commission adopted CBC Chapter 7A, requiring new buildings in VHFHSZ to use ignition-resistant construction methods and materials. CBC Chapter 7A is applicable to building materials, systems, and/or assemblies used in the exterior design and construction of new buildings in a Wildland-Urban Interface Fire Area as defined in CBC Section 702A. Chapter 7A establishes minimum standards for the protection of life and property by increasing the ability of a building in any fire hazard severity zone within State Responsibility Areas or any wildland-urban interface fire area to resist the intrusion of flames or burning embers projected by a vegetation fire, and therefore contributes to a systematic reduction in conflagration losses. Related regulations include CFC Chapter 49, which provides the requirements for wildland-urban interface areas, and Title 19 California Code of Regulations (CCR) § 3.07, which provides provisions on clearances. Additionally, Title 14 CCR § 1299 – 1299.05 discuss fire hazard reduction around buildings and structures, with § 1299.03 providing

Zone 1 and Zone 2 requirements for defensible space and § 1299.05 discussing Alternate Methods.

5.20.2.3 Local Regulations

Riverside General Plan 2025

The GP 2025 contains guiding principle and policies to protect against public safety issues within the City in the Public Safety Element, Phase 1 General Plan Update – Adopted 2021.

Guiding Principle: Comprehensively address the public safety needs and concerns of its residents, businesses, institutions, and visitors in a proactive and coordinated way to ensure protection from foreseeable natural and human-caused hazards.

Policy PSE-1 – Natural Hazards

Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding, drought, and structural and wildland fires.

Policy PSE-2 – Natural Hazards

Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding, drought, and structural and wildland fires.

Policy PSE-3 – Transportation

Minimize the risk of potential hazards associated with air and ground transportation.

Policy PSE-4 – Emergency Services

Provide high-quality and responsive police, fire, and emergency services to all residents and businesses in Riverside.

Policy PSE-6 – Homelessness

Reduce homelessness in Riverside through coordinated implementation of and equitable accessibility to public safety, economic and social programs.

City of Riverside Local Hazard Mitigation Plan (LHMP)

The City of Riverside's Local Hazard Mitigation Plan (LHMP) dated January 1, 2018, evaluated and assessed the risks that identified hazards pose to the City, reviewed and assessed past disaster occurrences, and, through the engagement of the community, set goals to mitigate potential risks to reduce or eliminate long-term risk to people, property, and the environment from natural, man-made, and technological hazards.

Emergency Operations Plan

The Emergency Operations Plan, approved in May 2002 and updated in 2017, addresses the City's planned response to emergencies associated with natural disasters and technological incidents – including both peacetime and wartime nuclear defense operations.

Hazardous Materials Response Plan

The RFD has two levels of a Hazardous Materials Response Plan. The first level is for all responders and the second is specifically for the City's Hazardous Materials Response Team. In addition, the County has a similar plan for multi-agency hazmat response.

5.20.3 Project Design Considerations

The Project plans include a Fire Access Plan, and the Project will provide adequate fire access to ensure the safety of the residents. The fire access will leave room for the fire trucks to come in and out of the Project site and will allow them to reach all areas of the site in case of a fire. As RFD requires a minimum 20-foot-wide fire lane, the Project's fire access will have a clear fire lane/fire access to allow room for the fire trucks to navigate through the Project. There will be 4 fire hydrants throughout the site and three additional along the Project's frontage with Mission Village Drive and Mission Grove Parkway South.

5.20.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that impacts related to the Mission Grove Apartments Project may be considered potentially significant if the Project would:

- (Threshold A) Substantially impair an adopted emergency response plan or emergency evacuation plan;
- (Threshold B) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- (Threshold C) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- (Threshold D) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

5.20.5 Environmental Impacts

Threshold A: *Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

The Project will be served by Mission Grove Parkway South and Mission Village Drive. No street closures are required during the Project's construction. Per the GP 2025, Public Safety Element Technical Background Report (TBR), Figure CP-8: Evacuation Routes, Alessandro Boulevard is an arterial evacuation route and the SR-60 and I-215 are designated as freeway evacuation routes. Thus, the Project site is located adjacent to and has access to Alessandro Boulevard and SR-60 and I-215, designated evacuation routes.

Emergency response and evacuation procedures would be coordinated through the City in coordination with the police and RFD. The Project would not impair an adopted emergency response plan or evacuation plan and would comply with necessary procedures. While there would be an increase in the city population of 829 persons from the proposed Project, as outlined in Section 5.14 Population and Housing, the Project is anticipated to only contribute approximately 1.4 percent of the total anticipated population growth from 2020 to 2040 (per the City's 6th Cycle Housing Element Update). Due to its small proportion of the GP anticipated population growth, the proposed Project would not result in significant enough increase in population to directly impair the use of Alessandro Boulevard as an evacuation route. The Project's surrounding roadways would continue to provide emergency access to the Project area and to surrounding properties during construction and operation of the Project. Therefore, the Project will have a **less than significant** impact directly or indirectly to an emergency response or evacuation plan.

Threshold B: *Due to slope, prevailing winds, and other factors, would the Project exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

The Project site is bordered by Mission Grove Parkway South to the east and Mission Village Drive to the south. The Project site has the Mission Grove Shopping Center and parking to the north and west. Outside of the shopping center is existing residential development to the south, west and north, and commercial/retail to the east. The only open space area with vegetation that could fuel a wildland fire near the Project site is the Sycamore Canyon Wilderness Park, located approximately 3,500 feet to the northeast. If there were a wildland fire in the Sycamore Canyon Wilderness Park it would not be expected to spread to the Project site due to the distance between them and separation by existing development and Alessandro Boulevard. For these same reasons, if a fire were to occur at the Project site it would not be expected to spread to the Sycamore Canyon Wilderness Park.

The Project will incorporate RMC standards related to fire suppression at the Project site such as smoke detectors meeting the current CBC and CFCs installed in all units and other enclosed common areas such as hallways, recreation rooms, and utility rooms. Additional fire suppression

equipment such as alarm systems, fire extinguishers and sprinklers will also be incorporated as recommended by the RFD. Furthermore, Project structures would be required to comply with the CFC with regard to emergency fire access and use of building materials that would limit the spread of wildfire to the greatest extent possible. This would reduce potential spread of a fire from the Project site to areas outside the Project site boundary, reducing the Project's potential to exacerbate wildfire risks.

Overall, the Project would be constructed in compliance with the CFC and CBC, along with being compliant with the GP 2025 and RFD requirements. The Project would not expose Project occupants to pollutant concentrations from wildfire or the uncontrolled spread of a wildfire by exacerbating wildfire risks. Impacts would be **less than significant** with compliance with the CFC and CBC and RFD requirements.

Threshold C: *Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

The Project site is currently fully developed with a structure, surface parking lot, and landscaped areas. The Project site is surrounded by roadways and other residential and commercial/retail development. There are existing utilities adjacent to the Project site that will serve the Project. There are no offsite staging areas, and no offsite improvements are required that would extend into an undeveloped wildland area.

The Project would not require the installation or maintenance of other associated infrastructure beyond already existing developed conditions in Mission Grove Parkway South and Mission Village Drive to the east and south, where the Project would connect to existing utilities. Implementation of the Project would not require installation of new or increased level of infrastructure maintenance into wildland areas that could exacerbate fire risk or result in temporary or ongoing impacts to the environment. The Project's potential to exacerbate wildfire risk from installation and maintenance of infrastructure would be **less than significant**.

Threshold D: *Would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

The Project site is developed and relatively flat. There are no steep slopes on or around the Project site. The existing drainage patterns have been identified as southwesterly overland flow. The proposed drainage patterns will be preserved at the existing site drainage discharge

locations. The proposed Project includes four biotreatment basins located throughout the site; site runoff in the parking lot and roof runoff will be directed to these proposed Modular Wetlands Biofiltration systems which have been incorporated into the site design to fully address storm water runoff volumes. The proposed Project will not result in an increase in the rate or amount of surface runoff from the site, and in turn would not result in flooding or substantial erosion that could cause slope instability.

The Project would be constructed in compliance with the CFC and CBC, along with being compliant with the GP 2025 and RFD requirements. The Project would not expose people or structures within the Project to significant risks from wildfire or exacerbate wildfire risks from the Project to adjacent areas.

Impacts related to exposure of 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 would be **less than significant** with compliance with the CFC and CBC and implementation of design considerations, including landscaping and drainage improvements.

Threshold F: *Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?*

Per a review of Figure CP-5 – Very-High Fire Hazard Severity Zone Areas (GP 2025 Public Safety Element TBR), the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

As outlined in Threshold B analysis above, the proposed Project site is not located within an area or land classified as a VHFHSZ. The only open space area with vegetation that could fuel a wildland fire near the Project site is the Sycamore Canyon Wilderness Park, located approximately 3,500 feet to the northeast. If there were a wildland fire in the Sycamore Canyon Wilderness Park, it would not be expected to spread to the Project site due to the distance between them and separation by existing development and Alessandro Boulevard. For these same reasons, if a fire were to occur at the Project site it would not be expected to spread to the Sycamore Canyon Wilderness Park.

The Project will incorporate RMC standards related to fire suppression at the Project site such as smoke detectors meeting the current CBC and CFCs installed in all units and other enclosed common areas such as hallways, recreation rooms, and utility rooms. Additional fire suppression equipment such as alarm systems, fire extinguishers and sprinklers will also be incorporated as recommended by the RFD. Furthermore, Project structures would be required to comply with the CFC with regard to emergency fire access and use of building materials that would limit the spread of wildfire to the greatest extent possible. This would reduce potential spread of a fire from the Project site to areas outside the Project site boundary, reducing the Project's potential to exacerbate wildfire risks.

The nearest fire stations are Orangecrest Station No. 11, located at 19595 Orange Terrace Parkway and Canyon Crest Station No. 9, located at 6674 Alessandro Boulevard, both of which are less than 2 miles from the Project site. Due to the Project's close proximity to existing fires

stations, adequate response times can be provided by RFD. Also, the Project plans include a Fire Access Plan which demonstrates adequate fire access will be provided.

The Project would be constructed in compliance with the CFC and CBC, along with being compliant with the GP 2025 and RFD requirements. The Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Impacts would be **less than significant** with compliance with the CFC and CBC and implementation of design considerations.

5.20.6 Proposed Mitigation Measures

As there would be a **less than significant impact** related to wildfire as a result of the proposed Project, no Mitigation Measures are required.

5.20.7 Cumulative Environmental Effects

The Project will have a **less than significant impact** directly or indirectly to an emergency response or evacuation plan and mitigation is not required. With the Project design (including Fire Access Plan), the two nearest Fire Stations being less than two miles from the Project site, the Project's incremental impacts on fire protection services would be **less than significant**, and mitigation is not required. The Project's potential to exacerbate wildfire risk from installation and maintenance of infrastructure would be **less than significant** and mitigation is not required.

The planned and pending projects near the Project site, listed in Table 4.0-1 of this EIR, include residential, commercial, distribution warehouse, and Meridian Specific Plan – West Campus Upper Plateau Project with warehouses for high-cube fulfillment and cold storage, business park office, warehouse, and mixed-use buildings, retail, and park (active and public). These planned and pending projects would increase structural development near the Project site, in turn exposing new residents and property to potential risks from fires in the area.

The Project site is not located in a VHFHSZ and the other cumulative projects are not either. With compliance with the CFC and CBC and implementation of design considerations potential impacts from the Project are reduced to less than significant levels. The other cumulative projects would also be required to comply with applicable codes, laws and standards and implement any project specific mitigation measures as appropriate identified through the CEQA review process for that project's specific site conditions and design. All cumulative projects are required to be constructed in compliance with applicable CBC and CFC that ensure appropriate measures, including fire prevention and fuel modification features, are provided so that urban development does not expose project occupants to increased and uncontrolled fire hazards. Applicable CBC and CFC standards are designed to minimize the potential for uncontrolled fires. Furthermore, the cumulative projects would not result in permanent road closures, nor impede an established emergency or evacuation access route, or interfere with emergency response requirements, or fire protection response time standards. The Project is surrounded by mostly urban development and served by existing infrastructure. It would not contribute incrementally with other projects in

the City or surrounding area to create an environment that would exacerbate wildfire risks. Cumulative wildfire hazard impacts **would be less than significant**.

5.20.8 References

The following references were used in the preparation of this section of the EIR:

Cal Fire 2019 Strategic Plan	Strategic Plan January 2019 (Available at https://www.paperturn-view.com/cal-fire-communications/strategicplan2019-final?pid=MjU253660&p=3 , accessed September 2023)
Cal OES	Cal OES Governor's Office of Emergency Services, Fire & Rescue, Fire Operations webpage (Available at https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/fire-operations/ , accessed September 2023)
FHSZ Viewer	California Fire Hazard Severity Zone Viewer. (Available at: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414 , accessed September 2023)
GP 2025	City of Riverside, General Plan 2025, Public Safety Element and Public Safety Technical Report. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environment Impact Report (SCH# 2004021108), Section 5.13 Public Services. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)

6.0 Other CEQA Topics

This section analyzes the Project's consistency with regional plans, potential irreversible environmental effects, and growth-inducing impacts of the proposed Project.

