BUNDY CANYON RESORT APARTMENT PROJECT
Draft Environmental Impact Report

Prepared for
The City of Wildomar

November 2016

applied planning inc

NOTICE OF AVAILABILITY FOR PUBLIC REVIEW OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) FOR THE BUNDY CANYON RESORT APARTMENT PROJECT

A Draft Environmental Impact Report (State Clearinghouse Number 2016041067) has been prepared by the City of Wildomar for the Bundy Canyon Apartment Project (Planning Application No. 16-0006). The DEIR and Technical Appendices will be available for public review/comment beginning on **Wednesday, November 23, 2016** and can be downloaded from the City of Wildomar Environmental Documents Center webpage at http://www.cityofwildomar.org/environmental-documents.asp. A printed/hard copy of the DEIR document will also be available for review at the City of Wildomar, Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595 during regular business hours (8 am – 5 pm, Monday – Thursday).

The project applicant proposes to develop 140 multi-family residential units on 28.3 acres located on the south side of Bundy Canyon Road, approximately one mile easterly of Interstate 15. The applicant is requesting approval to develop 140 multi-family residential units on 28.3 acres which requires approval of a Change of Zone to amend the zoning map from the existing zoning designation of R-R (Rural Residential) to R-3 (General Residential), and a Plot Plan to develop the site with up to 140 multi-family residential units with related on-site & off-site improvements, including review of the site development, architecture and landscaping, etc.

The DEIR identifies project and cumulatively considerable significant impacts that require mitigation in the following topic areas: Aesthetics; Air Quality; Biological Resources; Cultural Resources/Tribal Cultural Resources; Geology and Soils; Global Climate Change and Greenhouse Gas (GHG) Emissions; Hydrology/Water Quality; Land Use and Planning; Noise; Population and Housing; Public Services and Utilities; and Transportation/Traffic. Significant and unavoidable impacts have been identified in the following topic areas: Noise; and Transportation/Traffic. The project is not located on any hazardous materials sites enumerated under Section 65962.5 of the California Government Code.

In accordance with Sections 15087 of the CEQA Guidelines, this Public Notice is posted to officially notify the public, public agencies, responsible and trustee agencies, that the required 45-day public review period will commence on **Wednesday, November 23, 2016 and conclude on Friday, January 6, 2017.** Any written comments (via email or letter) on the DEIR must be submitted no later than 5 p.m. on January 6, 2017. Written comments may be mailed to: Matthew C. Bassi, Planning Director, City of Wildomar Planning Department, 23873 Clinton Keith Road, Suite 201, Wildomar, CA 92595. Email comments (preferred) can be sent to mbassi@cityofwildomar.org. The Planning Commission is tentatively scheduled to review the DEIR and proposed development project at their March 1, 2017 meeting.

Posted: November 23, 2016

DRAFT ENVIRONMENTAL IMPACT REPORT

for the

Bundy Canyon Resort Apartment Project

State Clearinghouse Number:
2016041067

November 2016

Prepared for:
City of Wildomar
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1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

Pursuant to the requirements of the California Environmental Quality Act (CEQA), this Environmental Impact Report (EIR) evaluates and discloses the potential environmental effects resulting from construction and operation of the proposed Bundy Canyon Resort Apartment Project (the Project). The Project would result in up to 140 multi-family residential units on an approximately 28.3-acre site, located within the City of Wildomar, in Riverside County. Specifically, the site is located along Bundy Canyon Road, approximately one mile easterly of Interstate 15. Bundy Canyon Road forms the site's northerly border. Vacant land exists to the north (across Bundy Canyon Road) and east. Rural residential uses exist to the south of the site. Single-family residential uses and a pocket of vacant land are located to the west. Please refer also to EIR Section 3.0, *Project Description*, and Figure 3.2-1, *Project Location*.

This EIR Section summarizes relevant Project background issues, provides a brief description of the Project and its Objectives, and summarizes the potential environmental impacts of the proposal. Table 1.10-1, *Summary of Impacts and Mitigation*, presented at the conclusion of this Section, lists these impacts and presents the mitigation measures recommended to eliminate or reduce the effects of those impacts which have been determined to be potentially significant. Alternatives to the Project which could reduce the extent or severity of the Project's identified environmental impacts are also briefly described within this Section. For a full description of the Project, its impacts, recommended mitigation measures, and considered Alternatives, please refer to EIR Sections 3.0, 4.0, and 5.0, respectively.

1.2 PROJECT ELEMENTS

Primary elements comprising the Project are summarized below. Please refer also to the expanded characterization of Project facilities and operations presented at EIR Section 3.0, *Project Description*.

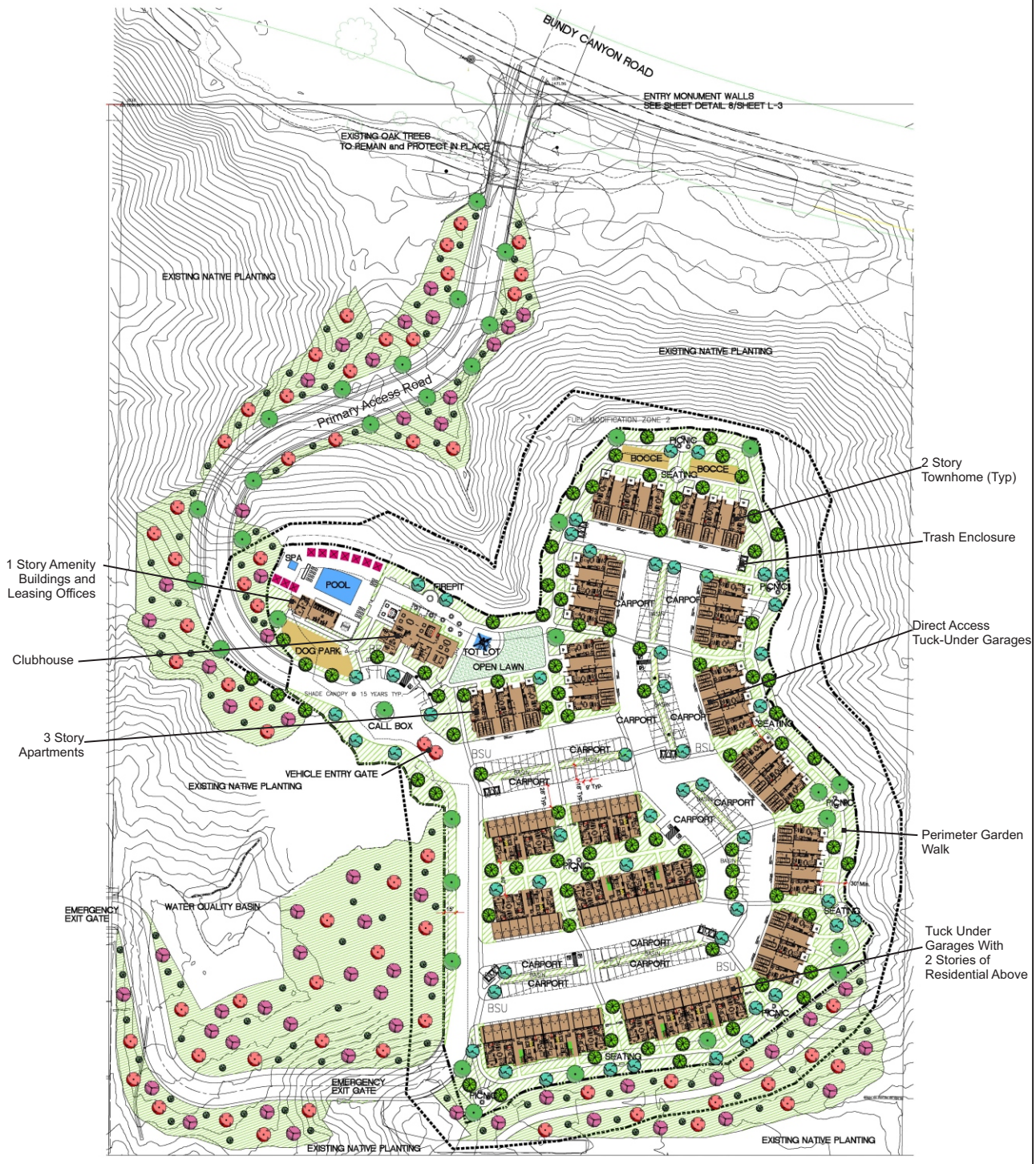
1.2.1 Site Preparation

The Project site is currently vacant and undeveloped. Site preparation activities would be completed within approximately 30 days of their commencement. The Project grading concept provides for balanced earthwork within the Project site, with no substantive import or export of grading material required.

1.2.2 Development Concept

The Project proposes the development of 2- and 3- story attached residential units, comprising 50 townhomes and 90 apartments. The Project would also implement a variety of supporting community amenities, including a clubhouse, swimming pool, basketball court, playgrounds, dog run, and picnic area. Figure 1.2-1 presents the Project Site Plan Concept. Table 1.2-1 summarizes the proposed mix of residential products that would be realized by the Project.

Locations, configurations, and sizes of proposed uses within the Project site are approximate, but considered accurate for planning and environmental evaluation purposes. Ultimate configuration and orientation of uses proposed by the Project are subject to City review and approval.



Source: Alhambra Group Landscape Architecture

Figure 1.2-1
Conceptual Site Plan

Table 1.2-1
Proposed Residential Types

Type	Number of Units
1 Bedroom Apartment	57
2 Bedroom Apartment	33
2 Bedroom Townhome	35
3 Bedroom Townhome	15
Total Units	***140***

Source: Bundy Canyon Resort Apartments Site Plan Concept, August 2016.

1.2.3 Access and Circulation

Primary access to the Project would be provided via a signalized driveway connecting northerly to Bundy Canyon Road. Access to the Project would be controlled by an automatic gate system. Secondary, emergency-only access would be provided from the southwest via an extension of Windwood Lane; this access point would remain closed under normal circumstances. Final designs and specifications for all Project driveways, traffic controls, and internal circulation improvements would be subject to review and approval by the City Engineering Department. Improvements to be implemented by the Project are described below.

- **Bundy Canyon Road** – Bundy Canyon Road is an east-west oriented roadway located along the Project's northern boundary. As part of the Project, Bundy Canyon Road between the Project's easterly and westerly boundaries would be constructed at its ultimate half-section width as an urban arterial (152-foot right-of-way) pursuant to applicable City of Wildomar standards. Bundy Canyon Road would be striped with three eastbound through lanes, consistent with the urban arterial roadway cross-section, at such time in the future when the roadway is widened to the east and west of the site.

- **Road "A" / Bundy Canyon Road** – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

  -Northbound Approach: One shared left-right turn lane. The queuing evaluation for the site access point indicates the 95th percentile northbound queue would not exceed 70-feet.
  -Southbound Approach: N/A
  -Eastbound Approach: One through lane and one right turn lane with a minimum of 100-feet of storage. Although Bundy Canyon Road is designated as an urban arterial roadway, the analysis conducted for the purposes of this traffic study assumes only two lanes in each direction of travel. An acceleration lane should also be provided to the east of Road "A" along Bundy Canyon Road.
  -Westbound Approach: One left turn lane with a minimum of 100-feet of storage and one through lane.

  The intersection of Road "A" and Bundy Canyon Road is anticipated to warrant a traffic signal under long-range traffic conditions. The City would require that future development on the northerly side of Bundy Canyon Road within Assessor Parcel Number (APN) 366-320-028,048 provide access to Bundy Canyon Road in alignment with Project Road "A."

- **Signing/Striping** - On-site traffic signing and striping plans would be developed and implemented consistent with City requirements.

- **Sight Distance** - Sight distance at each Project access point would be reviewed by the Lead Agency and Caltrans to ensure respectively, compliance with City of Wildomar and Caltrans design standards.

1.2.3.1 Construction Traffic Management Plan

Temporary and short-term traffic detours and traffic disruption may occur during Project construction activities. Accordingly, the Project Applicant would be responsible for the preparation of a construction area traffic management plan (Plan) to be submitted

to the City. Typical elements and information incorporated in the Plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

- **Identification of Construction Contract Responsibilities** - For example for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations (if any).**

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of grading/encroachment permits. The Plan and its requirements would be provided to all contractors as one component of permit/contract document packages.

1.2.4 Parking

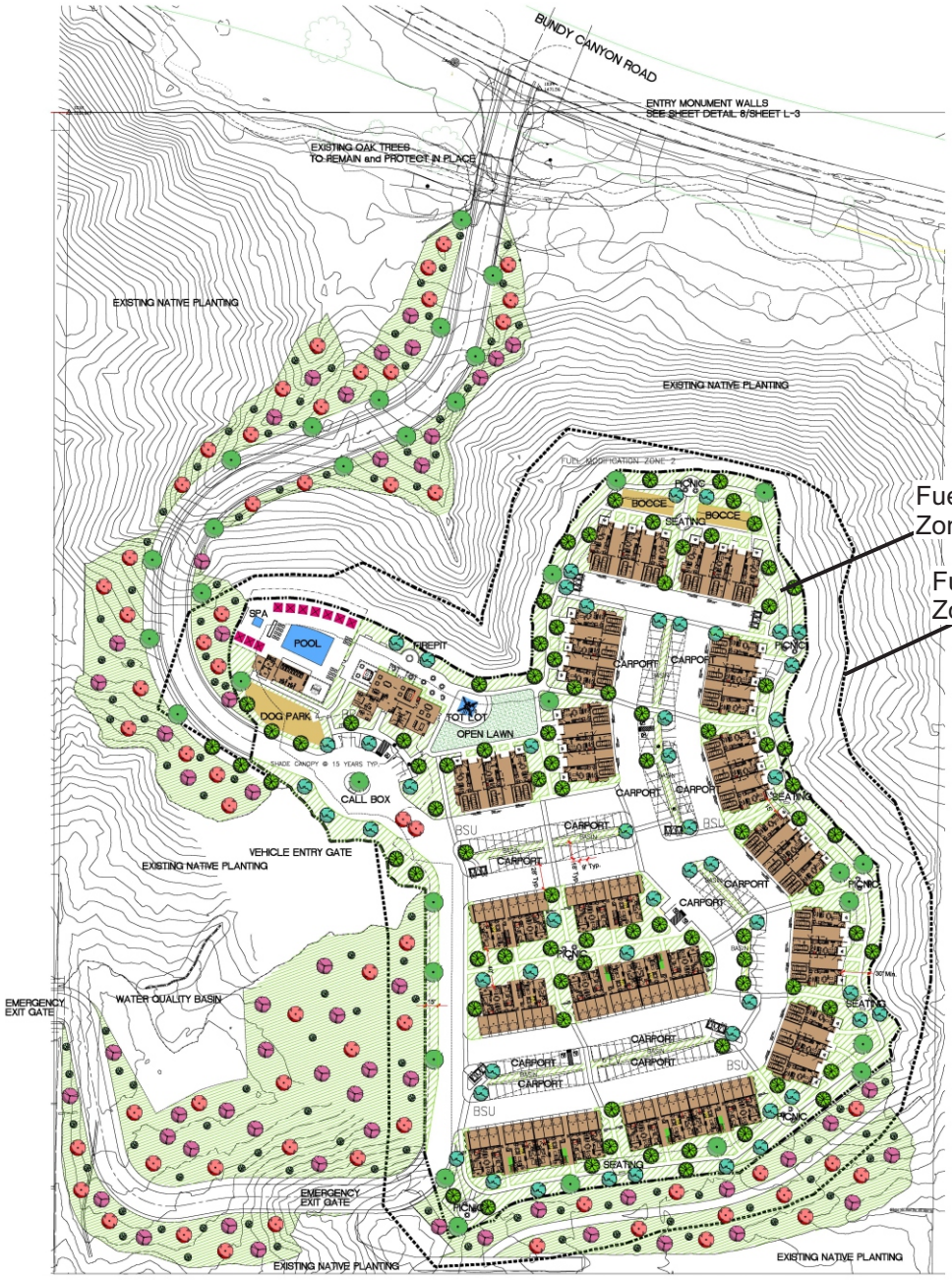
The City of Wildomar Municipal Code indicates that 266 parking spaces are required of the Project. Preliminary plans indicate that 288 spaces would be provided by the Project. Unless otherwise specified by the City, all parking areas and their configurations would be designed and implemented pursuant to City requirements as outlined at Wildomar Municipal Code Chapter 17.188.