6.1 Consistency with Regional Plans

CEQA, Section 15125(d), requires an EIR to discuss any inconsistencies between the proposed Project and applicable general and regional plans.

City of Riverside General Plan and Municipal Code

A discussion of the Project's consistency with applicable GP 2025 objectives and policies in the Housing Element, Land Use and Urban Design Element, Circulation and Community Mobility Element, and Public and Safety Element is contained in Section 5.11 Land Use and Planning of this EIR, Table 5.11-1 Consistency with Applicable General Plan Policies in these elements. As discussed in Section 5.11 Land Use and Planning, the Project would comply with all applicable GP 2025 objectives and policies in the Housing Element, Land Use and Design Element, Circulation and Community Mobility Element, and Public and Safety Element, with the exception of Policy CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP. The Project's proposed 35.0 dwelling units per acre would exceed the maximum permitted density of 6.0 dwelling units per acre within Zone C2. However, the Project does not exceed the non-residential average criteria (limited to 200 people per acre) or single-acre intensity criteria (limited to 500 people per acre). Thus, the Project would be partially inconsistent with and partially consistent with GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1. Section 5.11 Land Use and Planning also includes a discussion of consistency with applicable sections of the Zoning and Grading Codes. The proposed Project will comply with the applicable GP 2025 Housing Element Guiding Principle and policies (HE-2, HE-3 and HE-4) by increasing the types and availability of housing in the City. The Project will comply with smart growth principles by providing multi-family housing options (studio, one-, two-, and three-bedroom residential apartment units) in a mixed-use environment, it will be located adjacent to various commercial and retail businesses within walking distance, and will provide residents with nearby access to various transportation options. The Project provides for enhanced residential architecture and aesthetically coherent design elements that are compatible and complimentary with the existing surrounding residential built environment in terms of colors and materials and landscaping.

The Project will provide appropriate site design, landscaping, and building design in order to comply with the GP 2025 Land Use and Urban Design Elements. The proposed Project includes a General Plan Amendment (GPA) to change the existing General Plan Land Use Designation of the project site from C - Commercial to MU-U - Mixed Use-Urban, to allow residential land use. As outlined in Section 3.0 Project Description, the proposed Project would comply with the City's Site Development Standards (Table 3.0-3 Building Development Standards). Upon approval of the Project, including the proposed GPA, the proposed development would comply with the new applicable land use designation.

The Zoning Code Amendment request would change the on-site zoning designation from CR – Commercial Retail – to MU-U – Mixed-use Urban. Mixed Use-Urban zoning has been selected for this site to bring together medium- to high-density residential and retail development in a mixed-use environment. The Mixed Use-Urban zone will allow the proposed apartment project to be introduced into the existing retail environment and will create a framework for integration of uses with features such as pedestrian connectivity, walkability, and shared elements including parking. The proposed Project is consistent with the development standards of the proposed zone.

As outlined further in Section 5.11 Land Use and Planning, the project will meet all applicable standards in the RMC Title 7 Noise Control, Title 16 Buildings and Construction, Title 17 Grading Code, and Title 20 Cultural Resources. The proposed Project includes a Specific Plan Amendment (SPA) to revise the Mission Grove Specific Plan. The proposed revisions to the Mission Grove Specific Plan include adding the Mixed-Use – Urban classification for 9.92 acres, with density of 40 dwelling units per acre, and number of Mixed-Use – Urban units of 396.80, and reducing the Non-Residential, Retail Business & Office classification to 59.84 acres. The Project includes 604 parking spaces in total. Of these, 513 parking spaces will be dedicated for the Proposed apartment project, and 91 will be shared between the Proposed apartment project and the existing adjacent retail site. The shared parking will be memorialized in a new covenant and restriction agreement between the residential developer and Mission Grove Plaza. A 15% parking reduction request has been outlined for the Project site as noted in the Project’s Specific Plan Amendment, per City of Riverside Municipal Code 19.580.060.C.2.b. Upon approval of the Project, including the proposed SPA, the proposed development would comply with the new applicable zoning regulations.

As discussed above, the Project would be consistent with all applicable GP 2025 objectives and policies except for Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, in which the Project would be partially consistent and partially inconsistent. As the Project’s projected residential density would exceed and be partially inconsistent with Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, the Project would result in a **significant and unavoidable impact**. There are no feasible mitigation measures that would make the Project completely consistent with GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

For a more detailed analysis of the Project’s consistency with the MARB/IPA LUCP refer to Section 5.9 Hazards and Hazardous Materials (Subsection 5.9.6, Environmental Impacts) or Section 5.11 Land Use and Planning (Subsection 5.9.6, Environmental Impacts). The Project site is located within the March Air Reserve Base (MARB) airport influence area, within Compatibility Zone C2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP). The Riverside County Airport Land Use Commission (ALUC) prepared a Staff Report (dated September 14, 2023) analyzing the Project’s consistency with applicable airport land use compatibility criteria as outlined in further detail below. In summary, the Riverside County

ALUC Staff Report for the project concluded that the project was inconsistent with the MARB/IPA ALUCP based on the following:

- It exceeds the Zone C2 residential density criteria maximum of 6.0 du/ac.

The Riverside County ALUC Staff Report for the project concluded that the project was consistent with the following MARB/IPA ALUCP criteria:

- Non-residential average intensity (calculating with two different methods);
- Non-residential single-acre intensity.

The Project would be consistent with Compatibility Zone C2's non-residential density, height of structures, glare, electrical interference and there would be no safety issues related to these topics. However, the Project would be inconsistent with the allowable maximum residential density criteria for the Compatibility Zone C2. Due to the inconsistency of the maximum residential density, the project would result in a **significant and unavoidable impact**. There are no feasible mitigation measures that would reduce impacts related to inconsistency with the residential density criteria.

The City Council of the City of Riverside, by a two-thirds vote (per RMC Title 19), has the authority to overrule the Riverside County ALUC decision based on specific findings that the proposed Project is consistent with the purposes of ALUC law to protect public health, safety and welfare ensuring (1) the orderly expansion of airports, and (2) the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The Project is consistent with the purpose and intent of ALUC law and the MARB/IPA LUCP based on the following:

- 1) The Project is consistent with the residential development surrounding MARB/IPA, specifically in Zone C2 and will not result in the encroachment of incompatible residential densities affecting current or future March ARB/IPA operations. The Project involves the redevelopment of an underutilized commercial parcel with a multi-family residential development. The Project's proposed General Plan designation and zoning of Mixed Use-Urban, is consistent with surrounding development, and would assist in transitioning between commercial and single-family residential uses.

The Project site is bordered on the north, west, and east (across Mission Grove Parkway) by the Mission Grove Plaza Shopping Center, which has a General Plan Land Use Designation of C – Commercial and is zoned CR-SP – Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and is developed with retail uses. Multi-family residences are located further north (across Alessandro Boulevard), which have a General Plan Land Use Designation of HDR – High-Density Residential, and area zoned R-3-3000-SP – Multi-Family Residential and Specific Plan (Mission Grove) Overlay Zones. The Project site is bordered on the south by a single-family residential neighborhood (across Mission Village Drive), which has a General Plan Land Use Designation of Medium High Density Residential (MHDR) and is zoned R-1-7000-SP – Single Family Residential and Specific Plan (Mission Grove) Overlay Zones.

Several multi-family residential uses are located in Zone C2, near the Project site. There is a condominium complex, Mission Villas, located at 200 E. Alessandro Boulevard, adjacent to the Project site, across from Alessandro Boulevard. The Mission Grove Park apartments, located at 7450 Northrop Drive, are located closer to the end of Runway 14-32 than the Project. Mission Grove Park consists of 432 units and has a density of 16 dwelling units per acre. Estancia, located at 7871 Mission Grove Parkway South, consists of 208 units and has a density of 1.3 du/ac. The Project is consistent with other multi-family residential developments in the C2 Zone. Additionally, the Project consist of infill development of a commercial site. The vast majority of Zone C2 in the City of Riverside has been built out, largely by single family residences. Few infill sites, such as the Project are available for development. As such, the Project would not encourage other developments to exceed Zone C2 density standards or encroach upon MARB/IPA operations.

Therefore, the Project will not affect the orderly expansion of the MARB/IPA.

- 2) The Project is consistent with the aircraft noise standards of the ALUCP and the requirements of Public Utilities Code (PUC) Section 21670. The MARB/IPA ALUCP provides the CNEL considered normally acceptable for new residential uses in the vicinity of MARB/IPA, which is 65 dBA. The Project site is approximately 3.3 miles from the end of Runway 14-32. The MARB/IPA ALUCP depicts the site as being below the 60 CNEL range from aircraft noise. Therefore, ALUC found no special measures were required to mitigate aircraft-generated noise. Because the Project is consistent with the noise standards in the March MARB/IPA ALUCP, the Project also complies with noise standards in the City of Riverside General Plan (General Plan Noise Element, Figure N-10). While multi-family or mixed uses are not defined in the City's General Plan Noise Element, the "normally acceptable" noise level for an infill single family residential use is between 55 and 65 dBA CNEL. The General Plan Noise Element Figure N-9 shows the Project site as being just outside the 60-65 dB CNEL noise contour projected for MARB/IPA operations. Accordingly, noise exposure from MARB/IPA would not exceed normally acceptable levels for the Project site.

The Project will comply with the Riverside Municipal Code requirements regarding construction noise and will not compound noise related to MARB/IPA operations. All construction would take place between 7:00 am and 7:00 pm on weekdays, 8:00 am and 5:00 pm on Saturdays, and would not take place at any time on Sundays or federal holidays.

Consistent with MARB/IPA ALUCP, the Project will utilize standard construction techniques to ensure interior noise levels from aviation-related sources are no more than CNEL 40 dB.

The Project will comply with ALUC noticing conditions and will provide a "Notice of Airport in Vicinity" to all prospective purchasers and occupants of the property.

The Project does not propose any uses specifically prohibited or discouraged in compatibility Zone C2 (highly noise-sensitive outdoor nonresidential uses), such as major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.

The Project also does not propose noise sensitive uses such as children's schools, day care centers, libraries, hospitals, or nursing homes.

Therefore, the Project minimizes the public's exposure to excessive noise and safety hazards within areas around MARB/IPA.

A City Council proposed overrule of an ALUC action must provide a copy of the proposed decision and findings to both ALUC and the California Division of Aeronautics, a minimum of 45 days prior to decision to overrule ALUC. These agencies have 30 days in which to provide comments to City Council.

Air Quality Management Plan (AQMP)

Section 5.3 Air Quality discusses consistency with the current Air Quality Management Plan (AQMP). As discussed in Section 5.3 Air Quality, the Project's consistency with the 2022 AQMP was determined using the project consistency criteria defined in Chapter 12, Section 12.2 and Section 12.3 of the South Coast Air Quality Management District's (SCAQMD's) CEQA Air Quality Handbook. As discussed in Section 5.3, the Project would not result in or cause National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS) violations and construction and operational-source impacts would not exceed the applicable SCAQMD regional and localized thresholds. As such, the Project is therefore considered to be consistent with the AQMP.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

Consistency with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is contained in Section 5.4 Biological Resources. As discussed in Section 5.4 Biological Resources, the Project site consists of an existing structure with associated paved surface parking within a developed commercial shopping center. The site is not located in a Criteria Cell. The Project is consistent with the applicable MSHCP requirements in Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and Section 7.5.3 (Construction Guidelines). With compliance with all applicable requirements of the MSHCP and payment of the MSHCP Local Development Mitigation Fee, the proposed Project will be fully consistent with the MSHCP.

City's Restorative Growthprint-Climate Action Plan (RRG-CAP)

Section 5.8 Greenhouse Gas Emissions includes a discussion of the City's Restorative Growthprint-Climate Action Plan (RRG-CAP). The Riverside Restorative Growthprint (RRG) combines two plans: the Economic Prosperity Action Plan (RRG-EPAP) and the Climate Action Plan (RRG-CAP), which work in conjunction to spur entrepreneurship and smart growth while advancing the City's GHG emission reduction goals. The RRG includes actions to reduce GHG emissions that align with the City's planning priorities and its vision of a future "green" economy based on sustainable businesses. The RRG-EPAP identifies the measures and strategies in the

RRG-CAP with the greatest potential to drive local economic prosperity through clean-tech investment, entrepreneurship, and expansion of local green businesses.

In 2014, Riverside was one of 12 cities that collaborated with the Western Riverside Council of Governments on a *Subregional Climate Action Plan* (Subregional CAP) that included 36 measures to guide Riverside's GHG reduction efforts through 2020. The RRG-CAP expands upon the Subregional CAP and provides a path for the City to achieve deep reductions in GHG emissions through 2035, while the RRG-EPAP provides a framework for smart growth and low-carbon economic development. The RRG-CAP prioritizes the implementation of policies that enable the City to fulfill the requirements of AB 32 and SB 375. The Project would be consistent with applicable RRG and CAP measures (refer to Section 5.8 Greenhouse Gas Emissions, Table 5.8-7 – RRG CAP Project Consistency).

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is an association of local governments and agencies that serves as a Metropolitan Planning Organization (MPO), a Regional Transportation Planning Agency (RTPA) and a Council of Governments (COG). The SCAG region encompasses six (6) counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. SCAG is responsible for developing long-range regional transportation plans, including the regional Sustainable Communities Strategy (SCS) and associated growth forecasts, regional transportation improvement programs, and regional housing needs allocations.

SCAG's Connect SoCal – The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. Connect SoCal embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions (CTCs), tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

The Project is consistent with RTP/SCS GHG emissions reduction strategies, including focusing on focusing growth near destinations & mobility options, leverage of technology innovations, and promoting a green region (refer to Section 5.8 Greenhouse Gas Emissions, Table 5.8-8 –Project Consistency with Applicable RTP/SCS GHG Emissions Reduction Strategies). The Project would not conflict with the Connect SoCal – 2020-2045 RTP/SCS.

2015 Urban Water Management Plan

Section 5.19 Utilities and Service Systems discusses Project consistency with the Riverside Public Utilities, Water Division Urban Water Management Plan (UWMP). As discussed in Section 5.19 Utilities and Service Systems, the Project would be subject to compliance with the City's Water Conservation Ordinance and the California Green Building Code. Further, based on the water supply and demand projections, projected water supplies would be sufficient to meet the

projected water demand for the Project. Thus, the Project would not conflict with the provisions of the UWMP.

6.2 Significant Unavoidable Adverse Impacts

CEQA requires decision makers to balance the benefits of a Project against its unavoidable environmental risks in determining whether to approve a project. The analysis contained in this EIR concludes the Project would result in a significant and unavoidable impacts related to inconsistency with applicable airport land use compatibility criteria of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA LUCP) and applicable GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP. As the Project would be inconsistent with applicable MARB/IPA LUCP land use compatibility density criteria for Zone C2, and the Project's projected residential density would exceed and be partially inconsistent with Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 of GP 2025 related to the MARB/IPA LUCP, the Project would result in a **significant and unavoidable impact**. Although implementation of the recommended conditions identified in the Riverside County Airport Land Use Commission (ALUC) Staff Report for the Project would not render the Project consistent with the MARB/IPA LUCP Compatibility Zone C2 density compatibility criteria, they would be implemented, in order to reduce the potential hazards from flight accidents to the greatest extent feasible.

As shown in Table 5.17-1 – Regional and Project VMT Per Capita, the Project's calculated VMT per capita for baseline year 2018 is 24.8. A 17.7 percent reduction to the Project's baseline VMT per capita results in a reduced Project VMT of 20.4. As previously discussed, a project would result in a significant project-generated VMT impact if the baseline or cumulative project-generated VMT per capita exceeds 15 percent below the current jurisdictional baseline VMT per capita. Table 5.17-1 indicates that 85 percent of the jurisdictional baseline VMT per capita for future year 2045 is 13.6. Thus, even with the assumed maximum 17.7 percent VMT reduction as a result of implementing Project-applicable VMT reduction strategies, the Project's baseline per capita VMT would still exceed 15 percent below the 2045 jurisdictional baseline VMT per capita, resulting in a significant project-generated VMT impact.

VMT mitigation measures and strategies aim to promote overall mobility with the goal of reducing VMT and GHG emissions. Implementation of the project design features and TDM measures outlined in Section 5.17 Transportation, may possibly reduce the proposed Project's VMT by approximately up to 17.7 percent. These TDM measures may help offset some of the VMT impacts of the proposed Project by up to 17.7 percent but will not reduce the impact to a less than significant level. Therefore, the proposed Project would have **significant and unavoidable impacts** related to transportation.

6.3 Significant Irreversible Environmental Changes

Section 15126.2(d) of the CEQA Guidelines requires EIRs to contain a discussion of significant irreversible environmental changes which would be caused by the proposed Project should it be implemented. This section addresses the use of non-renewable resources during initial and

continued phases of the Project, the commitment of future generations to environmental changes or impacts because of the Project, and any irreversible damage from environmental accidents associated with the Project.

6.3.1 Use of Non-Renewable Resources

Construction of the Project would involve an irreversible commitment of construction materials and non-renewable energy resources. The Project would involve the use of building materials and energy resources, some of which are non-renewable, to construct the 347 apartment units. Consumption of these resources would occur with any development of the Project site and are not unique to the Project.

Operation of the Project would irreversibly increase local demand for non-renewable energy resources, such as petroleum products and natural gas. Increasingly efficient building design, however, will offset this demand to some degree by reducing energy demands of the Project. The Project will be subject to the energy conservation requirements of the California Energy Code 2022 (Title 24, Part 6, of the California Code of Regulations, California's Energy Efficiency Standards for Residential and Nonresidential Buildings) and the California Green Building Standards Code (Title 24, Part 11 of the California Code of Regulations). The California Green Building Standards Code functions to:

- Reduce GHG emissions from buildings;
- Promote environmentally responsible, cost-effective, healthy places to live and work;
- Reduce energy and water consumption; and
- Respond to the environmental directives of the administration.

In addition the 2022 CALGreen standards will require the Project recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with either (CalGreen) Section 4.408.2, 4.408.3, or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance (4.408.1). The California Energy Code provides energy conservation standards for all new and renovated commercial and residential buildings constructed in California, and the Green Building Standards Code requires solar access, natural ventilation, and stormwater capture. With adherence to these standards, the Project would not use unusual amounts of energy or construction materials, and impacts related to consumption of non-renewable and slowly renewable resources would be less than significant. Consumption of these resources would occur with any development of the Project site and would not be unique to the Project.

6.3.2 Commitment of Future Generations

Approval of the Project would result in environmental changes or impacts that commit future generations to new environmental circumstances. Primarily, the approval of the Project would change the underlying GP 2025 land use designations and zoning of the Project site and the Mission Grove Specific Plan land use and zoning, as detailed in Section 5.11, Land Use and Planning. The change in the underlying regulations would allow for a change from C - Commercial

to MU-U - Mixed Use-Urban for a multi-family development. This would result, in turn, in an increase in population as compared to commercial development as envisioned in the City's GP 2025. However, as outlined in Section 5.14 Population and Housing, the GP 2025 was designed to accommodate anticipated growth by providing adequate services, access and infrastructure. The Project area is currently served by existing roads and other infrastructure and the Project would only require minor extensions or laterals from nearby roads and utilities to the site. Also, the Project would result in a very small incremental increase in population growth, 1.4% of the anticipated GP 2025 anticipated growth. The Project's 1.4% percent incremental increase is anticipated to be a less than significant increase. The Project would also require an irreversible commitment of law enforcement, fire protection, water supply, wastewater treatment, and solid waste disposal services. However, as discussed in Section 5.15 Public Services, Section 5.19 Utilities, and Section 5.20 Wildfire, impacts to these services and systems would not be significant and any impacts would be mitigated by the applicant's payment of impact fees for services provided (schools, fire, and transportation).

6.4 Growth-Inducing Impacts

Section 15126.2(e) of the CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The Project's growth inducing potential is therefore considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

6.4.1 Population Growth

The Project would involve the development of multi-family residences, which will directly increase the City's population. The expected number of tenants is 829 persons, and therefore the estimated population growth from the Project is 829 persons. Per the 6th Cycle Housing Element Technical Background Report, the City of Riverside had an estimated population of 328,155 in 2020. This represents a growth of 58,445 people from 2020 to 2040. Therefore, the Project is anticipated to contribute approximately 1.4 percent of the anticipated population growth.

The General Plan 2025 was designed to accommodate anticipated growth under the typical development scenario by providing adequate services, access and infrastructure. The Project area is currently served by existing roads and other infrastructure and the Project would only require minor extensions or laterals from nearby roads and utilities to the site. Also, the Project would result in a very small incremental increase in population growth, approximately 1.4 percent, of what was anticipated. Thus, the Project is within the City's anticipated 2025 growth projection. The Project's estimated 829 persons to the total population would be a minuscule incremental increase of the anticipated growth. Moreover, per the City's General Plan EIR, the maximum population projection would be 444,308 persons, which would result in the Project's generated residents of 829 person to be approximately 0.2 percent of the maximum population growth in 2025. The approximately 1.4 percent incremental increase is anticipated to be a less than

significant increase and would not exceed both the estimated projection and the maximum projection of the City's General Plan 2025 EIR growth projections.

In regard to indirect population growth, the Project area is currently served by existing roads and other infrastructure and the Project would only require minor extensions or laterals from nearby roads and utilities to the site. Therefore, the Project is not anticipated to indirectly induce population growth by the extension of infrastructure into undeveloped areas.

6.4.2 Economic Growth

The Project would generate temporary employment opportunities during construction. Because workers would be expected to come from the existing regional work force, construction of the Project would not be growth-inducing from a temporary employment standpoint.

The operations (on-site leasing office) and maintenance of the development (cleaning and landscape maintenance of the on-site amenities) would generate new employment opportunities. However, the proposed Project would not provide a substantial number of long-term jobs and workers would be expected to come from the existing regional work force.

The Project would not be expected to induce substantial economic expansion in the Project vicinity to the extent that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around Riverside would be addressed as part of the CEQA environmental review for each of those development projects.

6.5 References

The following references were used in the preparation of this section of the EIR:

GP 2025	City of Riverside, <i>Riverside General Plan 2025</i> , November 2007, with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0 , accessed September 2023)
RMC, Title 17	City of Riverside, Code of Ordinances, Title 17 Grading Code (Available at: https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTII COOR_TIT17GR , accessed September 2023)
RMC, Title 19	City of Riverside, Code of Ordinances, Title 19 Zoning (Available at https://library.municode.com/ca/riverside/codes/code_of_ordinances?nodeId=PTIIC OOR_TIT19ZO , accessed September 2023)
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan. (Available at https://rctlma.org/Portals/0/mshcp/volume1/index.html , accessed June 2023).

RRG-CAP	City of Riverside, <i>Riverside Restorative Growthprint – Climate Action Plan</i> . January 2016. (Available at: https://riversideca.gov/cedd/planning/city-plans/other-city-plans , accessed September 2023)
SCAG 2020	Southern California Association of Governments (SCAG), <i>Connect SoCal 2020 (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy)</i> . September 3, 2020. Available at https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020 , accessed September 2023.

7.0 Alternatives to the Proposed Project

The following discussion considers alternatives to implementation of the Project. The discussion examines the potential environmental impacts resulting from each alternative. Through comparisons of these alternatives to the Project, the relative advantage(s) of each can be weighed and analyzed.

The *CEQA Guidelines*, Section 15126.6, identify the parameters within which consideration and discussion of alternatives to the proposed Project should occur. As stated in this section of the guidelines, alternatives must focus on those that are potentially feasible, reduce significant impacts, and which attain most of the basic objectives of the Project.

7.0.1 Project Objectives

As stated in Section 3.4 of this EIR, the objectives for the Project, are as follows:

- Provide a high-quality residential development in close proximity to many existing amenities and transit corridors.
- Increase the type and amount of housing available, consistent with the goals of the City's Housing Element.
- Maximize the residential potential of the site to assist the City of Riverside in meeting project housing demand as part of the City's housing needs and growth projections.
- Use land resources more efficiently by providing a well-planned, infill redevelopment on a underutilized vacant site.
- Identify mixed-use development standards in the Specific Plan Amendment to create a framework for cohesive integration of uses.
- In furtherance of the City's Climate Action Plan, replace aging building construction with green building practices and other sustainable development methods.
- Create a mixed-use environment encouraging walkability.
- Provide for enhanced residential architecture and aesthetically coherent design elements that are compatible and complimentary with the existing surrounding residential built environment in terms of colors and materials and landscaping.

Included in this analysis are four alternatives, including the CEQA-required "No Project" alternative, that involve changes to the Project that may reduce Project-related environmental impacts as identified in this DEIR. Alternatives have been developed to provide a reasonable range of options to consider that would help decision makers and the public understand the general implications of revising or eliminating certain components of the proposed Project.

The following alternatives are evaluated in this DEIR:

- **Alternative 1:** No Project Alternative
- **Alternative 2:** Lower Density ALUC Consistent Multi-Family Residential Project
- **Alternative 3:** Retail Project Alternative
- **Alternative 4:** Off-Site Multi-Family Residential Project

Detailed descriptions of the alternatives are outlined below.

7.0.2 Rationale for Alternative Selection

State CEQA Guidelines Section 15126.6(a) requires that an EIR "...describe a range of reasonable alternatives to the project, or the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." Each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed project. According to this section of the State CEQA Guidelines, "...an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation." An EIR is not required to consider alternatives which are infeasible. The City, as lead agency, is responsible for selecting a range of Project alternatives to be discussed other than the "rule of reason" (CEQA Guidelines Section 15126.6(a)). 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 an alternative. (CEQA Guidelines Section 15126.6 (f)(1)).