1.2.5 Other Site Improvements

Supporting site improvements to be implemented by the Project are described below.

1.2.5.1 Landscape Concept

The Project Landscape Concept (Figure 1.2-2) integrates and responds to existing vegetation and topographic conditions. More specifically, the perimeter of the Project site would retain its current topography and would remain in its native vegetated state. To reduce potential fire hazards, two fuel modification zones have been designed separating developed Project areas from adjacent vegetation. Zone 1, located nearest proposed structures, would comprise a 30-foot irrigated buffer between structures and Zone 2. Zone 2 would contain a mix of existing vegetation and a hydroseed mixture of appropriate groundcovers. Zone 2 would be a minimum of 100 feet wide and would not be irrigated. Interior portions of the Project site would feature drought tolerant urban plantings, including trees, shrubs, vines and groundcover. A drip irrigation system would be utilized throughout. The landscaping concept in total would comply with the City's Water Efficient Landscapes Ordinance as outlined in Chapter 17.276 of the Wildomar Municipal Code.



PLANTING LEGEND

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	SIZE	NUMBER	REMARKS	WATER USE
	TREES:						
	QUE. AGR.	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	33	TRIPLE STAKE / HEIGHT 10'-12' , SPREAD 5'-6' MIN.	L
	CHI. TAS.	CHITALPA TASHKENTENSIS 'PINK DAWN'	PINK FLOWERING CHITALPA	15 GAL	62	DOUBLE STAKE / HEIGHT 7'-8' , SPREAD 2'-3' MIN.	L
	CER. OCC.	CERCIS OCCIDENTALIS	WESTERN RED BUD	15 GAL	102	DOUBLE STAKE / HEIGHT 6'-7' , SPREAD 1'-2' MIN.	L
	ACA. STE.	ACACIA STENOPHYLLA	SHOESTRING ACACIA	15 GAL	55	DOUBLE STAKE / HEIGHT 7'-8' , SPREAD 2'-3' MIN.	L
	PIS. CHI.	PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	85	DOUBLE STAKE / HEIGHT 8'-10' , SPREAD 3'-4' MIN.	L
	OLE. E. 'W.'	OLEA EUROPEA 'WILSONII'	FRUITLESS OLIVE	24" BOX	50	DOUBLE STAKE / HEIGHT 8'-10' , SPREAD 3'-4' MIN.	L
	SHRUBS:						
	BAC. P. 'P.P.'	BACCHARIS PILULARIS 'PIDGEON POINT'	PROSTRATE COYOTE BUSH	1 GAL	–	TRIANGULAR SPACING @ 5' O.C.	L
	HES. PAR.	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LEU. FRU.	LEUCOPHYLLUM FRUTICOSUM	TEXAS RANGER	5 GAL	–	FULL & BUSHY @ 5' O.C.	L
	ANA. FLA.	ANAGYZANTHUS FLAVIDUS 'VELVET AMBER'	AMBER KANGAROO PAWS	1 GAL	–	FULL & BUSHY @ 3' O.C.	L
	KNI. UVA.	KNIPHOFIA UVARIA	RED HOT POKER	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	AGA. 'SHA.'	AGAVE 'SHARKSKIN'	SHARKSKIN AGAVE	5 GAL	–	FULL & BUSHY @ 5' O.C.	L
	MUE. RIG.	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LAV. STO.	LAVANDULA STOECHAS	SPANISH LAVENDER	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	SAL. GRE.	SALVIA GREGGI	AUTUMN SAGE	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LOM. LON.	LOMANDRA LONGIFOLIA	LOMANDRA	1 GAL.	–	FULL & BUSHY @ 3' O.C. IN WATER QUALITY BASINS	M
	VINES:						
	DIS. BUC.	DISTICTUS BUCCINITORIA	BLOOD RED TRUMPET VINE	5 GAL	–	ATTACH TO WALLS & TRELLIS	M
	MULCH						
	WOOD MULCH	SHREDDED WOOD MULCH	MEDIUM GRIND WOOD MULCH	NA	AS REQ'D.	3" DEEP – INSTALL TO ALL PLANTING AREAS AS SHOWN	
	LAWN :						
	FES. ARU.	FESTUCA ARUNDIACEA	TURF TYPE TALL FESCUE	SOD	AS REQ'D.	INSTALL PER SPECIFICATIONS	H

N

NOT TO SCALE

Source: Alhambra Group

applied planning inc

Figure 1.2-2
Conceptual Landscape Plan

1.2.5.2 Lighting

The Project would include building-mounted, wall-mounted, and pole-mounted fixtures illuminating Project entrances, walkways, and parking areas. All lighting would be designed and implemented consistent with Wildomar Municipal Code Chapter 8.64, *Light Pollution*. Project conformance with Chapter 8.64 would preserve access to the dark night sky; reduce light pollution generally, and specifically in support of the Palomar Observatory; minimize potential adverse off-site impacts of lighting; conserve energy; and ensure adequate lighting for safety and security.

1.2.6 Infrastructure, Utilities, and Public Services

All public services, infrastructure systems, and utilities are currently available to service the Project site. No major new infrastructure or utilities improvements are proposed by the Project, nor are any required. The Project would implement necessary utilities improvements to include connections to existing services, and/or necessary realignment or modification of existing service lines. All connections to, and modification of, utilities necessary to serve the Project would be accomplished consistent with City and purveyor requirements.

1.2.6.1 Water Supply and Delivery

Water would be provided to the Project by the Elsinore Valley Municipal Water District (EVMWD). The Project would connect to one or more of the water service lines located in road rights-of-way adjacent to the Project site. A 20-inch EVMWD water line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD water line is located in Windwood Lane at the southwesterly limits of the Project site.

To ensure that adequate fire flows are available to all Project uses, on-site water delivery improvements would be provided consistent with Riverside County Fire Department requirements. The Project would install recycled water distribution system for landscaping and connect to the EVMWD recycled water system when available to the Project site, reducing potable water demand with recycled, non-potable water.

1.2.6.2 Stormwater Management

The Project stormwater management system concept comprises the Project Hydrology Report, and Project Water Quality Management Plan (EIR Appendix F). All Project stormwater management system improvements would be designed, constructed, and maintained consistent with City requirements. The City of Wildomar is required to comply with a Municipal Separate Storm Sewer System (MS4) Permit by the San Diego Regional Water Quality Control Board. This MS4 Permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential activities. The City lies within two watersheds (Santa Ana and Santa Margarita); however, the entire City is governed by the MS4 Permit for the Santa Margarita region. Consistent with provisions of the MS4 Permit, the Project would implement construction stormwater management improvements and practices pursuant to a City-approved Storm Water Pollution Prevention Plan (SWPPP).

The overall management of developed storm waters within the Project site would be accomplished through an on-site system of inlets, underground storm drains, surface drainage systems, and water quality treatment elements. Developed storm waters would be treated by a system of physical features (e.g., landscape infiltration areas) and operational best management practices (BMPs) identified in the Project Water Quality Management Plan (WQMP).

In combination, the Project SWPPP, stormwater management system concept, and WQMP ensure that post-development stormwater discharge rates and volumes would not exceed the receiving system capacities. And further that any stormwater discharges from the Project site would meet or exceed water quality performance standards established by the City's MS4 Permit and related provisions of the City Jurisdictional Runoff Management Program (JRMP). Please refer also to the Project Hydrology Study, and WQMP presented at EIR Appendix F.

1.2.6.3 Other Infrastructure Systems

The Project site is provided natural gas service, electrical service and communications services as summarized below. All modification of, and connection to, existing services would be accomplished consistent with City and purveyor requirements.

- Natural Gas Service: Natural gas service would be provided by The Gas Company.

- Electrical Service: Electrical Service would be provided by Southern California Edison. As part of the Project, existing overhead electrical lines would be relocated underground. All new electrical connections would also be placed underground.

- Communications Service: Time Warner and Verizon currently provide communication/cable services to the City and these services would be available to the Project.

1.2.6.4 Public Services

The following public services are available to the Project:

- Fire Protection Services (Riverside County Fire Department/Cal Fire);
- Police Protection Services (Riverside County Sheriff's Department);
- Schools (Lake Elsinore Unified School District, K-12);
- Libraries (Mission Trail Community Library); and
- Parks (City of Wildomar).

1.2.7 MSHCP Compliance/Biological Resources Avoidance

1.2.7.1 Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Riverside County Multiple Species Habitat Conservation Plan (MSHCP) protects 146 native species of plants, birds, and animals, and preserves a half-million acres of their habitats. Potential impacts to biological resources are avoided and/or mitigated in

part through compliance with the (MSHCP). Details regarding the MSHCP can be accessed at: http://wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/.

Project consistency with, and support of, the MSHCP is discussed at EIR Section 4.11, *Biological Resources*.

1.2.7.2 Biological Resources Avoidance

Complementing Project consistency with and support of the MSHCP, the Project incorporates design elements and proposes construction methods that would avoid protected biological resources. More specifically, as part of the Project, a temporary access road and railroad car bridge would be implemented to facilitate access to the Project site during Project construction. The temporary access road and railroad car bridge would be implemented in areas that are already disturbed and do not support or exhibit substantive habitat.

Additionally, a permanent bridge crossing would connect Road A to Bundy Canyon Road. The permanent bridge accessing the Project site would be designed to span the entirety of jurisdictional areas along the northerly project boundary, and all construction activities would occur outside jurisdictional areas and protected habitat, with no resulting disturbance to protected biological resources. The following measures are incorporated in the Project to ensure that protected biological resources are avoided during construction of the proposed permanent Road A bridge.

Prior to and During Construction of the Permanent Bridge Crossing access to Bundy Canyon Road:

- Permanent bridge and abutments shall be scheduled to commence outside of the least Bell's vireo nesting season (approximately April 10 until July 31, depending on when the birds arrive from and depart to wintering areas).

- Any bridge construction activities that commence during the least Bell's vireo nesting season (April 10 until July 31) shall incorporate habitat surveys to determine

potential presence of least Bell's vireo. Such surveys shall be conducted by a qualified biologist within three days prior to construction. The survey area shall consist of the bridge impact area (bridge footprint and abutments) and a 500-foot buffer around the bridge impact area. If any active nests are detected within the survey area, a buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts. Supporting documentation in the form of the EIR Mitigation Monitoring Plan shall be prepared and submitted to CDFW and/or USFWS on completion of construction to outline any proposed monitoring activities.

- If least Bell's vireo is observed within the survey area during the 3-day pre-construction survey, the following measures shall be taken to minimize potential indirect impacts to least Bell's vireo:
    - Prior to construction, a training program shall be developed and implemented by the Project biologist to inform all construction personnel workers about the listed species, its habitat, and the importance of complying with species avoidance and impact minimization measures.
    - All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Wildomar.
    - Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards. Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied least Bell's vireo habitat.
    - Construction contractors shall stage equipment in areas that would create the greatest distance between construction noise sources and habitat that is occupied during the breeding season.

- If the Project biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of birds, the construction supervisor shall be informed and work shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within areas of occupied habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.
- If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of birds is still being affected, work shall again be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.

1.2.8 Energy Efficiency/Sustainability

Project Energy Demands and Energy Efficiency/Conservation Measures are summarized at EIR Section 5.7, *Energy Conservation*. The Project would provide for, and promote, energy efficiencies consistent with those required under applicable state or federal standards and regulations, and in so doing would meet incumbent Title 24 standards. Moreover, energy consumed by the Project would be comparable to, or less than, energy consumed by other development proposals of similar scale and intensity. On this basis, the Project would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards are less-than-significant. Further, the Project would not cause or result in the need for additional energy-producing facilities or energy delivery systems. The Project, therefore, would not create or result in a potentially significant impact on energy resources. Please refer also to related discussions presented at EIR Section 4.3, *Air Quality*, and EIR Section 5.7, *Energy Conservation*.

1.3 DISCRETIONARY APPROVALS AND PERMITS

The following discretionary approvals and decisions are required for the Project:

- **Certification of the EIR**. Certification of the Project EIR is requested, to include the adoption of Facts, Findings and a Statement of Overriding Considerations; and adoption of the EIR Mitigation Monitoring Program.

- **Approval of a Zone Change** from R-R (Rural Residential) to R-3 (General Residential).

- **Plot Plan Approval** for Project design and architectural details.

Additionally, the Project would require a number of non-discretionary construction, grading, drainage and encroachment permits from the City to allow implementation of the Project facilities.

1.3.1 Other Permits and Approvals

CEQA Guidelines Section 15124 also provides that requirements or potential requirements for "Other Permits and Approvals" should, to the extent known, be identified. Based on the current Project design concept, other permits necessary to realize the proposal would likely include, but are not limited to, the following.

- Permitting may be required by/through the South Coast Air Quality Management District (SCAQMD) for certain aspects of the Project operations and its associated equipment.

- Permitting may be required by/through the Santa Ana Regional Water Quality Control Board and/or the San Diego Regional Water Quality Control Board.

- Permitting (i.e., utility connection permits) may be required from utility providers.

- Other ministerial permits necessary to realize all on and offsite improvements related to the development of the site.

1.4 INITIAL STUDY

The City of Wildomar, through the Initial Study process, has determined that the Project has the potential to cause or result in significant environmental impacts, and warranted further analysis, public review, and disclosure through the preparation of an EIR. The Initial Study (IS) and associated EIR Notice of Preparation (NOP), dated April 2016, were forwarded to the California Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the public comment period for the NOP/IS as April 21 through May 20, 2016. The assigned State Clearinghouse reference for the Project is SCH No. 2016041067. The Initial Study, NOP, and NOP responses are presented at Appendix A of this EIR.

1.5 IMPACTS FOUND NOT TO BE POTENTIALLY SIGNIFICANT

The following discussions identify environmental issues that have been determined pursuant to the IS/NOP preparation and public review processes to pose no potentially significant impacts. Specific issues considered to pose no potentially significant impacts are not substantively discussed within the body of this EIR. Please refer also to related discussions and analyses presented within the Initial Study, EIR Appendix A, and EIR Table 1.10-1, *Summary of Impacts and Mitigation*.

Aesthetics

There are no State-designated scenic highways in close proximity to the Project site. However, I-15, located approximately one (1) mile to the west, is considered a State eligible scenic highway. The General Plan contains policies that regulate development near designated and eligible scenic highways. These policies act to maintain the scenic quality of the corridor through the use of setbacks, and the regulation of landscaping, signage, and power lines. Compliance with City regulations would ensure development of the site would not impact surrounding views of any scenic resources or vistas.

As supported by the preceding discussion, the Project would have less-than-significant impacts for the following aesthetic considerations:

- Substantial adverse effects on a scenic vista; and

- Substantial damage to scenic resources, including, but not limited to, trees, rocks, outcroppings, and historic buildings within a state scenic highway;

Agriculture and Forest Resources

The Project site and vicinity do not evidence currently active or recent agricultural uses; and these areas are not designated as farmland of local, regional or statewide importance; nor are any portions of the Project site subject to, or otherwise affected by, Williamson Act contracts. Further, there are no lands within the City of Wildomar that qualify, or are designated, as forest land or timberland. As such, the Project would have no impact in regard to the following considerations:

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

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;

- Conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production;

- Result in the loss of forest land or conversion of forest land to non-forest use; or

- 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.

Air Quality

The Project does not propose facilities or on-going operations that would create objectionable odors affecting a substantial number of people. On this basis, the Project would have a less-than-significant impact in regard to the following consideration:

- Create objectionable odors affecting a substantial number of people.

Biological Resources

The Project does not propose actions or uses that would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. The Project would adhere to all applicable General Plan policies, specifically compliance with the Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project site does not lie within, nor would it otherwise substantively affect an MSHCP criteria cell, core, or linkage. On this basis, the Project would have a less-than-significant impact in regard to the following considerations:

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and

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

Cultural Resources

There are no known historic, archaeological, or paleontological resources located within the Project site, nor would the Project affect any known offsite resources of historical, archaeological, or paleontological significance. However, as required by California Health and Safety Code Section 7050.5, should human remains be found, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are found to be

prehistoric, the coroner would coordinate with the California Native American Heritage Commission as required by state law. As such, the Project would have a less-than-significant impact for the following cultural resources consideration:

- Disturbance of any human remains, including those interred outside of formal cemeteries.

Geology and Soils

The Project site is located in a region known to be seismically active, and seismic ground-shaking may be expected during an earthquake. However, the subject property is not located within an Alquist-Priolo Earthquake Fault Zone, and there are no known or suspected faults or fault traces within the site.

As implemented through the City's standard review and approval processes, a site and use-specific geotechnical study has been prepared for the Project, subject to review and approval by the City Engineer. In general, the geotechnical study addresses and reflects California Building Code design, engineering and construction requirements that act to minimize the effects of earthquakes and other geologic or soils conditions on structures. The Project would comply with the approved geotechnical study pursuant to City development permit review processes.

Construction activities associated with the Project would temporarily expose underlying soils, thereby increasing their interim susceptibility to erosion until the Project is fully implemented. Potential erosion impacts incurred during construction activities are mitigated below the level of significance through preparation of, and compliance with, a Storm Water Pollution Prevention Plan (SWPPP). In this regard, the Project proponent is required to file an approved SWPPP prior to initiation of construction activities. Compliance with the SWPPP is realized through ongoing inspection and monitoring of the subject site as provided for under the City's established building permit and site inspection processes.

The proposed development would connect to adjacent sewer services. No septic tanks or other alternative wastewater disposal systems are proposed.

Based on the preceding, the Project would result in less-than-significant impacts, or have no impact for the following geology and soils considerations:

- Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving 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; strong seismic ground shaking; or landslides;

- Substantial soil erosion or the loss of topsoil; or

- Soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Hazards and Hazardous Materials

During the normal course of construction activities, there would be limited transport of potentially hazardous materials (e.g., gasoline, diesel fuel, paints, solvents, fertilizer, etc.) to and from the Project site. The Project is required to meet all City and County regulations addressing transport, use, storage and disposal of these materials.

The Project does not propose uses or activities that would require atypical transportation, use, storage, or disposal of hazardous or potentially hazardous materials not addressed under current regulations and policies. Mandated compliance with existing regulations, as identified above, also reduces the potential for risk of accidental explosion or release of hazardous substances. Impacts in this regard are considered less-than-significant.

The site is located within one-quarter mile of Bundy Canyon Christian School. Other schools near the site include Cornerstone Christian School, located approximately one-half mile to the southwest, and Elsinore High School, located approximately 1.2 miles to the west of the site. The Project proposes conventional residential uses, and does not include elements or aspects that would create or otherwise result in hazardous emissions, and does not propose or require substantive handling of hazardous or acutely hazardous materials, substances, or waste. Pre-packaged materials such as paint, solvents, glues, fertilizers, used during construction and maintenance are subject to extensive local, State, and federal regulations, and are not considered sources of potentially significant hazardous materials or hazardous emissions. Additionally, the Project site is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The Project site is located over two miles easterly of Skylark Field, a private airport in the City of Lake Elsinore. The Project site is located outside of the Influence Area of this airport, as shown at Figure C-6, *Airport Influence Areas,* of the Wildomar General Plan. No other private or public airports are located in the immediate Project vicinity.

Additionally, the proposed residential uses are in compliance with all Federal Aviation Administration (FAA) regulations for land uses in the vicinity of an airport, such as height restrictions, noise abatement, and lighting restrictions. Moreover, it is noted that the Project does not propose activities or uses that would otherwise affect airports or airport operations.

The Project does not propose or require designs or activities that would interfere with any identified emergency response or emergency evacuation plan. Emergency procedures or design features required by County, State and Federal guidelines would be implemented during construction and operation of the Project. Temporary alterations to vehicle circulation routes associated with Project construction are addressed through City-mandated construction traffic management plans. Ongoing coordination with the local fire and police departments during construction would ensure that potential interference with emergency response and evacuation efforts are avoided. The potential

for the Project to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan is therefore considered less-than-significant.

The Project site is considered subject to "High" wildfire susceptibility.[1] To minimize potential fire hazards including potential wildfire hazards, all structures would be constructed consistent with California Fire Code requirements. Additionally, two fuel modification zones would be incorporated along the perimeter of the developed Project area (the "Wildland/Urban" interface) acting to reduce fuel loads and the potential for fires to approach and reach structures. Moreover, the Project site and surrounding areas are currently provided fire protection and emergency response services by the Riverside County Fire Department/Cal Fire. Development fees and taxes paid by the Project act to offset its incremental demands for fire protection services. The potential for the Project to expose people or structures to a significant risk of loss, injury or death involving wildland fires is considered to be less-than-significant.

Based on the preceding, the Project would have less-than-significant impacts under the following hazards/hazardous materials considerations:

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

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;

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

[1] Riverside County General Plan; Figure S-11, *Wildfire Susceptibility*.

- 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;

- 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 the people residing or working in the project area;

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and

- 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.

Hydrology and Water Quality

The Project would be provided water service by the Elsinore Valley Municipal Water District (EVMWD) water system. Direct additions or withdrawals of groundwater are not proposed by the Project. Further, construction proposed by the Project would not involve massive substructures at depths that would significantly impair or alter the direction or rate of flow of groundwater. The Project would not contribute to groundwater depletion, nor discernibly interfere with groundwater recharge. Groundwater which may be consumed by the Project and the City as a whole is recharged pursuant to the District's policies and programs. The Project would not affect designated recharge areas.

The site is not located within a 100-year flood hazard zone. As such, no placement of structures in a 100-year flood hazard zone would occur as a result of Project

implementation and no impact would occur relative to the placement housing or other structures within a mapped 100-year flood hazard area.

The site is also located outside any identified potential inundation areas. As such, the potential for people or structures to be subjected to substantial risk of loss, injury or death involving flooding as a result of the failure of a levee or dam is considered less-than-significant.

The nearest body of water to the Project site is Lake Elsinore, located over 4 miles northwesterly of the site. At this distance, the site is not considered susceptible to seiche-related hazards. The Project site is located approximately 25 miles inland of coastal waters. As such, the site is not subject to tsunami hazards. No slopes of significance have been identified on or near the Project site, and the Project site has not historically been affected by mudflows. Impacts related to tsunami, seiche, or mudflow would not affect the Project.

Based on the preceding discussions, the Project would result in less-than-significant impacts, or have no impact for the following hydrology and water quality considerations:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

- Inundation by seiche, tsunami, or mudflow.

Land Use

The Project site is located within the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) area. The Project would be implemented consistent with the requirements of the MSHCP. The Project's potential to conflict with any applicable habitat or natural communities conservation plan is considered less-than-significant.

Based on the preceding, the Project would have less-than-significant impacts for the following land use considerations:

- Conflict with any applicable habitat conservation plan or natural communities conservation plan.

Mineral Resources

There are no mineral resources known to exist within the Project site that would be of value to the region and the residents of the state. As such, the Project would result in no impacts for the following mineral resources considerations:

- Loss of availability of a known mineral resource that would be of value to the region and to the residents of the state; and

- Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Noise

The Project site is located over two miles easterly of Skylark Field, a small private airport in the City of Lake Elsinore. The Project site is located outside of the Influence Area of this airport. No other private or public airports are located in the immediate Project vicinity. Given the distance to the airport, intervening land uses, and relatively

small scale of aviation operations of Skylark Field, the Project's potential to expose future occupants of the Project site to excessive aircraft-related noise is considered less-than-significant. Moreover, it is noted that the Project does not propose activities or uses that would otherwise affect airports or airport operations. As such, the Project would have less-than-significant impacts for the following potential noise impact considerations:

- 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, expose people residing or working in the project area to excessive noise levels; and

- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

Population and Housing

The Project does not involve or propose the displacement of any onsite or offsite housing stock. No impacts relating to displacement of housing would result from the Project. Based on the preceding, the Project would have no impacts for the following population and housing considerations:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Public Services, Recreation

Development of the Project would require established public agency oversight including, but not limited to, plan check and permitting actions by the City Planning and Public Works Departments, and Police and Fire Departments. These actions

typically fall within routine tasks of these agencies and are paid for via plan check and inspection fees.

The Project would be required to pay all applicable park development impact fees required of new development for the provision of Citywide parkland and park development. Further, residential uses developed pursuant to the Project would incorporate onsite recreational facilities (including a pool, clubhouse, picnic areas with barbeques, tot lot, dog park, and basketball court) to serve future residents. The Project would not affect any park or recreational facilities not included within the Project site.

Based on the preceding, the Project would have less-than-significant impacts for the following public services and recreation considerations:

- 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 parks or other public facilities;

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial deterioration of the facility would occur or be accelerated; or

- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

Transportation/Traffic

The Project does not propose elements or aspects that would affect air traffic patterns. As noted previously within discussions of safety hazards and noise, the Project is located outside any identified airport influence areas. Additionally, the proposed uses are in compliance with all Federal Aviation Administration (FAA) regulations for land

uses in the vicinity of an airport, such as height restrictions, noise abatement, and lighting restrictions.

The Project does not propose elements or aspects that would conflict with adopted alternative transportation policies. On a long-term basis, the Project may result in increased demand for public transportation; however, existing transit service is available within the City. Affected transit agencies routinely review and adjust their ridership schedules to accommodate public demand. The need for transit-related facilities, including but not limited to bus shelters and bicycle parking, would be coordinated between the City and the Project Applicant, with input from transit providers as applicable, as part of the City's standard development review process.

On this basis, the Project would have less-than-significant impacts for the following potential transportation considerations:

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Utilities and Service Systems

Wastewater generated by the Project would be collected for treatment by the Elsinore Valley Municipal Water District (EVMWD), a permittee of the Santa Ana and San Diego Regional Water Quality Control Boards (SARWQCB/SDRWQCB). Project-generated wastewater would be typical of residential sources, and would not require treatment beyond that provided by existing and programmed EVMWD facilities. Moreover, the Project would be developed and operated in compliance with the City regulations and standards of the SARWQCB/SDRWQCB.

As discussed in the Initial Study, the Project would have a less-than-significant impact for the following consideration:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

1.6 AREAS OF CONCERN OR CONTROVERSY

Section 15123 of the *CEQA Guidelines* requires that the EIR summary identify areas of potential concern or controversy known to the lead agency, including issues raised by other agencies and the public. Issues of concern were identified by the Lead Agency, through responses to the Project Initial Study/Notice of Preparation (NOP), and other communications addressing the Project and the Project EIR.

Responses received pursuant to distribution of the NOP and Public Scoping Meeting are presented at EIR Appendix A. Table 1.6-1 presents a list of NOP respondents, and a corresponding summary of NOP comments, indicated by *italicized text*. Responses to comments, together with correlating EIR references are indicated in subsequent statements. Unless otherwise noted, all NOP respondent comments are addressed within the body of the EIR.

As a matter of record, Table 1.6-1 also lists Tribes that have formally requested AB 52 Consultation with the Lead Agency.

Table 1.6-1
List of NOP/AB 52 Respondents and Summary of Comments/Responses

Respondent	Summary of Comments
State Agencies	
State of California Office of Planning and Research, State Clearinghouse (SCH)	*SCH provided receipt and record of distribution of the NOP/IS and established the NOP review and comment period of April 21, 2016 through May 20, 2016.* EIR Appendix A includes a copy of the Project IS/NOP and NOP Responses.
State of California Department of Transportation, District 8 (Caltrans)	*Caltrans requests hard copies and electronic copies of EIR documentation; offers analytic considerations related to transportation; and comments on "livability" evidenced in the Project design.* The Lead Agency will provide EIR documentation requested by Caltrans. Livability comments are noted.

Table 1.6-1
List of NOP/AB 52 Respondents and Summary of Comments/Responses

Respondent	Summary of Comments
State of California Native American Heritage Commission (NAHC)	*The NAHC response provides procedural guidance in determining the Project's potential to impact cultural resources.* As discussed at EIR Section 4.12, *Cultural Resources*, a comprehensive Cultural Resources Investigation was conducted for the Project site, and no cultural resources were identified within the Project site or vicinity. To avoid impacts to potential historic, prehistoric, or paleontological (fossil) resources that may be present onsite in a buried context, EIR mitigation measures require monitoring by a professional archaeologist during earth-moving activities; appropriate disposition of any recovered artifacts; and provisions for discovery of any Native American human remains. Representatives of the appropriate Indian tribes shall also be consulted with respect to the treatment of these resources.
County/Regional Agencies	
Riverside County Fire Department (RCFD)	*RCFD provides the following comments:* • *The Project Applicant would be required to mitigate potential adverse impacts to fire protection services via capital improvements and/or payment of impact fees.* • *Fire protection and emergency access shall be provided consistent with RCFD requirements.* • *Fire Department water system(s) for fire protection shall be in accordance with the California Fire Code; Riverside County Ordinance 787, and RCFD Standards.* As discussed in the EIR: • The Project Applicant would be required to pay fire impact fees stipulated by the Lead Agency, acting to offset the Project's incremental demands on fire protection services. Fire protection capital improvements are not proposed by the Project. • The Project site is considered subject to "High" wildfire susceptibility. To minimize potential fire hazards including potential wildfire hazards, all structures would be constructed consistent with California Fire Code requirements. Additionally, two fuel modification zones would be incorporated along the perimeter of the developed Project area (the "Wildland/Urban" interface) acting to reduce fuel loads and the potential for fires to approach and reach structures. • The final Project designs would be subject to RCFD review and approval, this would act to ensure conformance to RCFD access requirements; and provision of fire protection water systems conforming to RCFD standards and requirements. Please refer also to EIR Section 4.8, *Public Services and Utilities*.
Riverside County Department of Environmental Health (DEH)	*DEH requests the following:* • *An original copy of a water and sewer "will-serve" letter from the appropriate water and sewer purveyor.* • *Written clearance from DEH Office of Industrial Hygiene. A noise impact study may also be required.* • *Written clearance from DEH Environmental Cleanup Programs and submittal of a Phase I Environmental Site Assessment; and* • *Environmental Health Review Fees.*