The rationale for selecting the alternatives to be evaluated, and a discussion of the "No Project" alternative are also required (State CEQA Guidelines, Section 15126.6(e)). The No Project alternative is no redevelopment of the site. As the Project is not consistent with designated land use and zoning for the site, the "no project" alternative (Alternative 1) would be retaining the existing development of the site that remains in accord with the current land use and zoning designations and the Mission Grove Specific Plan. Under this alternative, the GP land use designation of C – Commercial and zoning of CR – SP - Commercial Retail as well as Specific Plan (Mission Grove) designation as Retail Business & Office and CR- SP Commercial Retail Overlay Zone would remain as is. Development under Alternative 2 would include lower density multi-family residential uses that would be consistent with the density criteria for the C2 Compatibility Zone of the March Air Reserve Base/ Inland Port ALUC Plan. Due to the Project site being an existing retail development, continued use of the site as permanent retail is considered for Alternative 3. Alternative 4 includes the proposed re-development Project at an off-site location within the City of Riverside.

7.0.3 Alternative 1 – No Project/No Redevelopment

The No Project/No Redevelopment Alternative assumes that the proposed 347 residential unit development would not be constructed. Alternative 1 considers no redevelopment/disturbance on the Project site. As such, the entire 9.92-acre site would remain a 104,231-square-foot vacant retail building (a former K-Mart retail store) and an associated surface parking lot. The retail building was constructed in 1991 and the former K-Mart retail store closed in October of 2020. Although there is no permanent tenant of the retail building, since vacated by K-Mart, it has had a temporary and seasonal tenant, the Spirit Halloween Costume Store. The No Project/ No Redevelopment Alternative would continue to be consistent with the existing General Plan land

use designation of C Commercial, the existing zoning of CR-SP- Commercial Retail and Specific Plan (Mission Grove) Overlay Zones and with the Mission Grove Specific Plan and would not require a GPA, RZ, SPA, or TPM. The No Project alternative would not fulfill any of the Project's objectives as the existing site would not provide high-quality housing in close proximity to many amenities and high quality transit corridors, assist the City of Riverside in meeting housing needs; use land resources more efficiently with infill redevelopment on an underutilized vacant site; or further the City's Climate Action Plan by replacing aging building construction with green building practices and other sustainable development methods. Under this alternative, no improvements would be made to the Project site and the site would continue to be vacant with temporary/seasonal retail tenants. This alternative has no characteristics in common with the proposed Project nor any of the other alternatives as no proposed redevelopment would occur.

Impact Analysis for Alternative 1

Aesthetics

The Project site is currently developed and consists of a vacant retail building (formerly a K-Mart retail store) and associated surface parking lot. Since becoming vacant in 2020, the retail building hosts a Spirit Halloween Costume Store as a temporary and seasonal tenant.

The Project site is located within an existing shopping center consisting of various commercial and retail uses, such as grocery stores, fast food restaurants, and a gym/fitness center. Additionally, the site's surrounding uses consist of both single-family and multi-family residential uses.

Under Alternative 1, the vacant retail building would remain vacant aside from its temporary and seasonal tenant (Spirit Halloween) and no permanent aesthetic redevelopment changes or disturbances would occur to the building or its associated surface parking lot. The vacant retail building would only have the temporary and seasonal aesthetic change of a Spirit Halloween banner hung on the building's frontage, which would be removed when the seasonal tenant vacates the space. Assuming the Project site retail building remains undeveloped, there would be no construction or redevelopment of structures that would alter site views, nor would there be any new sources of light and glare at the site associated with site construction or redevelopment. Therefore, as Alternative 1 would not alter currently existing site views and would not introduce new or additional sources of light or glare, potential aesthetic impacts under Alternative 1 would be **less than** those associated with the proposed Project.

Agriculture and Forestry Resources

As discussed in DEIR Section 5.2, Agriculture and Forestry Resources, the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is the Project site located adjacent to any of these farmland designation land uses. Additionally, the Project site is not currently zoned for agricultural use or adjacent to land zoned for agricultural use, nor is the site located within an area affected by a Williamson Act Preserve or under a Williamson Act Contract. As previously discussed, the Project site is currently developed and consists of a vacant retail building and associated surface parking lot and does not contain any farmland, forest land, or timberland, nor is the site located adjacent to any land containing these

uses. As these uses are not located on or within the vicinity of the Project site, no impacts would occur to agricultural or forestry resources under development of the proposed Project or under Alternative 1. Therefore, potential impacts under the No Project/No Redevelopment Alternative would be **similar to** those of the proposed Project.

Air Quality

As analyzed in Section 5.3, Air Quality, the proposed Project would generate emissions through construction and operations, though emissions would not exceed regional localized significance thresholds (LSTs) for any criteria pollutant, nor would the proposed Project expose sensitive receptors to substantial pollutant concentrations. Under Alternative 1, the currently existing vacant retail building would remain vacant, except for the building's temporary and seasonal Spirit Halloween Costume Store tenant. Thus, under Alternative 1, there would be no construction at or redevelopment of the site and accordingly, no emissions from construction activities would be generated and operational emissions would be intermittent (i.e., seasonal and temporary when the Spirit Halloween tenant occupies the building). Therefore, potential air quality impacts under Alternative 1 would be **less than** those associated with the proposed Project.

Biological Resources

As analyzed in Section 5.4, Biological Resources, 15 special-status plant species have been recorded in the USGS Riverside East quadrangle, in which the Project site is located. The Project site consists of an existing vacant retail building and associated surface parking lot, which are site conditions that have eliminated the Project site's ability to provide suitable habitat for special-status plant species. Additionally, 29 special-status wildlife species have reported occurrences within the USGS Riverside East quadrangle. A review of the habitat requirements of each of the special-status wildlife species indicates that the Project site does not contain nor would be able to provide potentially suitable habitat for any of these wildlife species. The site contains trees that could provide potentially suitable habitat for nesting birds; these trees would be left in place under the development of the proposed Project and under Alternative 1. In addition, as the site is paved/developed, it does not contain, nor would it be able to provide, suitable conditions or habitat for features such as wetlands, vernal pools, or riparian or riverine resources. As the site does not contain nor would it be able to support any sensitive biological resources, potential impacts to biological resources would be less than significant under both the proposed Project and the No Project/No Redevelopment Alternative. Therefore, potential impacts to biological resources under Alternative 1 would be **similar to** those associated with the proposed Project.

Cultural Resources

As discussed in DEIR Section 5.5, Cultural Resources, the City may consider the Project area to have a moderate to high sensitivity for potential impacts to cultural resources. Additionally, while the proposed Project's Cultural Resources Assessment did not report the presence or discovery of human remains, construction and/or ground-disturbing activities could have the potential to disturb or destroy previously undiscovered human remains, including those interred outside of formal cemeteries. Under the No Project/No Redevelopment Alternative, the previously developed Project site would remain vacant and undisturbed by construction or ground-disturbing

activities. Therefore, potential impacts to cultural resources under Alternative 1 would be **less than** those associated with the proposed Project.

Energy

Under Alternative 1, No Project/Redevelopment, the existing retail building would remain vacant except for the times when it is occupied by its temporary and seasonal tenant, the Spirit Halloween Costume Store. There would be no construction or redevelopment of the site that would result in an increased use of electricity, natural gas, or petroleum associated with redevelopment construction and operation activities. As discussed in DEIR Section 5.6, Energy, the proposed Project would utilize electricity, natural gas, and petroleum during the construction and operation of the proposed Project residential development. Thus, potential impacts to energy resources under Alternative 1 would be **less than** those associated with the proposed Project.

Geology and Soils

Under Alternative 1, No Project/Development, the Project site would not be altered and there would be no ground disturbance on the site. As discussed, the Project site is previously developed and consists of a vacant retail building and associated surface parking lot. Under Alternative 1, the site would not undergo any construction or redevelopment disturbances, such as ground disturbance and grading, that could result in potential impacts to geological and soil resources. Therefore, potential impacts to geology and soils under Alternative 1 would be **less than** those associated with the proposed Project.

Greenhouse Gas Emissions

As discussed in DEIR Section 5.8, Greenhouse Gas Emissions, construction of the proposed Project would generate greenhouse gas (GHG) emissions during the construction and operation of the Project, though emissions do not exceed any of the GHG significance thresholds. The No Project/Development alternative would not include on-site development and would thus not generate any construction or operational GHG emissions. Therefore, impacts associated with GHG emissions under Alternative 1 would be **less than** those of the proposed Project.

Hazards and Hazardous Materials

As discussed in DEIR Section 5.9, Hazards and Hazardous Materials, the proposed Project's residential density would exceed and be inconsistent with the allowable maximum residential density criteria for MARB/IPA LUCP Compatibility Zone C2, resulting in a significant and unavoidable impact. While conditions of approval have been proposed, implementation of these conditions would not render the proposed Project consistent with the MARB/IPA LUCP Compatibility Zone C2 residential density criteria. Under Alternative 1, the site would not require any zoning, land use, or specific plan changes as the site would remain a vacant retail building within a commercial use area. The site would remain consistent with allowable uses and maximum residential densities under the No Project/Redevelopment Alternative. Therefore, potential impacts relating to hazards and hazardous materials under Alternative 1 would be **less than** those associated with the proposed Project.

Hydrology and Water Quality

As discussed in DEIR Section 5.10, Hydrology and Water Quality, expected pollutant sources that could impact water quality resources from the proposed Project include interior drains, indoor/structural pesticide use, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, and parking lots. Under Alternative 1, the Project site would not undergo any construction or redevelopment activities that would generate pollutant sources associated with them. Rather, under Alternative 1, the Project site would remain under current site conditions, which consist of a vacant retail building and associated surface parking lot. While the proposed Project's potential impacts to hydrology and water quality would be less than significant, because Alternative 1 would not include any on-site construction, redevelopment, or operational activities, potential impacts under Alternative 1 would be **less than** those associated with the proposed Project.

Land Use and Planning

As discussed in DEIR Section 5.11, Land Use and Planning, the proposed Project's projected residential density of 35.0 dwelling units per acre would be inconsistent with the allowable 6.0 dwelling units per acre permitted by the MARB/IPA LUCP residential density criteria for Compatibility Zone C2, in which the Project site is located. Also, the proposed Project would be consistent with all applicable GP 2025 objectives and policies except for Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, in which the Project would be partially consistent and partially inconsistent. Thus, the proposed Project would result in a significant and unavoidable impact to land use and planning due to inconsistency with the allowable maximum residential density of the MARB/IPA LUCP C2 Zone as well as being partially inconsistent with GP 2025 Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP. Under Alternative 1, the site would not require any zoning, land use, or specific plan changes as the site would remain a vacant retail building within a commercial use area. The site would remain consistent with allowable uses and densities of Compatibility Zone C2 of the MARB/IPA LUCP, under the No Project/Redevelopment Alternative. Therefore, potential impacts to land use and planning under Alternative 1 would be **less than** those associated with the proposed Project.

Mineral Resources

As discussed in DEIR Section 5.12, Mineral Resources, the Project site has been developed for commercial uses and is not located within or adjacent to areas of known mineral resources that would be of value to the region or State. Additionally, the City's GP 2025 PEIR determined that there are no specific areas within the City boundary or proposed Sphere of Influence Area that have locally-important mineral resource recovery sites. As the Project site has already been developed with a retail building and associated surface parking lot, and as the site is not located within or adjacent to areas of known mineral resources, neither the development of the proposed Project nor implementation of Alternative 1 would result in impacts to mineral resources. Therefore, potential impacts to mineral resources under Alternative 1 would be **similar to** those associated with the proposed Project.

Noise

Under the No Project/Redevelopment Alternative, the existing retail building would remain vacant except for when temporarily and seasonally occupied by the Spirit Halloween Costume Store tenant. There would be no redevelopment of the site or associated surface parking lot that would generate construction or operational noise as would occur under the proposed Project. While the proposed Project's potential construction, vibration, and operational noise impacts would be less than significant, as Alternative 1 would not include any redevelopment construction noise or vibration and operational noise would be intermittent (i.e., seasonal and temporary), potential impacts under Alternative 1 would be **less than** those associated with the proposed Project.

Population and Housing

Under Alternative 1, no construction or redevelopment activities would occur on the Project site that would cause a substantial unplanned population growth, nor would Alternative 1 result in displacing substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. As discussed, the Project site currently consists of a vacant retail building and associated surface parking lot; additionally, the site is currently zoned for commercial uses. While the proposed Project's potential impacts to population and housing would be less than significant, because Alternative 1 would not include any redevelopment involving residential uses and associated population growth, potential impacts to population and housing under Alternative 1 would be **less than** those associated with the proposed Project.

Public Services

Under the No Project/Redevelopment Alternative, the Project site would remain under its current site conditions, which consist of a vacant retail building and associated surface lot, with no redevelopment of the site for alternative uses. The retail building would only be temporarily and seasonally occupied by the Spirit Halloween Costume Store tenant. These intermittent commercial uses would not result in an increased demand in public services, such as fire protection, police protection, parks, or libraries, such that new/additional facilities would need to be constructed. While potential impacts to public services under the proposed Project would be less than significant, because Alternative 1 would not result in any redevelopment of the Project site, potential impacts to public services under Alternative 1 would be **less than** those of the proposed Project.