Table 1.6-1
List of NOP/AB 52 Respondents and Summary of Comments/Responses

Respondent	Summary of Comments
	• Water and sewer "will-serve" letter from the appropriate water and sewer purveyor will be provided to DEH prior to the issuance of the first building permit, or timing as otherwise specified by the Lead Agency. • Written clearance from DEH Office of Industrial Hygiene will be obtained prior to issuance of the first building permit, or timing as otherwise specified by the Lead Agency. The Project noise impact analysis is provided at EIR Appendix E. • Written clearance from DEH Environmental Cleanup Programs will be obtained prior to issuance of the first building permit, or timing as otherwise specified by the Lead Agency. The Project site has not been previously developed or otherwise substantively utilized for human activities. The Lead Agency has previously determined that a Project Phase I Environmental Site Assessment is not required. • Any requisite Environmental Health Review Fees will be remitted by the Project Applicant.
South Coast Air Quality Management District (SCAQMD)	*SCAQMD provides detailed guidance in regard to the preparation of the Project air quality impact analysis, health risk assessment, and greenhouse gas analysis, and requests an electronic copy of these technical studies to be provided with the EIR.* The Project Air Quality Impact Analysis, and Greenhouse Gas Analysis are presented at EIR Appendices C and D. Each of the specific topics referenced by the SCAQMD in their NOP response is addressed in Section 4.3, *Air Quality* and 4.4, *Greenhouse Gas Emissions and Global Climate Change*. Modeling files, technical studies and supporting air quality documentation have been provided to SCAQMD in electronic format(s) as requested.
City/Local Agencies and Organizations	
Agua Caliente Band of Cahuilla Indians	*The commentor states that the Project site is located outside of their Tribe's Traditional Use Area.* No response is required.
Rincon Band of Luiseño Indians	*The Rincon Band of Luiseño Indians notes that the Project is not within "Rincon's Historic Boundaries," and defers consultation processes to the Pechanga Band of Luiseño Indians.* Consultation geographic limits noted by the Rincon Band of Luiseño Indians are recognized. The EIR NOP has also been provided to the Pechanga Band of Luiseño Indians, with no comments received.
Individuals	
Scott Walter	*Mr. Walter requests that the following topics be addressed in the EIR: Aesthetics, Air Quality, Impact on Wildlife, Hydrology/ Water Quality, Land Use and Planning, Noise Impact, Police and Fire Protection Impact, and Traffic*. Areas of analysis germane to the Project correlating with the topical issues requested by Mr. Walter are presented in the EIR. Please refer to EIR Sections 4.1, *Land Use and Planning*; 4.2, *Transportation/Traffic*; 4.3, *Air Quality*, 4.5, *Noise;* 4.6, *Hydrology/Water Quality*; 4.8, *Public Services & Utilities*; 4.10, *Aesthetics; and 4.11, Biological Resources.*

Table 1.6-1
List of NOP/AB 52 Respondents and Summary of Comments/Responses

Respondent	Summary of Comments
AB 52 Consultation	
Soboba Band of Luiseño Indians	Pursuant to AB 52, the Soboba Band of Luiseño Indians has requested the initiation of a consultation with the Lead Agency; the transfer of information to the Soboba Band of Luiseño regarding the progress of the Project as soon as new developments occur; and that the Soboba Band of Luiseño Indians acts as a consulting tribal entity for the Project. AB 52 consultation correspondence and associated documentation are provided at the conclusion of EIR Section 4.12.
Pechanga Band of Luiseño Indians	Pursuant to AB 52, the Pechanga Band of Luiseño Indians has requested the initiation of a consultation with the Lead Agency; the transfer of information to the Pechanga Band of Luiseño Indians regarding the progress of the Project as soon as new developments occur; and that the Pechanga Band of Luiseño Indians acts as a consulting tribal entity for the Project. AB 52 consultation correspondence and associated documentation are provided at the conclusion of EIR Section 4.12.

1.7 EIR TOPICAL ISSUES

Impacts determined not to be potentially significant, and therefore not considered in detail in this EIR, are summarized at EIR Section 1.5, *Impacts Found Not To Be Potentially Significant*. Based upon the Initial Study analysis, comments received pursuant to circulation of the NOP, and other public/agency input, the analysis of the EIR addresses the following topics:

- Aesthetics;
- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Geology and Soils;
- Global Climate Change and Greenhouse Gas (GHG) Emissions;
- Hydrology/Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services and Utilities; and
- Transportation/Traffic.

Additionally, EIR Section 5.0, *Other CEQA Considerations*, presents discussions of other mandatory CEQA topics including:

- Cumulative Impact Analysis;
- Alternatives Analysis;
- Growth-Inducing Impacts of the Proposed Action;
- Significant Environmental Effects;
- Significant and Irreversible Environmental Changes; and
- Energy Conservation.

1.8 SUMMARY OF SIGNIFICANT PROJECT IMPACTS

Implementation of the Project as proposed would result in certain impacts that are determined to be significant and unavoidable. These impacts are discussed in detail in the body of the EIR text under their associated topical headings, and are summarized at Table 1.8-1.

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
Traffic	
	The Project would construct, or pay required fees toward, completion of all necessary Study Area transportation/traffic system improvements. At the significantly-impacted locations noted below, the Project cannot feasibly construct the required improvements, and/or payment of fees would not assure their timely completion. **<u>Cumulatively Significant Impacts</u>** **Existing (2015) Conditions:** ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Existing Conditions cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: **ID No. Intersection** 4 Sellers Rd. / Canyon Rd. 7 Walnut Creek Rd. / Bundy Canyon Rd.

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
	Opening Year (2017) Conditions: ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: **ID No. Intersection** 4 Sellers Rd. / Canyon Rd. 5 Monte Vista Dr. / Bundy Canyon Rd. 6 Canyon Ranch Rd. / Bundy Canyon Rd. 7 Walnut Creek Rd. / Bundy Canyon Rd. 9 Road "A" / Bundy Canyon Rd. **Horizon Year (2040) Conditions:** ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Post-2035 traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable: **ID No. Intersection** 1 Orange St. / Bundy Canyon Rd. 3 I-15 NB Ramps / Bundy Canyon Rd. 4 Sellers Rd. / Canyon Rd. 5 Monte Vista Dr. / Bundy Canyon Rd. 8 Oak Canyon Dr. / Bundy Canyon Rd. 9 Road "A" / Bundy Canyon Rd.
	Congestion Management Plan (CMP) Facilities Impacts Study Area Intersection 3, I-15 - NB Ramps / Bundy Canyon Rd., is a CMP facility. Pending completion of required improvements, the Project's contributions to significant traffic impacts at or affecting Study Area Intersection No. 3, I-15 - NB Ramps / Bundy Canyon Rd., are considered cumulatively significant and unavoidable.

Table 1.8-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
Noise and Vibration	
	Project Impacts **Temporary Construction-Source Noise and Vibration Impacts** Construction-source noise and vibration impacts would be significant and unavoidable for the duration of Project construction activities. **Cumulatively Significant Impacts** **Temporary Construction-Source Noise and Vibration Impacts** Construction-source noise and vibration impacts would be cumulatively considerable, and significant and unavoidable for the duration of Project construction activities.

All other potential environmental effects of the Project are determined to be less-than-significant as substantiated within this EIR and accompanying Initial Study, or are reduced to levels that would be less-than-significant with application of mitigation measures identified herein. A summary of all Project impacts and proposed mitigation measures is presented at EIR Section 1.10, *Summary of Impacts and Mitigation Measures*.

1.9 ALTERNATIVES TO THE PROJECT

Descriptions of, and the rationale underlying, the alternatives considered in this EIR are presented below. As provided for under CEQA, the ultimate rationale underlying the development and selection of alternatives to the Project is the reduction or avoidance of otherwise resulting significant environmental impacts, while allowing for attainment of the basic Project Objectives. Alternatives considered within this analysis include:

- CEQA-mandated "No Project" Alternative;
- Reduced Intensity Alternative-Bundy Canyon Resort Apartment Project Land Use Plan;
- Alternative Sites;
- "No Threshold Exceedance" Alternative for Significant Traffic Impacts; and

- "No Threshold Exceedance" Alternative for Noise Impacts.

1.9.1 No Project Alternative

The *CEQA Guidelines* specifically require that the EIR include in its evaluation a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

> If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment (*CEQA Guidelines*, Section 15126.6 (e)(3)(b)).

In the case considered here, the subject site is a vacant and available property absent any significant environmental or physical constraints. Further, the Project site is fully served by proximate available utilities and supporting public services; and is provided appropriate access. Areas around the subject site are developed with, or are being developed with urban uses.

The City General Plan Land Use Map designates the Project site as "Medium Density Residential" (MDR). The MDR General Plan Land Use allows for development with single-family detached and attached residential uses at 2 – 5 dwelling units/acre (du/ac),

with an anticipated population density of 7 – 17 persons per acre. Limited agriculture and animal keeping are permitted. Intensive animal keeping is discouraged.

A development similar to the Project was previously proposed for the subject site, and was approved through the Tentative Tract Map stage (TT 26372). This proposal however was abandoned at the direction of the proponent due to market/financial considerations. In this context, failure to proceed with the Project would likely not result in preservation of existing environmental conditions, and the practical result of the Project's non-approval would be the development of some other variety or optimal configuration of urban residential uses within the subject site. As a consequence, any development of the subject site under a No Project Alternative would be likely materially consistent with the Project, though internal land use configurations, development intensities, and specific uses may be realigned within the constraints and allowances of the City General Plan and Municipal Code. Environmental impacts resulting from development of the subject site under a No Project Alternative would likely therefore be comparable to those occurring under the Project.

If, however, development of the subject site was significantly delayed by economic, political, or other outside influences, existing environmental conditions would likely prevail, and in most instances, environmental impacts would be reduced when compared to the Project. To provide an analysis differentiated from that developed for the Project within the body of this EIR, the No Project Alternative considered herein is assumed to represent a "No Build" condition.

1.9.2 Reduced Intensity Alternative - Bundy Canyon Resort Apartment Project Land Use Plan

Under the Reduced Intensity Alternative - Bundy Canyon Resort Apartment Project Land Use Plan (hereafter referred to as the Reduced Intensity Alternative) the subject site would be developed with the types and configurations of land uses currently proposed by the Project, but at an aggregate intensity that would provide a demonstrable reduction in impacts otherwise resulting from the Project. For illustrative purposes, the Reduced Intensity Alternative evaluated herein assumes a 50 percent reduction in residential intensity otherwise resulting from the Project; yielding development of the

subject site with 70 multi-family dwelling units. For the purposes of this analysis, housing unit proportionalities proposed under the Project would be maintained. The Reduced Intensity Alternative would diminish, but would not eliminate significant and unavoidable traffic and construction-source noise impacts resulting from the Project. Table 1.9-1 compares the composition and scope of uses under the Project with development that would occur under the Reduced Intensity Alternative.

Table 1.9-1
Site Development Comparison
Project and Reduced Intensity Alternative

Dwelling Unit Type	Number of Units	
	Project	Reduced Intensity Alternative
1 Bedroom Apartment	57	29
2 Bedroom Apartment	33	16
2 Bedroom Townhome	35	18
3 Bedroom Townhome	15	7
Total Units	***140***	***70***

Sources: Project data from Bundy Canyon Resort Apartment Project Site Plan Concept, August 2016; Reduced Intensity Alternative-Applied Planning, Inc.

1.9.3 Alternative Sites Considered and Rejected

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." *CEQA Guidelines* §15126.6 (f) (1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account are "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context) and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives."

The Project considered herein is not subject to relocation to an alternative site. Notably, relocation of the Project would not substantively or materially reduce the Project's significant environmental impacts, the basis for the consideration of Alternative sites under CEQA. Moreover, there are no other suitable alternative locations that the Applicant can reasonably acquire, control, or otherwise have access to.

In this latter regard, relocation to an Alternative Site is not likely to achieve any measurable reduction in the Project's traffic impacts. Specifically, implementation of traffic improvements, including intersection signalization and roadway segment widening as envisioned under the City General Plan Circulation Element, is an ongoing process undertaken in conjunction with the development of vacant or underutilized properties throughout the City. As such, it is highly unlikely that a suitable Alternative Site could be identified that would distribute Project trips only to roadways that have already been improved to their ultimate General Plan configurations, thus avoiding the Project's cumulatively significant impacts at City transportation facilities.

Similarly, construction-source noise and vibration impacts would not be materially affected by relocation of the Project. These impacts would not be reduced, but rather would only be transferred to a different area within the City.

Moreover, as noted previously in this Section, there are no feasible alternative sites under control of likely control of the Applicant that would allow for relocation of the Project and associated reassignment of traffic and/or relocation of construction activities.

Based on the preceding considerations, the analysis of an Alternative Site was not further considered.

1.9.4 "No Threshold Exceedance" Alternative for Significant Traffic Impacts Considered and Rejected

Specific improvements identified in the Project TIA (EIR Appendix B) and summarized at Draft EIR Section 4.2 would provide a physical solution to identified potentially significant cumulative traffic impacts. Project mitigation responsibilities at affected

Study Area faculties are fulfilled through fee payments directed to completion of the required improvements. Notwithstanding, Project fee payments would not ensure timely implementation of improvements required as mitigation for potentially significant cumulative traffic impacts, and impacts are therefore considered cumulatively significant and unavoidable pending completion of the required improvements.

Any measurable additional traffic contributed to the facilities noted previously in this Section would result in cumulatively significant traffic impacts similar to those occurring under the Project, requiring some manner of currently infeasible mitigation. In that any viable development of the subject site would generate trips likely affecting some or all of the above-referenced facilities, an alternative to the Project developed specifically to alleviate cumulatively significant traffic impacts within the Study Area was not further evaluated. Notwithstanding, the Reduced Intensity Alternative considered herein would act to generally reduce traffic volumes within the Study Area and would likely diminish the magnitude of traffic impacts; but would not avoid cumulatively significant traffic impacts affecting Study Area facilities.

1.9.5 "No Threshold Exceedance" Alternative for Significant Noise/Vibration Impacts Considered and Rejected.

Project construction-source noise/vibration impacts reflect maximum noise levels generated by operations of typical construction equipment. The types and quantities of equipment employed, and associated maximum noise/vibration levels generated, would not differ substantively under any reasonable development scenario for the subject site. As such, potential alternatives with the specific goal of avoiding significant construction-source noise/vibration impacts resulting from the Project were rejected from consideration, and are not further evaluated in this discussion.

1.9.6 Environmentally Superior Alternative

For the purposes of CEQA, the EIR Alternatives Analysis has identified the Reduced Intensity Alternative as the environmentally superior alternative. Please refer also to EIR Section 5.3 for the complete Alternatives Analysis.

1.10 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.10-1 summarizes potential impacts resulting from implementation and operations of the Project. The impacts identified at Table 1.10-1 correspond with environmental topics and impacts discussed at EIR Section 4.0, *Environmental Impact Analysis*. Table 1.10-1 also lists measures proposed to mitigate potentially significant environmental impacts of the Project, and indicates the level of significance after application of proposed mitigation.

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.1 Land Use and Planning			
Physically divide an established community.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
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.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.2 Traffic and Circulation			
Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.	<u>Existing-with-Project:</u> Potentially Cumulatively Significant at the following Study Area intersections: • Intersection No. 4 - Sellers Rd. / Canyon Rd. • Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.	*4.2.1 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-10. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.* • *Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd.* o *Traffic Signal (DIF)* • *Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.* o *2nd EB through lane* o *2nd WB through lane*	Cumulatively Significant and Unavoidable. The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Existing-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.1 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			capable of mitigating potentially significant impacts, these improvements cannot be assured.
	<u>Opening Year-with-Project:</u> Potentially Cumulatively Significant at the following Study Area intersections: • Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd. • Intersection No. 5 - Monte Vista Dr. / Bundy Canyon Rd. • Intersection No. 6 - Canyon Ranch Rd. / Bundy Canyon Rd. • Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd. • Intersection No. 9 - Road "A" / Bundy Canyon Rd.	*4.2.2 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-12. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.* • *Intersection No. 4 -Sellers Rd. / Bundy Canyon Rd.* o *Traffic Signal (DIF) Same as Existing with Project* o *NB left turn lane (Requirement of other Study Area project(s))* o *NB shared left-through-right turn lane (Requirement of other Study Area project(s))* o *2nd EB through lane (TUMF/DIF)* o *3rd EB through lane (TUMF/DIF)* o *EB right turn lane (Requirement of other Study Area project(s))* o *WB left turn lane (Requirement of other Study Area project (s))* o *2nd WB through lane (TUMF/DIF)*	Cumulatively Significant and Unavoidable. The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Opening Year-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.2 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be capable of mitigating potentially significant impacts, these improvements cannot be assured.

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		• *Intersection No. 5 - Monte Vista Dr. / Bundy Canyon Rd.* o *Traffic Signal (DIF)* o *NB left turn lane (Requirement of other Study Area project (s))* o *NB right turn lane (Requirement of other Study Area project (s))* o *2nd EB through lane (TUMF/DIF)* o *EB right turn lane (Requirement of other Study Area project (s))* o *2nd WB through lane (TUMF/DIF)* • *Intersection No. 6 - Canyon Ranch Rd. / Bundy Canyon Rd.* o *2nd EB through lane (TUMF/DIF) - Same as Existing with Project* o *2nd WB through lane (TUMF/DIF) - Same as Existing with Project* • *Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.* o *2nd EB through lane (TUMF/DIF) - Same as Existing with Project* o *2nd WB through lane (TUMF/DIF) - Same as Existing with Project*	

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		• *Intersection No. 9 - Road "A" / Bundy Canyon Rd.* o *Traffic Signal (TUMF/DIF)* o *2nd EB through lane (TUMF/DIF)* o *2nd WB through lane (TUMF/DIF)*	
	<u>Horizon Year-with-Project:</u> Potentially Cumulatively Significant at the following Study Area intersections: • Intersection No. 1 - Orange St. / Bundy Canyon Rd. • Intersection No. 3 - I-15 NB Ramps / Bundy Canyon Rd. • Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd. • Intersection No. 5 - Monte Vista Dr. / Bundy Canyon Rd. • Intersection No. 8 - Oak Canyon Dr. / Bundy Canyon Rd.	*4.2.3 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-14. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.* • *Intersection No. 1 - Orange St. / Bundy Canyon Rd.* o *2nd NB through lane (DIF)* o *3rd EB through lane (TUMF/DIF)* o *2nd WB left turn lane (Fair Share)* o *3rd WB through lane (TUMF/DIF)* o *WB right turn lane (Fair Share)* • *Intersection No. 3 - I-15 NB Ramps / Bundy Canyon Rd.* o *3rd EB through lane (TUMF/DIF)* o *3rd WB through lane (TUMF/DIF)* • *Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd.* o *Traffic Signal (DIF) - Same as Existing Conditions and Opening Year*	Cumulatively Significant and Unavoidable. The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Horizon Year-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.3 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be capable of mitigating potentially significant impacts, these improvements cannot be assured.

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
	• Intersection No. 9 - Road "A" / Bundy Canyon Rd.	o *NB left turn lane (Requirement of other Study Area project (s)) – Same as Opening Year* o *NB shared left-through-right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year* o *2nd EB through lane (TUMF/DIF) - Same as Opening Year* o *3rd EB through lane (TUMF/DIF) - Same as Opening Year* o *EB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year* o *WB left turn lane (Requirement of other Study Area project(s)) – Same as Opening Year* o *2nd WB through lane (TUMF/DIF) - Same as Opening Year* o *3rd WB through lane (TUMF/DIF)* • *Intersection No. 5 - Monte Vista Dr. / Bundy Canyon Rd.* o *Traffic Signal (DIF) - Same as Opening Year* o *NB left turn lane (Requirement of other Study Area project(s)) – Same as Opening Year* o *NB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year* o *2nd EB through lane (TUMF/DIF) - Same as Opening Year* o *EB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year*	

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		o *2nd WB through lane (TUMF/DIF) - Same as Opening Year* • *Intersection No. 8 - Oak Canyon Dr. / Bundy Canyon Rd.* o *2nd EB through lane (TUMF/DIF)* o *2nd WB through lane (TUMF/DIF)* o *Traffic Signal (DIF)* • *Intersection No. 9 - Road "A" / Bundy Canyon Rd.* o *Traffic Signal (TUMF/DIF) - Same as Opening Year* o *2nd EB through lane (TUMF/DIF) - Same as Opening Year* o *2nd WB through lane (TUMF/DIF) - Same as Opening Year* o *SB shared left-through-right turn lane (Requirement of other Study Area project(s))* o *EB left turn lane (Fair Share)*	
Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.	Potentially Significant at or affecting Study Area Intersection No. 3, I-15 - NB Ramps / Bundy Canyon Rd.	Please refer to Mitigation Measure 4.2.3.	Cumulatively Significant and Unavoidable. The Project would pay all requisite fees for improvements at Study Area CMP facilities. However, timely completion of improvements required for mitigation of cumulatively significant impacts

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
			at CMP facilities within the Study Area cannot be assured. Pending completion of required improvements, Project contributions to impacts affecting Study Area CMP facilities are considered cumulatively considerable.
Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.3 Air Quality			
Conflict with or obstruct implementation of the applicable air quality plan.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	<u>Construction-Source:</u> Potentially Significant.	*4.3.1 The following requirements shall be incorporated into Project plans and specifications in order to ensure implementation of SCAQMD Rule 403 and limit fugitive dust emissions:* • *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour;* • *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the*	Less-Than-Significant.

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Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		Project site 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; and • *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.* *4.3.2 Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling. This requirement is based on the California Air Resources Board regulation in Title 13, Chapter 10, Section 2485, Division 3 of the California Code of Regulations, which imposes a requirement that heavy duty trucks accessing the site shall not idle for greater than five (5) minutes at any location. This measure is intended to apply to construction traffic.* *4.3.3 All off-road diesel-powered construction equipment ≥ 150 hp shall meet California Air Resources Board (CARB) Tier 4 emission standards.* *4.3.4 Only "Zero-Volatile Organic Compounds" paints (no more than 50 grams/liter of VOC) and/or High Volume Low Pressure (HVLP) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used. To the extent practicable, construction materials*	

Table 1.10-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the City prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		that are pre-painted, or that do not require painting should be employed.	
	Operational-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
	Construction-Source LST Emissions: Potentially Significant. for PM_{10} and $PM_{2.5}$ emissions only.	*4.3.5 To ensure that localized construction-source emissions do not exceed modeled estimates presented in the AQIA, daily site disturbance during site preparation and grading shall not exceed 5 acres per day. Additionally, BACMs per Mitigation Measures 4.3.1 through 4.3.4 shall be implemented to reduce and control localized emissions.*	Less-Than-Significant.
	Operational-Source LST Emissions: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Expose sensitive receptors to substantial pollutant concentrations.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Table 1.10-1
Summary of Impacts and Mitigation

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.4 Global Climate Change and Greenhouse Gas Emissions			
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.5 Noise			
Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	*Construction-Source:* Less-Than-Significant.	No mitigation is necessary.	Not applicable.
	Vehicular-Source: Less-Than-Significant	No mitigation is necessary.	Not applicable.
	Operational/ Area-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	*Construction-Source:* Less-Than-Significant.	No mitigation is necessary.	Not applicable.
	Vehicular-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
	Operational/ Area-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.	*Construction-Source:* Potentially Significant.	*4.5.1 Install minimum 6-foot high temporary construction noise barriers at the Project site boundaries (as shown on Exhibit 11-A of the Noise Impact Analysis) for the duration of construction activities at the Project site. The temporary noise barrier shall have the following lengths: 130 feet at receiver location R2, 540 feet at receiver location R4, and 680 feet at receiver location R5. The noise control barriers must present a solid face from top to bottom.* • *The barriers shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the noise source. The noise barrier shall be constructed using one of the following materials:* *o An acoustical blanket (e.g., vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts;* *o Masonry block;* *o Stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot;* *o Glass (1/4 inch thick), or other transparent material with sufficient weight per square foot;*	Significant and Unavoidable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		o Earthen berm; *o Any combination of these construction materials satisfying a weight of at least 4 pounds per square foot of face area.* • *The noise barriers must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired.* • *The noise control barriers and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity.*	
	Vehicular-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
	Operational/ Area-Source: Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise.	Potentially Significant. (construction-source vibration)	There are no feasible mitigation measures to reduce this impact. Construction vibration is temporary and intermittent, and will cease completely upon completion of construction. Additionally, though construction-related vibration would be perceptible (primarily when heavy equipment is operating near the Project boundaries proximate to sensitive receptors) no building damage would occur.	Significant and Unavoidable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
4.6 Hydrology and Water Quality			
Violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or substantial erosion or siltation on- or off-site; or create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or otherwise substantially degrade water quality.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.7 Geology and Soils			
Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction.	Less-Than-Significant. Incorporation of recommendations of the Project Geotechnical Investigation, and compliance with existing City/CBC	*4.7.1 Design and development of the Project shall comply with recommendations and performance standards identified in the Geotechnical Investigation at pages 9 through 29, Sections 9.1 through 9.14. Where the Project Geotechnical Investigation is silent, requirements of the California Building Code as adopted and implemented by the City of Wildomar shall prevail. The Project Geotechnical Investigation provides recommendations and*	Less-Than-Significant.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Location 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. Location on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), creating substantial risks to life or property.	seismic design regulations, standards, and policies reduces potential impacts to levels that are less-than-significant, and no additional mitigation is required. Notwithstanding, to ensure their timely monitored implementation, recommendations presented in the Project Geotechnical Investigation have been incorporated as Mitigation Measure 4.7.1	*performance standards for the following design and development components/attributes:* • *General Considerations (Investigation, pp. 9 - 10);* • *Soils Characteristics (Investigation, pp. 10 - 12);* • *Grading (Investigation, pp. 12 - 14);* • *Graded Slopes (Investigation, pp. 14 - 15);* • *Earthwork Grading Factors (Investigation, p. 15);* • *Fill Settlement (Investigation, p. 16);* • *Foundation and Concrete Slabs-on-Grade (Investigation, pp. 16 - 21);* • *Exterior Concrete Flatwork (Investigation, p. 22);* • *Conventional Retaining walls (Investigation, pp. 23 - 24);* • *Lateral Loading (Investigation, p. 24);* • *Swimming Pools/Spas (Investigation, pp. 24 - 25);* • *Pavement Design (Investigation, pp. 25 - 28);* • *Site Drainage and Moisture Protection (Investigation, pp. 28 - 29); and* • *Plan Review (Investigation, p. 29).*	
4.8 Public Services & Utilities			
Result in or cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or result in the	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
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 schools, fire or police protection services.			
Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
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.	No mitigation is necessary.	Not applicable.
Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Comply with federal, state, and local statutes and regulations related to solid waste.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.9 Population and Housing			
Induce substantial population growth in the area, either directly or indirectly.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.10 Aesthetics			
Substantially degrade the existing visual character or quality of the site and its surroundings.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.11 Biological Resources			
Substantially affect, either directly or through habitat modifications, any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS).	Potentially Significant.	*4.11.1 Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the Project Applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.* *Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.* *Other construction activities besides vegetation removal may occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) provided that all suitable habitat is thoroughly surveyed for the presence of nesting birds within 7 days prior to construction activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors) around the nest adjacent to construction will be delineated, flagged, and avoided until the nesting cycle is complete. The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological*	Less-Than-Significant.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		monitor to minimize impacts. *4.11.2 Prior to the issuance of any grading permit, the Project Applicant shall comply with applicable provisions of the MSHCP, including payment of the MSHCP Local Development Mitigation Fee; compliance with avoidance and minimization measures identified at Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas; compliance with Section 6.1.4 of the MSHCP pertaining to the Urban/Wildlands Interface; and compliance with Section 6.3.2 of the MSHCP pertaining to Burrowing Owl Survey Area requirements.* *4.11.3 In compliance with the MSHCP, a pre-construction survey for the burrowing owl shall be completed within 30 days prior to ground disturbance to determine the presence of burrowing owls.* *If burrowing owls are determined present during the 30-day pre-construction survey, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the Staff Report on Burrowing Owl Mitigation published by Department of Fish and Wildlife (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers.*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by the County of Riverside Environmental Programs Department (EPD), in coordination with the CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation and the MSHCP. *In accordance with the MSHCP, take of active nests shall be avoided. Passive relocation (i.e., the scoping of the burrows by a burrowing owl biologist and collapsing burrows free of young) shall occur when owls are present outside the nesting season. The EPD may require translocation sites for the burrowing owl to be created in the MSHCP reserve for the establishment of new colonies pursuant to MSHCP objectives for the species. Translocation sites, if required, shall be provided in consultation with EPD and/or CDFW taking into consideration unoccupied habitat areas, presence of burrowing mammals, existing colonies, and effects to other MSHCP Covered Species.* *4.11.4 Prior to and During Construction of the Permanent Bridge Crossing access to Bundy Canyon Road:* • *Permanent bridge and abutments shall be scheduled to commence outside of the least Bell's vireo nesting*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		season (approximately April 10 until July 31, depending on when the birds arrive from and depart to wintering areas). • *Any bridge construction activities that commence during the least Bell's vireo nesting season (April 10 until July 31) shall incorporate habitat surveys to determine potential presence of least Bell's vireo. Such surveys shall be conducted by a qualified biologist within three days prior to construction. The survey area shall consist of the bridge impact area (bridge footprint and abutments) and a 500-foot buffer around the bridge impact area. If any active nests are detected within the survey area, a buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts. Supporting documentation in the form of the EIR Mitigation Monitoring Plan shall be prepared and submitted to CDFW and/or USFWS on completion of construction to outline any proposed monitoring activities.* • *If least Bell's vireo is observed within the survey area during the 3-day pre-construction survey, the following measures shall be taken to minimize potential indirect impacts to least Bell's vireo:* o *Prior to construction, a training program shall be*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		developed and implemented by the Project biologist to inform all construction personnel workers about the listed species, its habitat, and the importance of complying with species avoidance and impact minimization measures. o *All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Wildomar.* o *Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards. Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied least Bell's vireo habitat.* o *Construction contractors shall stage equipment in areas that will create the greatest distance between construction noise sources and habitat that is occupied during the breeding season.* o *If the Project biologist determines that noise from the construction activities may be affecting the*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		normal expected breeding behavior of birds, the construction supervisor shall be informed and work shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within areas of occupied habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW. o *If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of birds is still being affected, work shall again be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.*	
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	Less-Than-Significant.	No mitigation is necessary.	Not applicable.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
Fish and Wildlife or U.S. Fish and Wildlife Service.			
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.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.	Less-Than-Significant.	No mitigation is necessary.	Not applicable.
4.12 Cultural Resources			
Cause a substantial adverse change in the significance of an archeological or historic resource as defined in §15064.5; Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Cause a substantial adverse change in the significance of a tribal cultural	Potentially Significant.	*4.12.1 To address the possibility that historical, archaeological, and/or tribal cultural resources (collectively referred to as "cultural resources" in these mitigation measures) may be encountered during grading or construction, a qualified professional archaeologist shall monitor all construction activities that could potentially impact cultural resources (e.g., grading, excavation, and/or trenching). Tribe(s) may assign individuals to monitor all grading, excavation and groundbreaking activities as well,*	Less-Than-Significant.