Recreation

Under the No Project/Redevelopment Alternative, the Project site would remain under its current site conditions, which consist of a vacant retail building and associated surface lot, with no redevelopment of the site for alternative uses. The retail building would only be temporarily and seasonally occupied by the Spirit Halloween Costume Store tenant. These intermittent commercial uses would not increase population or associated use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur, nor would the intermittent commercial uses require the construction or expansion of recreational facilities. While potential impacts regarding recreation under the proposed Project would be less than significant, because Alternative 1 would not result in any redevelopment of the

Project site, potential impacts to recreation under Alternative 1 would be **less than** those of the proposed Project.

Transportation

As discussed in DEIR Section 5.17, Transportation, the proposed Project would result in significant and unavoidable impacts regarding vehicle miles traveled (VMT). While mitigation measures are proposed, implementation of the measures would not decrease the proposed Project's impacts to VMT to a less than significant level. Under the No Project/Redevelopment Alternative, vehicular traffic and VMT levels associated with the Project site would remain relatively low in comparison to those generated by the proposed Project as the existing retail building would only be temporarily and seasonally occupied by the Spirit Halloween Costume Store tenant. Additionally, Alternative 1 would not include any construction related traffic associated with redevelopment of the site. Thus, potential impacts to transportation under Alternative 1 would be **less than** those of the proposed Project.

Tribal Cultural Resources

Construction of the proposed Project would involve ground-disturbing activities with the potential to unearth or adversely impact previously unidentified tribal cultural resources. The No Project Alternative would have no ground-disturbing activities and there would be no potential for adversely impacting tribal cultural resources. The No Project/Development alternative would have **less** potential impact than the proposed Project.

Utilities

Construction and operation of the proposed Project would result in an increased demand for utility services, such as water supply, wastewater treatment, and solid waste services. While potential impacts to utilities and service systems would be less than significant under the proposed Project, because Alternative 1 would not include any site redevelopment that could increase the demand of utility services, potential impacts to utilities and utility services under Alternative 1 would be **less than** those of the proposed Project.

Wildfire

As discussed in DEIR Section 5.20, Wildfire, the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ). Additionally, under current site conditions and as would remain the case under Alternative 1, the site's vacant retail building is only intermittently (i.e., seasonally and temporarily) occupied by the Spirit Halloween Costume Store tenant. Under Alternative 1, the site and its current uses would not have an increased risk of exposing people or structures to significant risks, such as downslope or downstream flooding or landslides, or to a significant risk of loss, injury, or death involving wildland fires due to being located in a VHFHSZ. As Alternative 1 was required to comply with the applicable California Building Standards Code (CBC) and California Fire Code (CFC) standards at the time it was constructed and the proposed Project would be required to comply with applicable CBC and CFC standards that ensure appropriate measures, including fire prevention and fuel modification features, are provided so that urban development does not expose project

occupants to increased and uncontrolled fire hazards, the potential to expose people or structures to significant risks of loss, injury, or death involving wildland fires are low. Potential wildfire impacts under Alternative 1 would be **similar to** those associated with the proposed Project.

7.0.4 Alternative 2 – Reduced Density Apartment Redevelopment

This discussion analyzes alternative redevelopment of the site with a high-quality residential development with a reduced density, such that it meets the density criteria of the C2 Compatibility Zone of the March Air Reserve Base/ Inland Port Airport Land Use Compatibility Plan MARB/IPA LUCP). The density standard for the C2 zone is six or less dwelling units per acre (du/ac). As the Project site is 9.92 acres, in order to meet the C2 zone density criteria of 6.0 du/ac, only 58 dwelling units would be constructed. Under this alternative, a GPA would be required to change the land use designation to Mixed Use – Neighborhood (MU-N), with maximum of 10.0 dwelling units per acre, and associated zone change (MU-N) as well as a Specific Plan Amendment to the Mission Grove Specific Plan. A TPM may also be required under this alternative for leasing and financing purposes.

Impact Analysis for Alternative 2

Aesthetics

Under Alternative 2, the Reduced Density Apartment Redevelopment, the proposed residential development would consist of 58 dwelling units in lieu of the proposed Project's 347 dwelling units. As discussed in DEIR Section 5.1, Aesthetics, the Project site is located in a highly urbanized area, consisting of commercial and retail uses as well as single- and multi-family residential uses. The Project site is not a scenic vista, nor are there any State scenic highways or City designated Scenic or Special Boulevards or Parkways in the vicinity of the Project site. Assuming the Reduced Density Apartment Redevelopment would be constructed with the same design elements of the proposed Project, Alternative 2 would include a contemporary Spanish architectural style with features such as decorative tiles at Project entries, foam trims, sills, corbels, and trellises at upper balconies. These design elements would simply be implemented on a smaller scale due to the reduced density development of Alternative 2. Additionally, the project design and landscaping of Alternative 2 would similarly be required to comply with the City's Design Guidelines and Zoning Code. Moreover, as the higher density, larger proposed Project development would not result in substantial light or glare, it is anticipated that a smaller, reduced density development would result in even less potential light and glare impacts. While impacts to aesthetics would be less than significant under the proposed Project, because the Reduced Density Apartment Redevelopment would result in a smaller scale residential development, impacts under Alternative 2 would be **less than** those of the proposed Project.

Agriculture and Forestry

As discussed in DEIR Section 5.2, Agriculture and Forestry Resources, the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is the Project site located adjacent to any of these farmland designation land uses. Additionally, the Project site is not currently zoned for agricultural use or adjacent to land zoned for agricultural use, nor is the site located within an area affected by a Williamson Act Preserve or under a

Williamson Act Contract. As previously discussed, the Project site is currently developed and consists of a vacant retail building and associated surface parking lot and does not contain any farmland, forest land, or timberland, nor is the site located adjacent to any land containing these uses. As these uses are not located on or within the vicinity of the Project site, no impacts would occur to agricultural or forestry resources under development of the proposed Project or under Alternative 2. Therefore, potential impacts under the Reduced Density Apartment Redevelopment would be **similar to** those of the proposed Project.

Air Quality

Under Alternative 2, Reduced Density Apartment Redevelopment, development of the Project site would result in construction and operational emissions that could potentially impact air quality. However, as Alternative 2 would consist of a multi-family residential development with only 58 dwelling units instead of the proposed Project's 347 dwelling units, it is assumed that construction of the project under Alternative 2 would accordingly consist of a shorter construction period, which would therefore result in less construction-related emissions. Additionally, a smaller scale residential development as proposed under Alternative 2 would correspondingly house fewer residents than could be accommodated under the proposed Project, resulting in fewer vehicles, and therefore, fewer vehicle emissions. As such, potential impacts to air quality under Alternative 2 would be **less than** those associated with the proposed Project.

Biological Resources

As analyzed in Section 5.4, Biological Resources, 15 special-status plant species have been recorded in the USGS Riverside East quadrangle, in which the Project site is located. The Project site consists of an existing vacant retail building and associated surface parking lot, which are site conditions that have eliminated the Project site's ability to provide suitable habitat for special-status plant species. Additionally, 29 special-status wildlife species have reported occurrences within the USGS Riverside East quadrangle. A review of the habitat requirements of each of the special-status wildlife species indicates that the Project site does not contain nor would be able to provide potentially suitable habitat for any of these wildlife species. While the site contains trees that could provide potentially suitable habitat for nesting birds, these trees would be left in place under the development of the proposed Project and, it is assumed, under the Reduced Density Apartment Redevelopment. In addition, as the site is paved/developed, it does not contain nor would it be able to provide suitable conditions or habitat for features such as wetlands, vernal pools, or riparian or riverine resources. As the site does not contain nor would it be able to support any sensitive biological resources, potential impacts to biological resources would be less than significant under either the proposed Project or the Reduced Density Apartment Redevelopment Alternative. Therefore, potential impacts to biological resources under Alternative 2 would be **similar to** those associated with the proposed Project.

Cultural Resources

Similar to the proposed Project, development of the Reduced Density Apartment Redevelopment Alternative would require site preparation and grading. However, as Alternative 2 would consist of a smaller scale residential project, it is assumed the grading limits and development footprint of Alternative 2 would be less than those of the proposed Project. Ground-disturbing activities with the potential to unearth or adversely impact previously undiscovered archaeological resources and/or human remains would still occur under Alternative 2, as construction activities would occur within the same development footprint as the proposed Project, resulting in the same area of ground disturbance. Therefore, potential impacts to cultural resources under Alternative 2 would be **the same as** those associated with the proposed Project.

Energy

Under the Reduced Density Apartment Redevelopment Alternative, electricity and natural gas would still be supplied by Riverside Public Utilities (RPU) and Southern California Gas Company (SoCalGas), respectively. It is anticipated that construction fuel consumption under Alternative 2 would be less than that of the proposed Project for construction equipment, vendor trips, and worker trips as Alternative 2 would be a comparatively smaller scale development than the proposed Project. Similar to the proposed Project, the project under Alternative 2 would comply with applicable Title 24 Building Standards for multi-family residential developments, including incorporating solar panels and providing electric vehicle (EV) charging stations. It is additionally anticipated that similar to the proposed Project, the project under Alternative 2 would utilize all electric appliances and only utilize natural gas for project amenities/common spaces. As the Reduced Density Apartment Redevelopment would be a smaller scale residential development, with only 58 dwelling units instead of the 347 dwelling units, it is anticipated that the project under Alternative 2 would consume less energy resources during both construction and operations as compared to the proposed Project. Therefore, potential impacts to energy resources under Alternative 2 would be **less than** those associated with the proposed Project.

Geology and Soils

The existing geology and soils conditions of the site would remain the same for both the proposed Project and Alternative 2. As discussed, the Project site is previously developed and consists of a vacant retail building and associated surface parking lot. Ground-disturbing activities for construction would occur within the same development footprint as the proposed Project, resulting in the same area of ground disturbance and potential impacts on geology and soils resources. Thus, potential impacts to geology and soils under Alternative 2 would be **the same** as those of the proposed Project.

Greenhouse Gas Emissions

Under Alternative 2, Reduced Density Apartment Redevelopment, development of the Project site would result in construction and operational greenhouse gas (GHG) emissions. However, as Alternative 2 would consist of a multi-family residential development with only 58 dwelling units instead of the proposed Project's 347 dwelling units, it is assumed that construction of the project under Alternative 2 would accordingly consist of a shorter construction period, which would

therefore result in less construction-related emissions. Additionally, a smaller scale residential development as proposed under Alternative 2 would correspondingly house fewer residents than could be accommodated under the proposed Project, resulting in fewer vehicles, and therefore, fewer vehicle GHG emissions. As such, potential impacts regarding GHG emissions under Alternative 2 would be **less than** those associated with the proposed Project.

Hazards and Hazardous Materials

As discussed in DEIR Section 5.9, Hazards and Hazardous Materials, the proposed Project's residential density would exceed and be inconsistent with the allowable maximum residential density criteria for MARB/IPA LUCP Compatibility Zone C2, resulting in a significant and unavoidable impact. Alternative 2 proposes a reduced density apartment redevelopment that would consist of 58 dwelling units in comparison to the 347 dwelling units associated with the proposed Project. The reduced number of dwelling units proposed under Alternative 2 would allow the proposed residential development to be consistent with the Compatibility Zone C2 allowable residential density. Therefore, as Alternative 2 would allow for a residential development that would be consistent with Compatibility Zone C2 residential density requirements, potential impacts regarding hazards and hazardous materials would be **less than** those associated with the proposed Project.

Hydrology and Water Quality

Similar to the proposed Project, expected pollutant sources that could impact water quality resources under Alternative 2 would include interior drains, indoor/structural pesticide use, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, and parking lots. While the proposed Project's potential impacts to hydrology and water quality would be less than significant, because Alternative 2 would consist of a smaller scale, reduced density residential development, potential impacts under Alternative 2 would be **less than** those associated with the proposed Project.

Land Use and Planning

As discussed in DEIR Section 5.11, Land Use and Planning, the proposed Project's projected residential density of 35.0 du/ac would be inconsistent with the allowable 6.0 du/ac permitted by the MARB/IPA LUCP density criteria for Compatibility Zone C2, in which the Project site is located. Thus, the proposed Project would result in a significant and unavoidable impact to land use and planning as a result of inconsistency with the maximum allowable residential density in the Compatibility Zone C2. Also, the proposed Project would be consistent with all applicable GP 2025 objectives and policies except for Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP, in which the Project would be partially consistent and partially inconsistent. Alternative 2 proposes a Reduced Density Apartment Redevelopment Alternative that would consist of 58 dwelling units rather than the proposed Project's total of 347 dwelling units, which would allow the development under Alternative 2 to be consistent with the maximum residential density criteria for Compatibility Zone C2 and it would be completely consistent with all applicable GP 2025 objectives and policies including Policies CCM-11.1, LU-22.3, LU-22.5,

and LU-69.1 related to the MARB/IPA LUCP. Therefore, potential impacts regarding land use and planning under Alternative 2 would be **less than** those associated with the proposed Project.