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is: o 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 o A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the		*and the Tribal monitor(s) shall be allowed on site during any construction activities that could potentially impact cultural resources. However, monitoring may be discontinued as soon as the qualified professional and the appropriate Tribe(s) are satisfied that construction will not disturb cultural resources.* *4.12.2 Prior to the issuance of any grading permit, the project archaeologist shall file a pre-grading report with the City to document the proposed methodology for grading activity observation which will be determined in consultation with the Tribe(s) that intend to assign Tribal monitor(s) pursuant to Mitigation Measure 4.12.1. The archaeologist and the Tribal monitor(s) will have the authority to temporarily halt and redirect grading activities in order to evaluate the significance of any cultural resources discovered on the project site.* *4.12.3 Prior to the issuance of any grading permit, the project applicant shall contact the Tribe(s) with notification of the proposed grading and shall enter into a Tribal Cultural Resources Treatment and Monitoring Agreement with each Tribe that determines its tribal cultural resources may be present on the site. The agreements shall include, but not be limited to, outlining provisions and requirements for addressing the handling of tribal cultural resources; project grading and development scheduling; terms of compensation for the Tribal monitors; treatment*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
significance of the resource to a California Native American tribe.		*and final disposition of any tribal cultural resources, including but not limited to sacred sites, burial goods and human remains, discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. The terms of the agreements shall not conflict with any of these mitigation measures. A copy of the signed agreements shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.* *4.12.4 If during grading or construction activities, cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by the archaeologist and the Tribal monitor(s). Any cultural resources that are discovered shall be evaluated and a final report prepared by the archaeologist. The report shall include: a list of the resources discovered; documentation of each site/locality; interpretation of the resources identified; a determination of whether the resources are historical resources, unique or non-unique archeological resources and/or tribal cultural resources; and the method of preservation and/or recovery for the identified resources. The archaeologist shall take into account the significance of a resource to the appropriate Tribe in making the determination that a resource is or is not a tribal cultural resource. If the archaeologist determines the cultural resources to be either historic resources or unique archaeological resources, but*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		not tribal cultural resources, avoidance and/or mitigation will be required pursuant to and consistent with CEQA Guidelines Section 15064.5(c) and Public Resources Code Section 21083.2. If the qualified archeologist determines the cultural resources to be tribal cultural resources, mitigation shall be consistent with the Tribal Cultural Resources Treatment and Monitoring Agreement required under Mitigation Measure 4.12.3 and Public Resources Code Section 21084.3. For all other cultural resources discovered on the project site, the project archaeologist shall assess the significance of such resources based on the provisions of CEQA with respect to archaeological resources and all significant cultural resources shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to a curation facility, that meets the standards set forth in 36 CFR Part 79 for federal repositories. *If the project applicant, project archaeologist, and Tribe cannot agree on the significance of, avoidance of, or mitigation for such resources, then the project applicant and the Tribe shall agree on an independent qualified archeologist who shall make the determination based on the information submitted by the Tribe, the religious beliefs, customs, and practices of the Tribe, and the provisions of the California Environmental Quality Act regarding tribal cultural resources. The decision of the independent qualified archeologist may be challenged by the City,*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		project applicant or the Tribe through any appropriate legal means including, but not limited to, a temporary restraining order or preliminary injunction. *4.12.5 Construction personnel involved in excavation and grading activities shall be informed of the possibility of discovering fossils at any location and the protocol to be followed if fossils are found. A professional meeting the Society of Vertebrate Paleontology standards shall provide the preconstruction training. The City shall ensure the grading plan notes include specific reference to the potential discovery of fossils. If potentially unique paleontological resources (fossils) are inadvertently discovered during project construction, work shall be halted immediately within 50 feet of the discovery, the City shall be notified, and a professional paleontologist shall be retained to determine the significance of the discovery. The paleontologist shall establish procedures for paleontological resource surveillance throughout project construction and shall establish, in cooperation with the project applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. Excavated finds shall be offered to a State-designated repository such as the Museum of Paleontology at the University of California, Berkeley, or the California Academy of Sciences.* *4.12.6 If human remains are encountered, California*	

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Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation
		Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within twenty-four (24) hours. Subsequently, the Native American Heritage Commission shall identify the most likely descendant and notify them of discovery. The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98 and the Agreement required under Mitigation Measure 4.12.2.	

2.0 INTRODUCTION

2.0 INTRODUCTION

2.1 OVERVIEW

This Environmental Impact Report (DEIR or EIR) evaluates and discloses potential environmental impacts of the proposed Bundy Canyon Resort Apartment Project (the Project). The Project would realize up to 140 multi-family residential units on an approximately 28.3-acre site, located within the City of Wildomar, in Riverside County. Of the total acreage, approximately 10.5 acres would be developed, and approximately 17.8 acres would comprise open space, roadway dedications, and exactions. Elements of the Project are further described at EIR Section 3.0, *Project Description*.

An EIR is an informational document intended to inform decision-makers and the general public of potentially significant environmental impacts of a Project. An EIR also identifies possible ways to preclude or minimize these potentially significant impacts (referred to as mitigation) and describes reasonable alternatives to the Project that may also reduce or avoid significant impacts.

The City of Wildomar has the authority to take action on the Project. The findings and conclusions of the EIR regarding environmental impacts of the Project do not control the City's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

2.2 AUTHORIZATION

This EIR has been prepared by the City of Wildomar in accordance with the *Guidelines for the Implementation of the California Environmental Quality Act (CEQA Guidelines)*,

(Sections 15000-15387 of the California Code of Regulations[1]), and the City's *Local CEQA Guidelines & Procedures*. The Bundy Canyon Resort Apartment Project considered in this EIR is a "project," as defined by Section 15378 of the *CEQA Guidelines*. The *CEQA Guidelines* stipulate that an EIR must be prepared for any project that may have a significant impact on the environment. Upon initial environmental review of the Project, the City determined that the Project may have a significant adverse impact on the environment and, therefore, the preparation of an EIR was required.

2.3 LEAD AND RESPONSIBLE AGENCIES

CEQA defines a "lead agency" as the public agency which has the principal responsibility for carrying out or approving a Project which may have a significant effect upon the environment. Other agencies, e.g., the California Department of Transportation (Caltrans), the South Coast Air Quality Management District (SCAQMD) or the Regional Water Quality Control Board (RWQCB), which also have some authority or responsibility to issue permits for Project implementation, are designated as "responsible agencies." Both the lead agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving the Project. The City of Wildomar is the lead agency for the Project.

The City's address is:	The City of Wildomar 23873 Clinton Keith Road, Suite 201 Wildomar, CA 92595
Contact Person:	Mr. Matthew Bassi, Planning Director

2.4 PROJECT APPLICANT

The Project Applicant is:	Hufsdar Investors, LLC. 361 North Canon Drive Beverly Hills, CA 90210
Contact Person:	Mr. Richard L. Darling, Manager

1 *The CEQA Guidelines* are the implementing provisions of CEQA. The law is contained in Public Resources Code Sections 21000-21189.3.

2.5 THE EIR PROCESS

When a public agency determines that there is substantial evidence that a Project may have a significant effect on the environment, the agency must prepare an EIR before a decision is made to approve or deny the Project. The purpose of the EIR is to disclose a project's potential environmental impacts and recommend measures to reduce or avoid significant impacts. The basic content of an EIR includes a description of the project under consideration and its objectives, a description of the existing project site and vicinity environmental conditions, a discussion of the potentially significant environmental effects of the project, recommended measures for reducing these effects, and identification and evaluation of feasible alternatives to the project which may also reduce potentially significant impacts of the proposal.

Typically, EIRs consist of two documents: a Draft EIR, distributed by the lead agency for review and comment by the general public and any interested governmental agencies; and a Final EIR, which consists of responses to comments received on, together with any necessary modifications to, the Draft EIR. After the Draft EIR has been circulated for review and the Final EIR has been prepared, the EIR must be certified by the lead agency as having complied with CEQA and considered by the agency's decision-making body before any action can be taken on a project.

When a public agency receives a complete project application or decides to undertake a Project of its own, it first determines if the project is subject to environmental review under CEQA and, if it is, the agency then typically prepares an Initial Study (IS) to determine if the project has the potential to cause significant adverse environmental effects. The IS serves as a tool to help the agency determine if an EIR is needed and also helps determine what issues should be examined in the EIR. An agency may skip the Initial Study process if it is evident in the preliminary assessment of a project that an EIR is required.

The EIR process is initiated by the distribution of a Notice of Preparation (NOP). Together with the Initial Study, the NOP is sent to agencies and interested individuals

to solicit their suggestions for appropriate issues and types of analysis to be included in the Draft EIR. When preparation of the Draft EIR has been completed, it is circulated to responsible agencies, other affected or interested agencies, and interested members of the public for review and comment. The review period for a Draft EIR is typically 45 days. To provide for appropriate consideration in the Final EIR, all comments and concerns regarding the Draft EIR should be received by the lead agency during this 45-day period.

Responses to comments received on the Draft EIR are prepared by the lead agency and included in the Final EIR. The Final EIR may also contain some additional information about the project's potential impacts and minor corrections or modifications to the Draft EIR. The Final EIR must be certified by the lead agency's decision-making body before, or in conjunction with, any action to approve or deny a project.

CEQA requires that the EIR only address significant adverse impacts. The *CEQA Guidelines* suggest thresholds or standards which define the significance of various types of impacts. The *CEQA Guidelines* also state that the significance of impacts should be considered in relation to their severity and probability of occurrence. However, ultimately, the determination of the significance of impacts is at the discretion of the lead agency. The identification of significant impacts in the EIR does not prevent an agency from approving a project. A project may be approved if the lead agency determines that impacts cannot be feasibly mitigated below a level of significance and if the agency determines that there are important overriding considerations, such as social and economic benefits, which are sufficient to justify approval of the considered project.

2.6 EIR CONTENT AND FORMAT

This EIR is organized into nine Chapters or Sections, each addressing a separate aspect of the required content of an EIR as described in the *CEQA Guidelines*. A summary of the Project's impacts and recommended mitigation measures is provided at Chapter 1.0. An introduction and general overview of the environmental process and the format of this EIR can be found at Chapter 2.0. Chapter 3.0 contains a complete description of the

Project, including its location, objectives, and physical and operational characteristics. The complete and detailed environmental impact analysis is presented at Chapter 4.0. The topical issues mandated by CEQA dealing with cumulative impacts, alternatives, long-term implications of the Project, and energy conservation are found at Chapter 5.0. Chapter 6.0 lists and defines the acronyms and abbreviations contained in this document. Chapter 7.0 lists the information sources and persons consulted during the environmental analysis process, and presents a list of the persons who prepared the EIR. The Initial Study and responses to the NOP, with supporting technical studies, are appended to the primary EIR document.

Chapter 4.0, *Environmental Impact Analysis*, is the focal component of the EIR. The environmental impact analysis has been organized into a series of sections, each addressing an environmental topic or area of concern identified through the Initial Study process (e.g., Land Use and Planning, Traffic and Circulation, Air Quality, Noise, etc.). To assist the reader in understanding the organization and basis of the analysis, the sections covering each individual environmental topic are typically divided into the following subsections:

- **Reader's Abstract:** An introductory reader's abstract, summarizing content and findings, is provided at the beginning of each topical section.

- **Introduction:** The introduction summarizes the content of the section and references other important studies and reports, such as technical studies appended to the EIR.

- **Setting:** This subsection describes environmental conditions at the Project site and in its vicinity which may be subject to change as a result of implementation of the proposal. Separate descriptions of existing environmental conditions are provided for each environmental topic.

- **Existing Policies and Regulations:** Various relevant policies, regulations, and programs related to the environmental topic are briefly described. Often, these existing policies and regulations serve to reduce or avoid potential environmental impacts.

- **Standards of Significance:** Before potential impacts are evaluated, the standards establishing the basis for judging significance are presented.

- **Potential Impacts and Mitigation Measures:** This subsection states and explains potential impacts caused by the Project. Based on the standards of significance, impacts are categorized as either potentially significant or less-than-significant. If the impacts are considered to be potentially significant, mitigation measures are proposed to reduce the impacts. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of feasible mitigation measures. Impacts that cannot be reduced to levels that are less-than-significant are identified as "significant."

The summary presented at Chapter 1.0 provides a comprehensive overview of the Project's impacts. For a more detailed description of Project impacts, it is recommended that the reader review the Project description (Chapter 3.0), and then read the sections on the topics of interest in the environmental impact analysis (Chapter 4.0).

2.7 INTENDED USE OF THIS EIR

This EIR addresses the potential environmental effects of the implementation and operation of the proposed Bundy Canyon Resort Apartment Project. The City of Wildomar (City) is the Lead Agency for the purposes of CEQA because it has the principal responsibility and authority for deciding whether or not to approve the Project, and how it would be implemented. As the Lead Agency, the City is also responsible for preparing the environmental documentation for the Project in compliance with CEQA.

The Lead Agency employs this EIR in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project, to include potential effects of the Project's component elements. It is anticipated that this EIR may also be employed by Responsible Agencies, e.g., Air Quality Management District(s), Regional Water Quality Control Board(s), *et al*.; as well as utilities and service providers for their related or dependent environmental analyses.

In employing this EIR, the City and other agencies need recognize that Project plans and development concepts identified herein are subject to refinement as the Project is further defined. Recognizing the potential for these future minor alterations to the Project, this EIR in all instances evaluates likely maximum impact scenarios that would account for these minor alterations. These refinements and/or minor revisions to development proposals do not typically warrant modified or revised environmental documentation. Notwithstanding, at the discretion and direction of the City, substantive modifications to the Project described herein may warrant additional environmental evaluation.

2.8 DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the State *CEQA Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference, and the pertinent material is summarized throughout this EIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the City of Wildomar Planning Department. Technical studies cited below were specifically developed in conjunction with the Project, and are appended to the EIR.

2.8.1 City of Wildomar General Plan

When the City of Wildomar incorporated in 2008, it adopted the Riverside County General Plan and the relevant portions of the Wildomar Area Plan as the City's General Plan. The City of Wildomar is in the process of updating its General Plan. Adoption of the General Plan Update and certification of the General Plan Update EIR are pending.

All proposed development projects, such the proposed Bundy Canyon Resort Apartment Project, are evaluated for consistency with the intent and purpose of the applicable General Plan land use designation(s) and related General Plan Policies. Physical development within the General Plan Area is shaped by current and future General Plan Policies, integral to each of the General Plan Elements.

2.8.2 City of Wildomar Zoning Ordinance

The City of Wildomar Zoning Ordinance (Zoning Ordinance) codifies and complements the City General Plan. The Zoning Ordinance provides the mechanism to implement and enforce Policies articulated in the General Plan. Many of the potential environmental concerns considered in this EIR are adequately addressed through application of existing guidelines and regulations contained in the Zoning Ordinance.

2.8.3 Project Technical Studies/EIR Appendices

Following are summary descriptions of documents and supporting technical studies which are appended to the main body of the EIR. Working titles of these documents generically refer to the Project and its physical attributes, and may not necessarily reflect the currently assigned "Bundy Canyon Resort Apartment" development title.