Mineral Resources

As discussed in DEIR Section 5.12, Mineral Resources, the Project site has been developed for commercial uses and is not located within or adjacent to areas of known mineral resources that would be of value to the region or State. Additionally, the City's GP 2025 PEIR determined that there are no specific areas within the City's boundary or proposed Sphere of Influence Area that have locally-important mineral resource recovery sites. As the Project site has already been developed with a retail building and associated surface parking lot, and as the site is not located within or adjacent to areas of known mineral resources, neither the development of the proposed Project nor implementation of Alternative 2 would result in impacts to mineral resources. Therefore, potential impacts to mineral resources under Alternative 2 would be **similar to** those associated with the proposed Project.

Noise

Similar to the proposed Project, development of the Reduced Density Apartment Redevelopment would result in construction related noise and vibration as well as operational noise. It is anticipated that because Alternative 2 would consist of a smaller scale, reduced density development, the construction period for Alternative 2 would be correspondingly shorter than that of the proposed Project, resulting in less construction generated noise and vibration. While the proposed Project's potential construction, vibration, and operational noise impacts would be less than significant, because Alternative 2 would consist of a smaller, reduced density residential development, potential noise impacts under Alternative 2 would be **less than** those of the proposed Project.

Population and Housing

As discussed in DEIR Section 5.14, Population and Housing, development of the proposed Project would not cause substantial unplanned population growth, nor would the proposed Project result in displacing any existing people or housing, necessitating the construction of replacement housing elsewhere. Similar to the proposed Project, the Reduced Density Apartment Redevelopment Alternative would consist of an infill redevelopment project that would provide multi-family residential uses. Both the proposed Project and Alternative 2 are growth accommodating (as compared to growth inducing), as the region, and the state as a whole, are short on housing. The proposed Project would result in less than significant impacts related to population and housing, and Alternative 2 would also. Although Alternative 2 is less growth accommodating, than the proposed Project (as it provides less units), both projects would not induce substantial population growth and therefore, potential impacts regarding population and housing under Alternative 2 would be **the same as** those of the proposed Project.

Public Services

As discussed in DEIR Section 5.15, Public Services, the proposed Project's 347-unit multi-family residential development would not result in an increased demand in public services, such as fire

protection, police protection, parks, or libraries, such that new/additional facilities would need to be constructed. In comparison to the proposed Project, Alternative 2 proposes a reduced density apartment redevelopment that would consist of only 58 dwelling units, which, accordingly, would result in a reduced number of residents who would utilize and be served by the Project site area's public services. While potential impacts to public services under the proposed Project would be less than significant, because Alternative 2 would result in a reduced demand on public services as compared to the proposed Project, impacts to public services under Alternative 2 would be **less than** those of the proposed Project.

Recreation

As discussed in DEIR Section 5.16, Recreation, the proposed Project's 347-unit multi-family residential development would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur. Additionally, the proposed Project would not require the construction or expansion of recreational facilities. In comparison to the proposed Project, Alternative 2 proposes a reduced density apartment redevelopment that would consist of only 58 dwelling units, which, accordingly, would result in a reduced number of residents who would utilize existing neighborhood and regional parks or other recreational facilities. While potential impacts relating to recreation under the proposed Project would be less than significant, because Alternative 2 would result in a reduced demand on recreational facilities as compared to the proposed Project, impacts regarding recreation under Alternative 2 would be **less than** those of the proposed Project.

Transportation

As discussed in DEIR Section 5.17, Transportation, the proposed Project would result in significant and unavoidable impacts regarding VMT. While mitigation measures are proposed, implementation of the measures would not decrease the proposed Project's impacts to VMT to a less than significant level. The proposed Project would consist of a 347-unit multi-family residential development; in contrast, the Reduced Density Apartment Development Alternative would consist of 58 units. It is assumed that the reduced number of vehicles associated with the reduced number of residents who could be accommodated by Alternative 2 would accordingly result in fewer vehicle miles travelled. Therefore, potential impacts to transportation under Alternative 2 would be **less than** those of the proposed Project.

Tribal Cultural Resources

Similar to the proposed Project, development of the Reduced Density Apartment Redevelopment Alternative would require site preparation and grading. Although Alternative 2 would consist of a smaller scale residential project, it is assumed the grading limits and development footprint of Alternative 2 would be the same as that of the proposed Project. Thus, while ground-disturbing activities with the potential to unearth or adversely impact previously undiscovered tribal cultural resources would still occur under Alternative 2, it is anticipated that these construction activities would occur within the same development footprint as that of the proposed Project, resulting in the same area of ground disturbance. Therefore, potential impacts to tribal cultural resources under Alternative 2 would be **the same as** those associated with the proposed Project.

Utilities and Service Systems

As discussed in DEIR Section 5.19, Utilities and Service Systems, construction and operation of the proposed Project would result in an increased demand for utility services, such as water supply, wastewater treatment, and solid waste services. Although this would be a similar case for the construction and operation of Alternative 2, it is anticipated that the demand for utility services under Alternative 2 would be reduced as Alternative 2 consists of a reduced density apartment redevelopment that would be smaller in scale and number of residents than the proposed Project. While potential impacts to utilities and service systems would be less than significant under the proposed Project, because Alternative 2 would consist of a reduced density apartment project, potential impacts to utilities and utility services under Alternative 2 would be **less than** those of the proposed Project.

Wildfire

As discussed in DEIR Section 5.20, Wildfire, the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ) nor would the proposed Project expose people or structures to significant risks, such as downslope or downstream flooding or landslides, or to a significant risk of loss, injury, or death involving wildland fires. Similar to the proposed Project, the Reduced Density Apartment Redevelopment Alternative would consist of an infill redevelopment project within a previously developed site that is not located within a VHFHSZ and that does not feature site conditions that would expose people or structures to the aforementioned significant risks. Therefore, potential impacts related to wildfire under Alternative 2 would be **similar to** those associated with the proposed Project.

7.0.5 Alternative 3 – Retail Development

This discussion analyzes alternative development of the site that remains in accord with the current land use and zoning designations and retains the existing development with the 104,231 square foot retail building and an associated surface parking lot. Under this alternative, the existing retail building and associated surface parking lot would be retained, with only minor improvements to the inside of the building, the outside of the building, and/or associated surface parking lot and landscaping which would house a permanent retail tenant that would utilize the full square footage of the building for retail. Under this alternative, the land use designation and zoning would remain as is, and no SPA would be required.

Impact Analysis for Alternative 3

Aesthetics

Alternative 3, the Retail Development Alternative, would consist of the existing retail building and associated surface parking lot being retained, with only minor improvements to the inside of the building, the outside of the building, and/or associated surface parking lot and landscaping. The existing building would house a permanent retail tenant that would utilize the full square footage of the building for retail. The Project site currently exists within a previously developed shopping center with associated retail, commercial, and fast-food uses. As such, the existing retail building matches the existing aesthetic character of the Project area as the building was constructed for

uses similar to that of the shopping center. Because Alternative 3 would only consist of minor improvements to the building interior, building exterior, and/or to the associated surface parking lot and landscaping, Alternative 3 is not anticipated to introduce any new/additional sources of light or glare that would result in significant impacts, nor would Alternative 3 result in structures that would further obstruct any views within the Project area. Therefore, as Alternative 3 would not result in any redevelopment of the site other than minor improvements for a future retail tenant, potential impacts to aesthetics under Alternative 3 would be **less than** those of the proposed Project.

Agriculture and Forestry Resources

As discussed in DEIR Section 5.2, Agriculture and Forestry Resources, the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is the Project site located adjacent to any of these farmland designation land uses. Additionally, the Project site is not currently zoned for agricultural use or adjacent to land zoned for agricultural use, nor is the site located within an area affected by a Williamson Act Preserve or under a Williamson Act Contract. As previously discussed, the Project site is currently developed and consists of a vacant retail building and associated surface parking lot and does not contain any farmland, forest land, or timberland, nor is the site located adjacent to any land containing these uses. As these uses are not located on or within the vicinity of the Project site, no impacts would occur to agricultural or forestry resources under development of the proposed Project or under Alternative 3. Therefore, potential impacts under the Retail Development Alternative would be **similar to** those of the proposed Project.

Air Quality

Under Alternative 3, there would be significantly fewer emissions that would impact air quality during site preparation as Alternative 3 would only consist of minor improvements to the existing retail building interior, building exterior, and/or to the associated surface parking lot and landscaping, rather than the demolition and building construction associated with the proposed Project. However, it is anticipated that operational emissions that would impact air quality would be greater under Alternative 3 than under the proposed Project as the commercial retail use of Alternative 3 would have a higher trip generation rate (e.g., repeated customer vehicle trips to and from the retail business, truck trips to deliver/restock retail merchandise/products) than the proposed Project's residential uses. The higher trip generation rate for the commercial retail use under Alternative 3 would in turn result in a higher generation of vehicle emissions during operations. Therefore, potential air quality impacts would be **greater** under Alternative 3 than the proposed Project.

Biological Resources

As analyzed in DEIR Section 5.4, Biological Resources, 15 special-status plant species have been recorded in the USGS Riverside East quadrangle, in which the Project site is located. The Project site consists of an existing vacant retail building and associated surface parking lot, which are site conditions that have eliminated the Project site's ability to provide suitable habitat for special-status plant species. Additionally, 29 special-status wildlife species have reported

occurrences within the USGS Riverside East quadrangle. A review of the habitat requirements of each of the special-status wildlife species indicates that the Project site does not contain nor would be able to provide potentially suitable habitat for any of these wildlife species. While the site contains trees that could provide potentially suitable habitat for nesting birds, these trees would be left in place under the development of the proposed Project and, it is assumed, under the Retail Development Alternative. In addition, as the site is paved/developed, it does not contain nor would it be able to provide suitable conditions or habitat for features such as wetlands, vernal pools, or riparian or riverine resources. As the site does not contain nor would it be able to support any sensitive biological resources, potential impacts to biological resources would be less than significant under either the proposed Project or the Retail Development Alternative. Therefore, potential impacts to biological resources under Alternative 3 would be **similar to** those associated with the proposed Project.

Cultural Resources

As discussed in DEIR Section 5.5, Cultural Resources, the City may consider the Project area to have a moderate to high sensitivity for potential impacts to cultural resources. Additionally, while the proposed Project's Cultural Resources Assessment did not report the presence or discovery of human remains, construction and/or ground-disturbing activities could have the potential to disturb or destroy previously undiscovered human remains, including those interred outside of formal cemeteries. Under Alternative 3, the existing previously developed Project site would not undergo ground-disturbing construction activities. Rather, only minor improvements would be made to interior of the existing retail building, exterior of the building, and/or to the associated surface parking lot and landscaping in preparation of hosting a long-term retail tenant. Therefore, potential impacts to cultural resources under Alternative 3 would be **less than** those associated with the proposed Project.

Energy

RPU would still supply electricity and SoCalGas would still supply natural gas under Alternative 3. Under Alternative 3, construction energy consumption is anticipated to be less than that of the proposed Project as only minor improvements would be made to interior of the existing retail building, exterior of the building, and/or to the associated surface parking lot and landscaping in preparation of hosting a long-term retail tenant. Additionally, the operational energy consumption of the Retail Development Alternative is anticipated to be less than the proposed Project. Alternative 3 is anticipated to be mainly a locally serving retail use as the site is located within an area surrounded by residential uses. As outlined in the City's Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Additionally, it is assumed that the retail development proposed under Alternative 3 would not be a 24-hour retail business and the development would also be required to comply with all applicable energy conservation standards and therefore would have a lower operational energy demand than the proposed Project. Therefore, potential impacts to energy under Alternative 3 would be **less than** those of the proposed Project.

Geology and Soils



The existing geology and soils conditions of the site would remain the same for both the proposed Project and Alternative 3. As discussed, the Project site is previously developed and consists of a vacant retail building and associated surface parking lot. In contrast to the proposed Project, Alternative 3 would not require any ground-disturbing construction activities; rather, only minor improvements would be made to interior of the existing retail building, exterior of the building, and/or to the associated surface parking lot and landscaping in preparation of hosting a long-term retail tenant. Therefore, Alternative 3 results in fewer ground disturbances that could potentially impact geology and soils resources. Thus, potential impacts to geology and soils under Alternative 3 would be **less than** those of the proposed Project.

Greenhouse Gas Emissions

Under Alternative 3, there would be significantly fewer GHG emissions during site preparation as Alternative 3 would only consist of minor improvements to the existing retail building interior, building exterior, and/or to the associated surface parking lot and landscaping, rather than the demolition and building construction associated with the proposed Project. However, it is anticipated that operational GHG emissions would be greater under Alternative 3 than under the proposed Project as the commercial retail use of Alternative 3 would have a higher trip generation rate (e.g., repeated customer vehicle trips to and from the retail business, truck trips to deliver/restock retail merchandise/products) than the proposed Project's residential uses. The higher trip generation rate for the commercial retail use under Alternative 3 would in turn result in a higher generation of vehicle GHG emissions during operations. Therefore, potential air quality impacts would be **greater** under Alternative 3 than the proposed Project.