2.8.3.1 Initial Study, NOP, and NOP Responses - EIR Appendix A

The EIR Initial Study (IS), Notice of Preparation (NOP) and responses received pursuant to distribution of the IS/NOP are presented at EIR Appendix A. Based on the Initial Study and responses to the NOP, the EIR addresses the following environmental topics:

- Aesthetics;
- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Geology and Soils;
- Global Climate Change and Greenhouse Gas (GHG) Emissions;
- Hydrology/Water Quality;
- Land Use and Planning;
- Noise;
- Population and Housing;
- Public Services and Utilities; and
- Transportation/Traffic.

2.8.3.2 Traffic Impact Analysis - EIR Appendix B

The detailed evaluation of Project-related traffic/transportation impacts is documented in *Wildomar Residential Traffic Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) October 11, 2016 (TIA). The traffic issues related to the Project have been evaluated within the TIA in the context of the California Environmental Quality Act (CEQA) and as directed by the City of Wildomar, the lead agency responsible for preparation of the traffic impact analysis. The TIA also incorporates applicable guidance provided by the California Department of Transportation, District 8 (Caltrans District 8).

2.8.3.3 Air Quality Impact Analysis - EIR Appendix C

Detailed analysis of the Project's potential air quality impacts is presented in *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015 (Project AQIA).

2.8.3.4 Greenhouse Gas Analysis - EIR Appendix D

Detailed analysis of the Project's potential Greenhouse Gas and Global Climate Change impacts is presented in *Wildomar Residential Greenhouse Gas Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015 (Project GHG Analysis).

2.8.3.5 Noise Impact Analysis - EIR Appendix E

Potential noise impacts of the Project, including construction-source and operational-source noise impacts are assessed within *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

2.8.3.6 Hydrology and Stormwater Management - EIR Appendix F

Drainage and stormwater runoff water quality considerations are evaluated and addressed in: *Preliminary Hydrology and Hydraulic Study for Bundy Canyon Resort Apartments* (Grant Becklund) October 24, 2016; *Project Specific Water Quality Management Plan for Bundy Canyon Resort Apartments* (Grant Becklund) October 24, 2016.

2.8.3.7 Geotechnical Investigation - EIR Appendix G

An assessment of the soils and geological conditions affecting the Project site and vicinity properties is presented in: *Geotechnical Investigation, Multi-Family Development, Bundy Canyon Road Near Tulip Lane, APN 367-250-008, Wildomar, California* (Geocon West, Inc.) February 25, 2016. The Geotechnical Investigation also provides recommendations pertaining to geotechnical aspects of constructing the Project.

2.8.3.8 Biological Resources Assessments - EIR Appendix H

Biological resources potentially affected by the Project are assessed in: *Bundy Canyon Resort Apartments Project Biological Resources Assessment* (ESA PCR) August 2016.

2.8.3.9 Cultural Resources Investigation

A cultural resources investigation was prepared for the Project: *A Phase I Cultural Resources Assessment of PA 16-0006, APN 367-250-008* (Jean A. Keller, Ph.D.) November 2015.

Due to the relative sensitivity of archaeological and historic sites to disturbance, cultural resource reports which identify the locations of potential resources are generally not circulated publicly. Although sensitive resources have not been identified within the Project site, other off-site sensitive resources are discussed in the Cultural Resources Investigation prepared for the Project. A copy of the Phase I Cultural Resources Investigation may be reviewed at the City of Wildomar Planning Department.

Additionally, the City has complied with notification requirements and has initiated consultation as required under AB 52. Please refer to EIR Section 4.12, *Cultural Resources* and consultation documentation attached at the conclusion of that Section.

3.0 PROJECT DESCRIPTION

3.0 PROJECT DESCRIPTION

3.1 OVERVIEW

The Bundy Canyon Resort Apartment Project (Project) considered in this EIR includes the proposed construction of up to 140 multi-family residential units on an approximately 28.3-acre site, and associated discretionary actions necessary to realize the proposed development (*see also*: City Planning Application No. 16-0006, available through the City of Wildomar). Approximately 10.5 acres of the Project site would be developed with residential and supporting uses; the remaining approximately 17.8 acres would comprise open space, roadway dedications, and exactions. The Project and its context are further described below. Any substantive changes to the Project described herein may, at the City's discretion, warrant further CEQA analysis.

3.2 PROJECT LOCATION

The Project site is located within the central portion of the City of Wildomar, within Riverside County. Specifically, the Project site is located along Bundy Canyon Road, approximately one mile easterly of Interstate 15. Please refer also to Figure 3.2-1, *Project Location*.

3.3 EXISTING LAND USES AND LAND USE DESIGNATIONS

The following discussions summarize existing land use conditions in the Project vicinity and provide general context for the Project.

3.3.1 Existing Land Uses

Project site and vicinity land uses are denoted in the aerial photograph presented at Figure 3.3-1; and area land uses are described below. Photographs of the existing Project site are presented at Figure 3.3-2.

Source: Google Earth; Applied Planning, Inc.

Figure 3.2-1
Project Location

Source: Google Earth; Applied Planning, Inc.

Figure 3.3-1
Existing Land Uses

View from the southwestern property corner looking northeast.

View from the center of the western property boundary looking east across the ridgeline.

Source: Jean A Keller, PhD.

applied planning inc

Figure 3.3-2
Project Site Photos

3.3.1.1 Project Site Land Use

The Project site comprises vacant hilly terrain. The northerly portion of the Project site, adjacent to Bundy Canyon Road evidences substantial disturbance including trash dumping, tree cutting, and the construction of a complex of "jumps" used for off-road bicycling. The remainder of the Project site is moderately disturbed by human activities, including crossings by various paths and trails. Bundy Canyon Road forms the site's northerly border.

Topographically, the Project site manifests three main components: a relatively flat alluvial plain in the south; an east-west trending ridge of steep-sided hills traversing the central portion of the Project site; and a narrow riparian corridor along the site's the northerly boundary. Elevations within the Project site range from 1460 feet above mean sea level (AMSL) to 1676 feet AMSL. Steep gradients are evident along the site's central ridge, approaching a 1:1 slope (Project Phase I Cultural Resources Assessment, p. 5).

3.3.1.2 Vicinity Land Uses

Vacant land similar in character to the Project site exists to the north (across Bundy Canyon Road) and east. Estate density (0.5 du/acre) residential uses and limited agricultural uses exist southerly of the Project site. Properties developed with medium density (2.1–5 du/ac) single-family residential uses and a pocket of vacant land are located westerly adjacent to the Project site. Southwesterly adjacent to the Project site, properties are undeveloped and are reserved for open space and recreational uses.

3.3.2 Existing Land Use Designations

Existing General Plan Land Use and Zoning designations for the Project site and vicinity properties are depicted at Figures 3.3-3 and 3.3-4, respectively, and are described below. Draft EIR Section 4.1, *Land Use and Planning*, identifies and describes germane General Plan Land Use and Zoning designations and provides an assessment of the Project's context within, and consistency with, existing and anticipated area land uses and land use designations.

3.3.2.1 Project Site Land Use Designation

General Plan Land Use

The City General Plan Land Use designation of the Project site is Medium Density Residential (MDR). The MDR General Plan Land Use is intended for residential development at a density of 2.1 – 5 dwelling units/acre (du/ac).

Zoning

Current zoning for the site is R-R (Rural Residential). The R-R Zone District provides for single-family rural residential development and related compatible and ancillary activities. The minimum R-R Zone District lot size is one-half acre, allowing for residential development at up to 2 du/ac. The Project proposes development of the approximately 28.3-acre Project site with up to 140 residential units, or at a residential density of approximately 5 du/ac. The Project therefore requires a zone change to allow for the proposed development intensity.

To permit development of the Project, the Project Applicant has requested a Zone Change from R-R (Rural Residential) to R-3 (General Residential). The R-3 Zone District would permit development of the Project site at 2.1 - 5 du/ac; and would therefore allow for development of the site at up to 5 du/ac as proposed by the Project. As a corollary effect, by increasing the allowed residential density, the requested Zone Change would resolve inconsistencies (or potential inconsistencies) between the density policies articulated in the General Plan and density standards established under the Zoning Ordinance. Moreover, residential densities allowed under requested R-3 Zoning and as realized under the Project would establish a cohesive clustered residential development. In this regard, the Project and associated requested Zone Change support General Plan clustering Policies as summarized below.

Policy LU 8.4 Allow development clustering and/or density transfers in order to preserve open space, natural resources, and/or biologically sensitive resources.

Clustered development proposed by the Project acts to preserve and maintain open space, natural resources and biologically sensitive resources. In these regards, the Project design focuses development within the central portion of the subject site, and maintains perimeter areas in their natural condition. This generally preserves natural resources within the Project site and specifically minimizes or avoids impacts to protected biological resources. This design also acts to screen views of the developed Project area from off-site vantages.

Policy LU 11.1 b. Allow development clustering to retain slopes in natural open space whenever possible.

Clustered development proposed by the Project acts to minimize site grading and terrain alteration and retains slopes in their natural condition. Corollary benefits include, but are not limited to, a generalized reduction is site disturbance (reduces potential construction-source air quality and noise impacts); and preservation of natural drainage patterns.

Further, clustered development proposed by the Project generally reduces environmental impacts and promotes land use compatibility. More specifically:

- Clustering of uses reflected in the Project Site Plan Concept facilitates efficient and safe access to and between all Project uses.

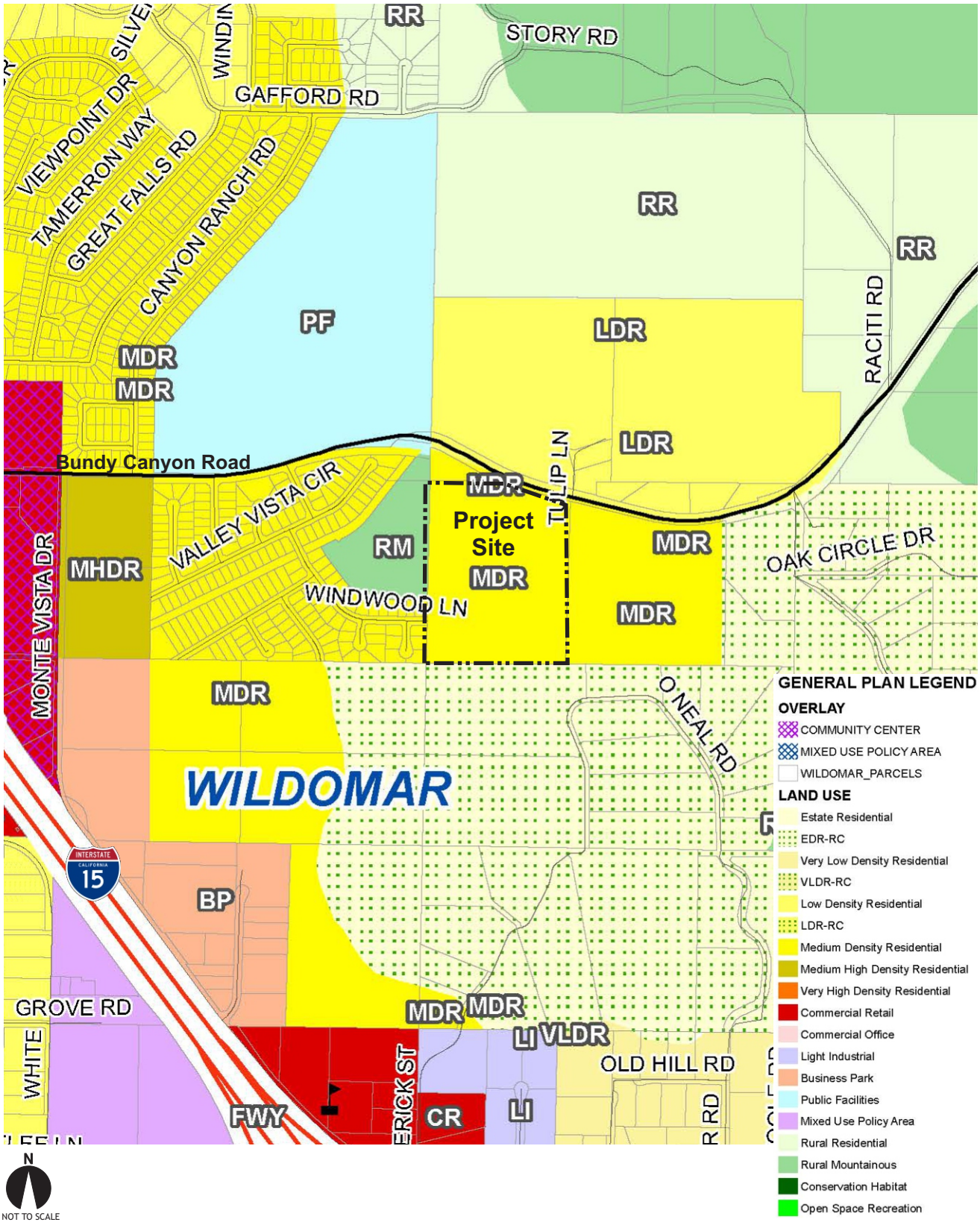
- The Project proposes clustered residential development with proximate access to local and regional transportation facilities. Clustered and intensified development and associated focused ridership base that would result from the Project support existing and future transit opportunities. Enhanced transit use acts generally to reduce traffic congestion, and mobile-source air pollutant emissions.

- Clustered development proposed by the Project acts to preserve and maintain open space, natural resources and biologically sensitive resources. In these regards, the Project design focuses development within the central portion of the subject site, and maintains perimeter areas in their natural condition. This generally preserves natural resources within the Project site and specifically

minimizes or avoids impacts to protected biological resources. This design also acts to screen views of the developed Project area from off-site vantages.

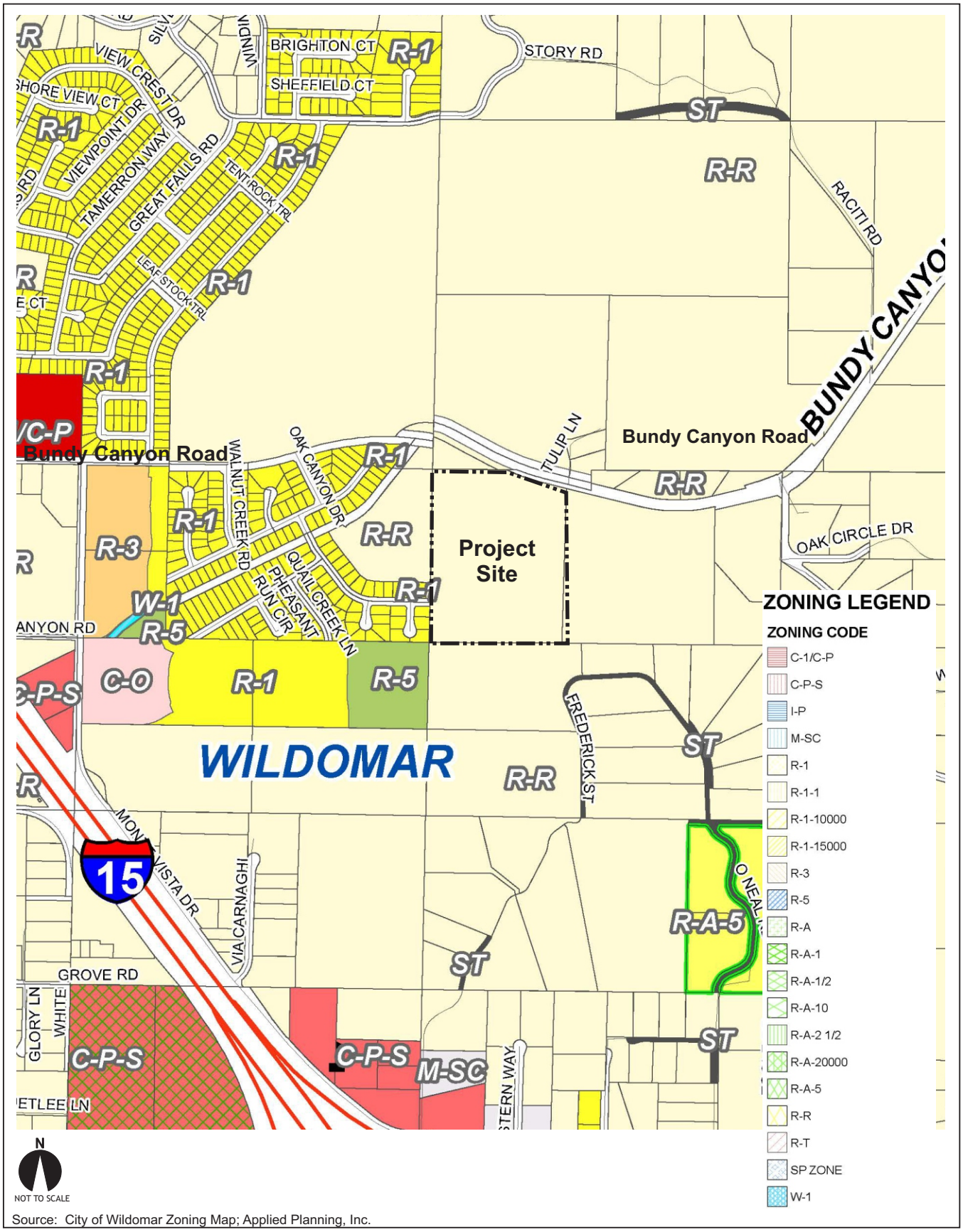
- Clustered development proposed by the Project acts to minimize site grading and terrain alteration and retains slopes in their natural condition. Corollary benefits include, but are not limited to, preservation of natural terrain; generalized reduction in site disturbance (reduces potential construction-source air quality and noise impacts); and preservation of natural drainage patterns.