Hazards and Hazardous Materials

As discussed in DEIR Section 5.9, Hazards and Hazardous Materials, the proposed Project's residential density would exceed and be inconsistent with the allowable maximum residential density criteria for MARB/IPA LUCP Compatibility Zone C2, resulting in a significant and unavoidable impact. Alternative 3, Retail Development would include retaining the existing development of the site that remains in accord with the current land use and zoning designations and the Mission Grove Specific Plan. The current retail use is consistent with the commercial density criteria (limits) in the MARB/IPA LUCP Compatibility Zone C2. Under this alternative, the land use designation and zoning would remain as is and the Project site would be under a CR – SP CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. Thus, under Alternative 3, there would not be a residential development in which the residential dwelling unit density could exceed and be inconsistent with the requirements of Compatibility Zone C2. As such, potential impacts regarding hazards and hazardous materials under Alternative 3 would be **less than** those of the proposed Project.

Hydrology and Water Quality

As discussed in DEIR Section 5.10, Hydrology and Water Quality, expected pollutant sources that could impact water quality resources from the proposed Project include interior drains, indoor/structural pesticide use, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, and parking lots. While the site preparation and operation of the retail development proposed

under Alternative 3 may still include some of these sources (e.g., landscaping/outdoor pesticide use), it is anticipated that it would be to a lesser degree than the proposed Project. As discussed, under Alternative 3, the existing site and existing retail building would be retained, with only minor improvements anticipated for the interior of the retail building, exterior of the building, and/or to the associated surface parking lot and landscaping. It is assumed the existing landscaping established during the development of the retail building/shopping center would be retained under Alternative 3. As it is anticipated that development under Alternative 3 would overall have fewer uses and sources that would impact hydrology and water quality than the residential development proposed under the proposed Project, impacts under Alternative 3 would be **less than** those of the proposed Project.

Land Use and Planning

As discussed in DEIR Section 5.11, Land Use and Planning, the proposed Project's residential density would exceed and be inconsistent with the allowable maximum residential density criteria for MARB/IPA LUCP Compatibility Zone C2, resulting in a significant and unavoidable impact. Alternative 3, Retail Development, would include retaining the existing development of the site that remains in accord with the current land use and zoning designations and the Mission Grove Specific Plan. Under this alternative, the land use designation and zoning would remain as is and the Project site would be under a CR – SP CR-SP Commercial Retail and Specific Plan (Mission Grove) Overlay Zones. Alternative 3 is anticipated to be consistent with the commercial density criteria (limits) in the MARB/IPA LUCP Compatibility Zone C2 as well. Alternative 3 would also be consistent with all applicable GP 2025 objectives and policies including Policies CCM-11.1, LU-22.3, LU-22.5, and LU-69.1 related to the MARB/IPA LUCP. Thus, , potential impacts regarding land use and planning under Alternative 3 would be **less than** those of the proposed Project.

Mineral Resources

As discussed in DEIR Section 5.12, Mineral Resources, the Project site has been developed for commercial uses and is not located within or adjacent to areas of known mineral resources that would be of value to the region or State. Additionally, the City's GP 2025 PEIR determined that there are no specific areas within the City's boundary or proposed Sphere of Influence Area that have locally important mineral resource recovery sites. As the Project site has already been developed with a retail building and associated surface parking lot, and as the site is not located within or adjacent to areas of known mineral resources, neither the development of the proposed Project nor implementation of Alternative 3 would result in impacts to mineral resources. Therefore, potential impacts to mineral resources under Alternative 3 would be **similar to** those associated with the proposed Project.

Noise

Under Alternative 3, it is anticipated that noise and/or vibration generated during site preparation would be significantly less than construction noise and vibration generated during the development of the proposed Project. Under the Retail Development Alternative, only minor changes to the existing retail building's interior, exterior, and/or to the associated surface parking lot and/or landscaping would occur, rather than the building demolition and building construction

that would occur under the proposed Project. Additionally, the site is situated within an existing shopping center with various existing commercial, retail, and fast-food uses; therefore, it is anticipated that operational noise generated would be similar to the shopping center's existing uses and would not result in a significant increase to existing noise levels in the Project area. Therefore, potential noise impacts under Alternative 3 would be **less than** those associated with the proposed Project.

Population and Housing

The Retail Development Alternative would consist of retaining the existing retail building and associated surface parking lot within the existing shopping center and would include a permanent retail tenant using the existing building for retail uses. As Alternative 3 would utilize existing commercial retail structures, it would not include development that would cause substantial unplanned population growth. Alternative 3 would not result in displacing any existing people or housing, necessitating the construction of replacement housing elsewhere. While potential impacts to population and housing would be less than significant under the proposed Project, because Alternative 3 would not consist of a residential development that would affect population and housing, potential impacts under Alternative 3 would be **less than** those of the proposed Project.

Public Services

The Retail Development Alternative would consist of retaining the existing retail building and associated surface parking lot within the existing shopping center and would include a permanent retail tenant using the existing building for retail uses. As Alternative 3 would operate within an area zoned for commercial retail uses, it is not anticipated that reinstating these uses via a permanent retail tenant at the existing retail building would result in an increased demand in public services, such as fire protection, police protection, parks, or libraries, such that new/additional facilities would need to be constructed. While potential impacts to public services under the proposed Project would be less than significant, because Alternative 3 would not introduce any new/additional uses to the Project site than the commercial retail uses the site was previously developed for, potential impacts to public services under Alternative 3 would be **less than** those of the proposed Project.

Recreation

Alternative 3 would consist of retaining the existing retail building and associated surface parking lot within the existing shopping center and would include a permanent retail tenant using the existing building for retail uses. As Alternative 3 includes a commercial retail use, it would not increase population or associated use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration would occur, nor would the commercial use require the construction or expansion of recreational facilities. While potential impacts regarding recreation under the proposed Project would be less than significant, because Alternative 3 would not introduce any new residential use and associated population growth, potential impacts to recreation under Alternative 3 would be **less than** those of the proposed Project.

Transportation

As discussed in DEIR Section 5.17, Transportation, the proposed Project would result in significant and unavoidable impacts regarding VMT. While mitigation measures are proposed, implementation of the measures would not decrease the proposed Project's impacts to VMT to a less than significant level. Alternative 3 is anticipated to be mainly a locally serving retail use as the site is located within an area surrounded by residential uses. As outlined in the City's Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Therefore, it is anticipated that potential impacts to transportation under Alternative 3 would be **less than** those associated with the proposed Project.

Tribal Cultural Resources

Construction of the proposed Project would involve ground-disturbing activities with the potential to unearth or adversely impact previously unidentified tribal cultural resources. In contrast, Alternative 3 would include only minor improvements to the existing retail building's interior, exterior, and/or associated surface parking lot and/or landscaping. Thus, under Alternative 3, there would be significantly reduced potential of adversely impacting unidentified tribal cultural resources. As such, potential impacts to tribal cultural resources under Alternative 3 would be **less than** those of the proposed Project.

Utilities and Service Systems

RPU would provide water service and the City's Public Works Department would provide sewer service to the development under Alternative 3, as with the proposed Project. Therefore, the current and projected available water supplies would be the same under Alternative 3 as under the proposed Project. Based on the water demand projections in the City for the proposed Project, projected water supplies were determined to be enough for the projected water demand of the proposed Project. It is anticipated that the commercial retail uses under Alternative 3 would have less water demand and generate less wastewater than the proposed Project as the proposed Project would require water and sewer service for numerous residential tenants rather than for the single retail tenant for the existing building under Alternative 3. Therefore, potential impacts to utilities and service systems under Alternative 3 would be **less than** those associated with the proposed Project.

Wildfire

As discussed in DEIR Section 5.20, Wildfire, the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ). Additionally, under current site conditions, which would be retained under Alternative 3, the site and its proposed retail uses would not expose people or structures to significant risks, such as downslope or downstream flooding or landslides, or to a significant risk of loss, injury, or death involving wildland fires. Alternative 3 would utilize the existing, currently vacant retail building and associated surface parking lot to host a permanent retail tenant, which would be a use similar to the surrounding shopping center. Alternative 3 would operate within a previously developed site that is not located within a VHFHSZ and that does not feature site conditions that would expose people or structures

to the aforementioned significant risks. Therefore, potential impacts related to wildfire under Alternative 3 would be **similar to** those associated with the proposed Project.

7.0.6 Alternative 4 – Proposed Project at Off-Site Location

This discussion analyzes the proposed 347 residential apartment project at an off-site location. This alternative does not include a specific off-site location; however, it is assumed for the purposes of this analysis that it would consist of redevelopment of a site similar in size and of a vacant or underutilized building or buildings within the City of Riverside. This development focuses on infill of abandoned or underutilized space. Alternative sites were not considered for this project and thus, there are no specific off-site locations that were considered by the applicant to be evaluated under this alternative. It is assumed for the purposes of this analysis that the off-site alternative location would also require a General Plan Amendment and a Zone Change from CR - Commercial to Mixed-Use Urban (MU-U), as with the proposed Project.

Impact Analysis for Alternative 4

Aesthetics

Under Alternative 4, the proposed Project's 347 dwelling units would be constructed at another project site of similar size within the City of Riverside limits. As discussed in DEIR Section 5.1, Aesthetics, the Project site is located in a highly urbanized area, consisting of commercial and retail uses as well as single- and multi-family residential uses. The Project site is not a scenic vista, nor are there any State scenic highways or City designated Scenic or Special Boulevards or Parkways in the vicinity of the Project site. The Proposed Project, at Off-Site Location would be constructed with the same design elements of the proposed Project, and the project design and landscaping of Alternative 4 would similarly be required to comply with the City's Design Guidelines and Zoning Code. As with the proposed Project, Alternative 4 would not result in substantial light or glare. While impacts to aesthetics would be less than significant under the proposed Project, because Alternative 4 would result in similar scale and architectural style residential development, impacts under Alternative 4 would be **similar to** those of the proposed Project.

Agriculture and Forestry

As discussed in DEIR Section 5.2, Agriculture and Forestry Resources, the Project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is the Project site located adjacent to any of these farmland designation land uses. Additionally, the Project site is not currently zoned for agricultural use or adjacent to land zoned for agricultural use, nor is the site located within an area affected by a Williamson Act Preserve or under a Williamson Act Contract. As previously discussed, the Project site is currently developed and consists of a vacant retail building and associated surface parking lot and does not contain any farmland, forest land, or timberland, nor is the site located adjacent to any land containing these uses. Similarly, the Alternative 4 location would not be anticipated to be designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, zoned for agricultural use or adjacent to land zoned for agricultural use, or located within an area affected by a Williamson Act Preserve or under a Williamson Act Contract, as the City of Riverside does not have large areas

designated or zoned as such. As these uses are not located on or within the vicinity of the Project site, no impacts would occur to agricultural or forestry resources under development of the proposed Project or under Alternative 4. Therefore, potential impacts under the Reduced Density Apartment Redevelopment would be **similar to** those of the proposed Project.

Air Quality

Under Alternative 4, Proposed Project at Off-Site Location, development of the Project site would result in construction and operational emissions that could potentially impact air quality. Alternative 4 would consist of a multi-family residential development with the same number of dwelling units and would be expected to have the same or similar construction period. As such, potential impacts to air quality under Alternative 4 would be **similar to** those associated with the proposed Project.

Biological Resources

As analyzed in Section 5.4, Biological Resources, 15 special-status plant species have been recorded in the USGS Riverside East quadrangle, in which the Project site is located. The Project site consists of an existing vacant retail building and associated surface parking lot, which are site conditions that have eliminated the Project site's ability to provide suitable habitat for special-status plant species. Additionally, 29 special-status wildlife species have reported occurrences within the USGS Riverside East quadrangle. A review of the habitat requirements of each of the special-status wildlife species indicates that the Project site does not contain nor would be able to provide potentially suitable habitat for any of these wildlife species. Similarly, the Alternative 4 location would already have been developed and is not anticipated to be a site that contains or is able to support any sensitive biological resources. Therefore, potential impacts to biological resources under Alternative 4 would be **similar to** those associated with the proposed Project.

Cultural Resources

Development of the Proposed Project at Off-Site Location Alternative would require site preparation and grading of a similar size, grading limits, and development footprint to the proposed Project. Thus, ground-disturbing activities with the potential to unearth or adversely impact previously undiscovered archaeological resources and/or human remains would still occur under Alternative 4. Therefore, potential impacts to cultural resources under Alternative 4 would be **similar to** those associated with the proposed Project.

Energy

Under the Proposed Project at Off-Site Location, electricity and natural gas would still be supplied by Riverside Public Utilities (RPU) and Southern California Gas Company (SoCalGas), respectively. It is anticipated that construction fuel consumption under Alternative 4 would be similar to that of the proposed Project for construction equipment, vendor trips, and worker trips. Similar to the proposed Project, the project under Alternative 4 would comply with applicable Title 24 Building Standards for multi-family residential developments, including incorporating solar panels and providing electric vehicle (EV) charging stations. It is additionally anticipated that similar to the proposed Project, the project under Alternative 4 would utilize all electric appliances

and only utilize natural gas for project amenities/common spaces. As the Proposed Project at Off-Site Location would be a similar scale residential development, with the same number of dwelling units, it is anticipated that the project under Alternative 4 would consume similar energy resources during both construction and operations as the proposed Project. Therefore, potential impacts to energy resources under Alternative 4 would be **similar to** those associated with the proposed Project.

Geology and Soils

As geology and soils conditions are site specific, at the Proposed Project at Off-Site Location they could be similar to or differ from the proposed Project site. Alternative 4 would still include ground-disturbing and grading construction activities, with an anticipated similar overall construction period. As both the proposed Project and Alternative 4 would be required to comply with the CBC, RMC, and recommendations made by the geotechnical engineer, the potential impacts to geology and soils under Alternative 4 would be **similar to** those of the proposed Project.

Greenhouse Gas Emissions

Under Alternative 4, Proposed Project at Off-Site Location, development would result in construction and operational greenhouse gas (GHG) emissions. As Alternative 4 would consist of a multi-family residential development with the same number of dwelling units and the construction period is expected to be the same, Alternative 4 would result in similar vehicle GHG and construction emissions. As such, potential impacts regarding GHG emissions under Alternative 4 would be **similar to** those associated with the proposed Project.

Hazards and Hazardous Materials

Proposed Project at Off-Site Location is not anticipated to be in a compatibility zone of an airport where density criteria would apply. Therefore, as Alternative 4 would allow for a residential development that would not be inconsistent with an airport land use plan, potential impacts regarding hazards and hazardous materials would be **less than** those associated with the proposed Project.

Hydrology and Water Quality

Similar to the proposed Project, expected pollutant sources that could impact water quality resources under Alternative 4 would include interior drains, indoor/structural pesticide use, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, and parking lots. While the proposed Project's potential impacts to hydrology and water quality would be the same, and they would be required to comply with the same regulations protecting water quality, potential impacts under Alternative 4 would be **similar to** those associated with the proposed Project.

Land Use and Planning

Proposed Project at Off-Site Location is not anticipated to be in a compatibility zone of an airport where density criteria would apply. Therefore, Alternative 4 would allow for a residential development that would not be inconsistent with an airport land use plan. Therefore, potential

impacts regarding land use and planning under Alternative 4 would be **less than** those associated with the proposed Project.

Mineral Resources

Proposed Project at Off-Site Location is not anticipated to be located within or adjacent to areas of known mineral resources that would be of value to the region or State. Additionally, the City's GP 2025 PEIR determined that there are no specific areas within the City's boundary or proposed Sphere of Influence Area that have locally important mineral resource recovery sites. As the Project site has already been developed with a retail building and associated surface parking lot, and as the site is not located within or adjacent to areas of known mineral resources, neither the development of the proposed Project nor implementation of Alternative 4 would result in impacts to mineral resources. Therefore, potential impacts to mineral resources under Alternative 4 would be **similar to** those associated with the proposed Project.

Noise

Similar to the proposed Project, development of the Proposed Project at Off-Site Location would result in construction related noise and vibration as well as operational noise. It is anticipated that because Alternative 4 would consist of a similar scale and density development, the construction period for Alternative 4 would be correspondingly similar than that of the proposed Project, resulting in similar construction generated noise and vibration. The proposed Project's potential construction, vibration, and operational noise impacts would be less than significant, and because Alternative 4 would consist of a similar residential development, potential noise impacts under Alternative 4 would be **similar to** those of the proposed Project.

Population and Housing

As discussed in DEIR Section 5.14, Population and Housing, development of the proposed Project would not cause substantial unplanned population growth, nor would the proposed Project result in displacing any existing people or housing, necessitating the construction of replacement housing elsewhere. Similar to the proposed Project, the Proposed Project at Off-Site Location Alternative would consist of an infill redevelopment project that would provide multi-family residential uses. The proposed Project would result in less than significant impacts related to population and housing, and as Alternative 4 would provide the same number of dwelling units as the proposed Project, potential impacts regarding substantial unplanned population growth would be the same under Alternative 2. Therefore, potential impacts regarding population and housing under Alternative 2 would be **similar to** those of the proposed Project.

Public Services

As discussed in DEIR Section 5.15, Public Services, the proposed Project's 347-unit multi-family residential development would not result in an increased demand in public services, such as fire protection, police protection, parks, or libraries, such that new/additional facilities would need to be constructed. Alternative 4 proposes the same density apartment redevelopment as the proposed Project. While potential impacts to public services under the proposed Project would be less than significant, Alternative 4 would also be less than significant on the demand for public

services. Impacts to public services under Alternative 2 would be **similar to** those of the proposed Project.

Recreation

As discussed in DEIR Section 5.16, Recreation, the proposed Project's 347-unit multi-family residential development would not substantially increase population that would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration would occur. Additionally, the proposed Project would not require the construction or expansion of recreational facilities. In comparison to the proposed Project, Alternative 4 proposes the same density apartment redevelopment. While potential impacts relating to recreation under the proposed Project would be less than significant, Alternative 4 would also be less than significant. Impacts regarding recreation under Alternative 4 would be **similar to** those of the proposed Project.

Transportation

As discussed in DEIR Section 5.17, Transportation, the proposed Project would result in significant and unavoidable impacts regarding VMT. While mitigation measures are proposed, implementation of the measures would not decrease the proposed Project's impacts to VMT to a less than significant level. The Proposed Project at Off-Site Location would consist of the same 347-unit multi-family residential development as the proposed Project. Alternative 4 would accordingly result in similar vehicle miles travelled, resulting in significant and unavoidable impacts regarding VMT. Therefore, potential impacts to transportation under Alternative 4 would be **similar to** those of the proposed Project.

Tribal Cultural Resources

Similar to the proposed Project, development of the Proposed Project at Off-Site Location Alternative would require site preparation and grading. Alternative 4 would consist of a similar scale residential project, grading limits and development footprint as the proposed Project. Thus, while ground-disturbing activities with the potential to unearth or adversely impact previously undiscovered tribal cultural resources would still occur under Alternative 4, resulting in a similar area of ground disturbance. Therefore, potential impacts to tribal cultural resources under Alternative 4 would be **similar to** those associated with the proposed Project.

Utilities and Service Systems

As discussed in DEIR Section 5.19, Utilities and Service Systems, construction and operation of the proposed Project would result in an increased demand for utility services, such as water supply, wastewater treatment, and solid waste services. This would be a similar case for the construction and operation of Alternative 4. As potential impacts to utilities and service systems would be less than significant under the proposed Project, they would also be for Alternative 4. Potential impacts to utilities and utility services under Alternative 4 would be **similar to** those of the proposed Project.

Wildfire

As discussed in DEIR Section 5.20, Wildfire, the proposed Project site is not located within an area or land classified as a Very High Fire Hazard Severity Zone (VHFHSZ) nor would the proposed Project expose people or structures to significant risks, such as downslope or downstream flooding or landslides, or to a significant risk of loss, injury, or death involving wildland fires. Similar to the proposed Project, the Proposed Project at Off-Site Location Alternative would be expected to consist of an infill redevelopment project within a previously developed site that is not located within a VHFHSZ and that does not feature site conditions that would expose people or structures to the aforementioned significant risks. Therefore, potential impacts related to wildfire under Alternative 2 would be **similar to** those associated with the proposed Project.

7.0.7 Alternatives Rejected from Further Consideration

Section 15126.6(c) of the State CEQA Guidelines specify that an EIR should identify alternatives that were considered by the lead agency but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR if it fails to meet the basic Project objectives, is infeasible, or does not avoid significant environmental impacts. The following alternatives were considered and rejected by the City.

There are two other former K-Mart retail stores and one former Sears retail store within the City of Riverside that have closed and remain vacant. They are located at the following:

- Former K-Mart retail store at the northwest corner of Iowa Avenue and 3rd/Blaine Street. The site is within a shopping center that also has a Stater Brothers grocery store and other smaller retail stores. A mixed-use student housing is proposed for this site, which is in close proximity to University of California, Riverside (UCR).
- Former K-Mart retail store at the southeast corner of Arlington Avenue and Van Buren Boulevard. This site is currently being redeveloped with commercial and retail uses and has a Stater Brothers grocery store as the anchor.
- Former Sears Department store at the northeast corner of Arlington Avenue and Streeter Avenue. A mixed use development is currently proposed with multi-family residential, an Aldi grocery store, and other commercial and retail spaces.

These alternative project locations are not feasible as they are currently owned by others that are pursuing entitlements with the City or have already obtained entitlements from the City for these proposed redevelopment projects. Therefore, these alternative off-site potential redevelopment locations were eliminated from further consideration.

7.0.8 Environmentally Superior Alternative

CEQA requires the identification of the environmentally superior alternative among the options studied. The environmentally superior alternative must be an alternative to the proposed project that reduces some of the environmental impacts of the proposed project, regardless of the financial costs associated with that alternative. Identification of the environmentally superior alternative is an informational procedure and the alternative identified as environmentally superior may not be the one that best meets the goals or needs of the proposed project.

Table 7.0-1 - Comparison of Alternatives Matrix, indicates whether each alternative's environmental impact is reduced, increased, or similar compared to that of the proposed Project for each of the issue areas studied. Based on the alternative's analysis provided above, Alternative 1: No Project/Redevelopment Alternative, would be the environmentally superior alternative. The No Project/Redevelopment Alternative would either avoid or lessen the severity of all significant impacts of the proposed project, as nothing would be constructed. However, the No Project/ No Redevelopment Alternative would not fulfill the objectives of the proposed project.

When the "No Project/Development" alternative is determined to be environmentally superior, State CEQA Guidelines also requires identification of the environmentally superior alternative among the development options. Of the other alternatives evaluated in this EIR, Alternative 2: Reduced Density Apartment Redevelopment and Alternative 3: Retail Development are determined to be the environmentally superior alternatives, however; they are not consistent with the proposed Project's Objectives and Goals. Alternative 4: Proposed Project at Off-Site Location, assuming that it could be located on a site that was previously developed and is currently vacant and is also not located in a compatibility zone that restricts residential development, would also be an environmentally superior alternative. This alternative would be consistent with the proposed Project's Objectives and Goals. However, it is unknown if such a property of similar size exists in the City and is currently available for purchase.

7.0.9 Comparison of Alternatives

Table 7.0-1 – Comparison of Alternatives Matrix, below, compares the potential environmental impacts of each alternative to the proposed Project.

Table 7.0-1 – Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	Alternative 1 No Project/ No Redevelopment	Alternative 2 Reduced Density Apartment Redevelopment	Alternative 3 Retail Development	Alternative 4 Proposed Project at Off-Site Location
<i>Aesthetics</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Agriculture/ Forestry Resources</i>	NI	Similar	Similar	Similar	Similar
<i>Air Quality</i>	LTS	Reduced	Reduced	Increased	Similar
<i>Biological Resources</i>	LTSM	Reduced	Similar	Similar	Similar
<i>Cultural Resources</i>	LTSM	Reduced	Similar	Reduced	Similar
<i>Energy</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Geology and Soils</i>	LTSM	Reduced	Similar	Reduced	Similar
<i>Greenhouse Gas Emissions (GHG)</i>	LTS	Reduced	Reduced	Increased	Similar
<i>Hazards & Hazardous Materials</i>	SU	Reduced	Reduced	Reduced	Reduced
<i>Hydrology/ Water Quality</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Land Use and Planning</i>	SU	Reduced	Reduced	Reduced	Reduced
<i>Mineral Resources</i>	NI	Similar	Similar	Similar	Similar

Environmental Issue	Proposed Project	Alternative 1 No Project/ No Redevelopment	Alternative 2 Reduced Density Apartment Redevelopment	Alternative 3 Retail Development	Alternative 4 Proposed Project at Off-Site Location
<i>Noise</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Population/ Housing</i>	LTS	Reduced	Similar	Reduced	Similar
<i>Public Services</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Recreation</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Transportation</i>	SU	Reduced	Reduced	Reduced	Similar
<i>Tribal Cultural Resources</i>	LTSM	Reduced	Reduced	Reduced	Similar
<i>Utilities and Service Systems</i>	LTS	Reduced	Reduced	Reduced	Similar
<i>Wildfire</i>	LTS	Similar	Similar	Similar	Similar
Meets Project Objectives?		Alternative 1 does not meet any or most of the Project objectives	Alternative 2 does not meet all or most of the Project objectives	Alternative 3 does not meet all or most of the Project objectives	Alternative 4 does meet all of the Project objectives
NI = No Impact LTS = Less than Significant Impact LTSM = Less than Significant Impact with Mitigation SU = Significant and Unavoidable					