Development proposed by the Project would be contingent on compliance with the R-3 Zone District Development Standards; and provided an approved plot plan is obtained pursuant to the provisions of City of Wildomar Municipal Code Chapter 17.216. Please refer also to the listings and descriptions of City Zoning Districts, permitted and conditionally permitted uses, and applicable development standards available at: http://www.cityofwildomar.org/zoningcode/index.asp.



Source: City of Wildomar General Plan; Applied Planning, Inc.

Figure 3.3-3
General Plan Land Use Designations



Source: City of Wildomar Zoning Map; Applied Planning, Inc.

Figure 3.3-4
Existing Zoning Designations

3.3.2.2 Vicinity Land Use Designations

General Plan Land Use

- Northerly and northeasterly of the Project site, across Bundy Canyon Road, properties are designated Low Density Residential (LDR). The LDR Land Use provides for single-family detached residences at densities of 1-2 dwelling units/acre (du/ac);

- Easterly of the Project site, properties are designated Medium Density Residential (MDR). The MDR Land Use is intended for residential development at a density of 2.1–5 du/ac;

- South of the Project site, properties are designated Estate Density Residential/ Rural Community (EDR/RC). The EDR/RC Land Use accommodates residential development at a density of 0.5 du/ac;

- Westerly of the Project site, the single-family residential properties are designated Medium Density Residential (MDR); a vacant pocket of land directly adjacent to the Project site is designated as Rural Mountainous (RM). The RM Land Use provides for single-family detached residences at densities of 0.1 du/ac.

Zoning

- Properties located northerly, southerly, and easterly of the Project site are designated Rural Residential (R-R). The R-R Zone District provides for single-family rural residential development and related compatible and ancillary activities. The R-R Zone permits one-family dwellings, nurseries, grazing, certain types of farming, and various other related uses. The minimum R-R Zone District lot size is one-half acre;

- Westerly of the Project site, properties are designated R-1 and R-R. The R-1 Zone District provides for single-family residential development and related compatible and ancillary activities. The minimum R-1 Zone District lot size is 7,200 square feet. The R-R Zone District is previously described;

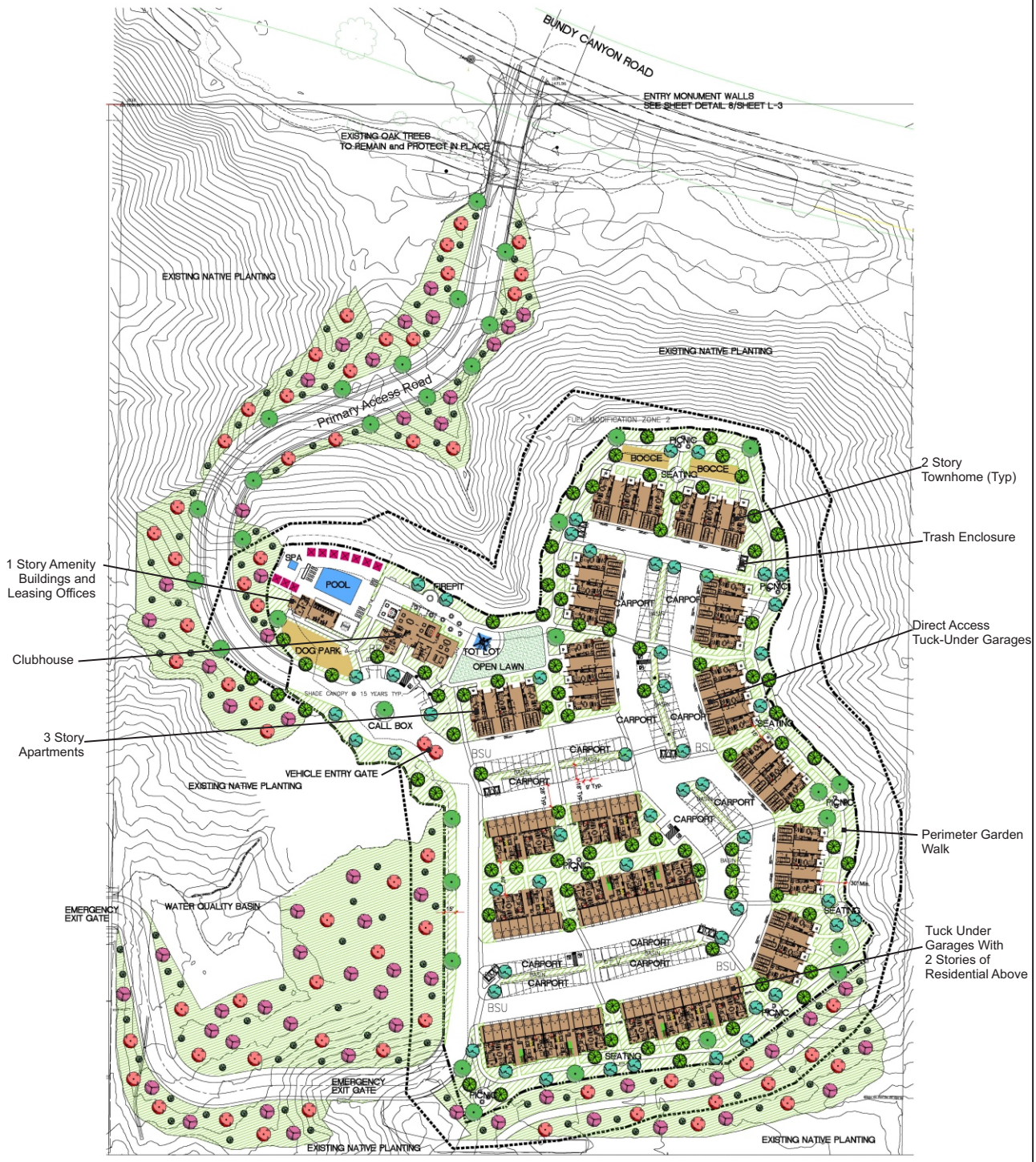
- Southwesterly of the Project site, properties are designated R-5, Open Area Combining Zone, Residential Developments. The R-5 Zone District accommodates golf courses, various non-commercial recreational facilities shared between residential communities, and ancillary supporting uses. The R-5 Zone designation applies to common open space and recreational amenities provided as components of associated residential development(s); minimum lot size standards are therefore not established for R-5 designated areas.

3.4 PROJECT ELEMENTS

3.4.1 Development Concept

The Project proposes the development of 140 residential units, including 50 townhomes and 90 apartments. Amenities available to the Project residents would include a clubhouse, swimming pool, basketball court, playgrounds, dog run, and a picnic area. Locations and configuration of proposed amenities are indicated at Figure 3.4-1, *Site Plan Concept*.

Preliminary plans depict the residential buildings encircling a common area containing community amenities, such as a clubhouse, swimming pool, bocce ball area, playground, dog run, and a picnic area. Other amenities or variations on these amenities may be ultimately implemented as the Project is further defined. A water quality basin would be located in the southwestern portion of the site. Table 3.4-1 presents the specific mix of residential products proposed and the configuration of uses within the site.



Source: Alhambra Group Landscape Architecture

Figure 3.4-1
Conceptual Site Plan

Table 3.4-1
Proposed Residential Products

Type	Number of Units
1 Bedroom Apartment	57
2 Bedroom Apartment	33
2 Bedroom Townhome	35
3 Bedroom Townhome	15
Total Units	***140***

Source: Bundy Canyon Resort Apartment Project Site Plan Concept, August 2016.

3.4.2 Architectural Rendering/Design Concepts

The Project architectural concepts (EIR Figures 3.4-2, 3.4-3) indicate contemporary residential community designs that would be consistent with City development standards as detailed at EIR Section 4.1, *Land Use*; Table 4.1-3, *Municipal Code Chapter 17.44 R-3 General Residential Zone Regulations and Development Standards Consistency.*

A representative architectural rendering of the proposed Project is presented at Figure 3.4-2. Design accents and amenities concepts proposed by the Project are illustrated at Figure 3.4-3. The designs presented are conceptual in nature and provided for informational and illustrative purposes. The Final building, accent, and amenities designs would be subject to the approval of the City of Wildomar as part of the Project entitlement process.

3.4.3 Site Preparation

The Project site would be graded in preparation for building construction. It is estimated that site preparation activities would be completed within 30 days of commencement. The preliminary Grading Plan indicates balanced earthwork, with no substantial import or export of grading material.

Typical Townhome Building

Typical Apartment Building

Clubhouse Entry

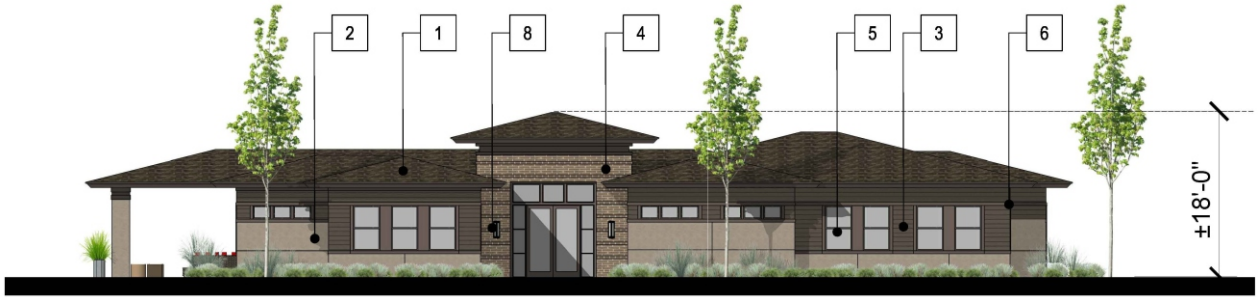
Source: KTGY Architecture + Planning

appliedplanning inc

Figure 3.4-2
Architectural Renderings

Townhome Building, Front Elevation, Typical

Apartment Building, Front Elevation, Typical



Clubhouse, Front Elevation

Material Legend

1. Asphalt Composite Roof
2. Stucco
3. Fibercement Siding
4. Brick Veneer
5. Vinyl Window With Trim
6. Painted Fascia/ Trim
7. Metal Rail
8. Decorative Light Fixture

Source: KTGY Architecture + Planning

applied planning inc

Figure 3.4-3
Conceptual Building Elevations

3.4.4 Access and Circulation

Primary access to the Project would be provided via a signalized driveway off Bundy Canyon Road. Access to the Project would be controlled by an automatic gate system. Secondary, emergency-only access would be provided from the southwest via an extension of Windwood Drive. Resident and/or visitor access via the Windwood Drive would be for emergency purposes only; this access point would remain closed under normal circumstances. Final designs and specifications for all Project driveways, traffic controls, and internal circulation improvements would be subject to review and approval by the City Engineering Department. Improvements to be implemented by the Project are described below. Project improvements listed below would be completed pursuant to City Conditions of Approval, to include improvements timing.

- **Bundy Canyon Road** – Bundy Canyon Road is an east-west oriented roadway located along the Project's northern boundary. As part of the Project, Bundy Canyon Road between the Project's eastern and western boundaries would be constructed at its ultimate half-section width as an urban arterial (152-foot right-of-way) pursuant to applicable City of Wildomar standards. Bundy Canyon Road would be striped with three eastbound through lanes, consistent with the urban arterial roadway cross-section, at such time in the future when the roadway is widened to the east and west of the site.

- **Road "A" / Bundy Canyon Road**[1] – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

  -Northbound Approach: One shared left-right turn lane. The queuing evaluation for the site access point indicates the 95th percentile northbound queue would not exceed 70-feet.

[1] Although Bundy Canyon Road is designated under the General Plan as an urban arterial roadway (6 travel lanes, 3 in each direction), the Project TIA assumes only 2 lanes of travel in the eastbound and westbound direction. Other proposed access restrictions along Bundy Canyon Road are also reflected in the Project TIA. This is consistent with City of Wildomar's planned improvements for Bundy Canyon Road.

-Southbound Approach: N/A

-Eastbound Approach: One through lane and one right turn lane with a minimum of 100 feet of storage.

-Westbound Approach: One left turn lane with a minimum of 100-feet of storage and one through lane.

The intersection of Road "A" and Bundy Canyon Road is anticipated to warrant a traffic signal with the development of the north side under long-range traffic conditions. The City would require that future development on the north side of Bundy Canyon Road within Assessor Parcel Number (APN) 366-320-028,048 provide access to Bundy Canyon Road in alignment with the Project Road "A."

- **Signing/Striping** - On-site traffic signing and striping plans would be developed and implemented consistent with City requirements.

- **Sight Distance** - Sight distance at each Project access point would be reviewed by the Lead Agency and Caltrans to ensure respectively, compliance with City of Wildomar and Caltrans design standards.

3.4.4.1 Construction Traffic Management Plan

Temporary and short-term traffic detours and traffic disruption may occur during Project construction activities. Accordingly, the Project Applicant would be responsible for the preparation of a construction area traffic management plan (Plan) to be submitted to the City. Typical elements and information incorporated in the Plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

- **Identification of Construction Contract Responsibilities** - For example for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations (if any).**

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan would be reviewed and approved by the City prior to the issuance of grading/encroachment permits. The Plan and its requirements would be provided to all contractors as one component of permit/contract document packages.

3.4.5 Parking

Based on the proposed land uses, the City of Wildomar Municipal Code indicates that 266 parking spaces are required of the Project. Preliminary plans indicate that 288 spaces would be provided by the Project. Unless otherwise specified by the City, all parking areas and their configurations would be designed and implemented pursuant to City requirements identified at Wildomar Municipal Code Chapter 17.188.

3.4.6 Other Site Improvements

Supporting site improvements to be implemented by the Project are described below.

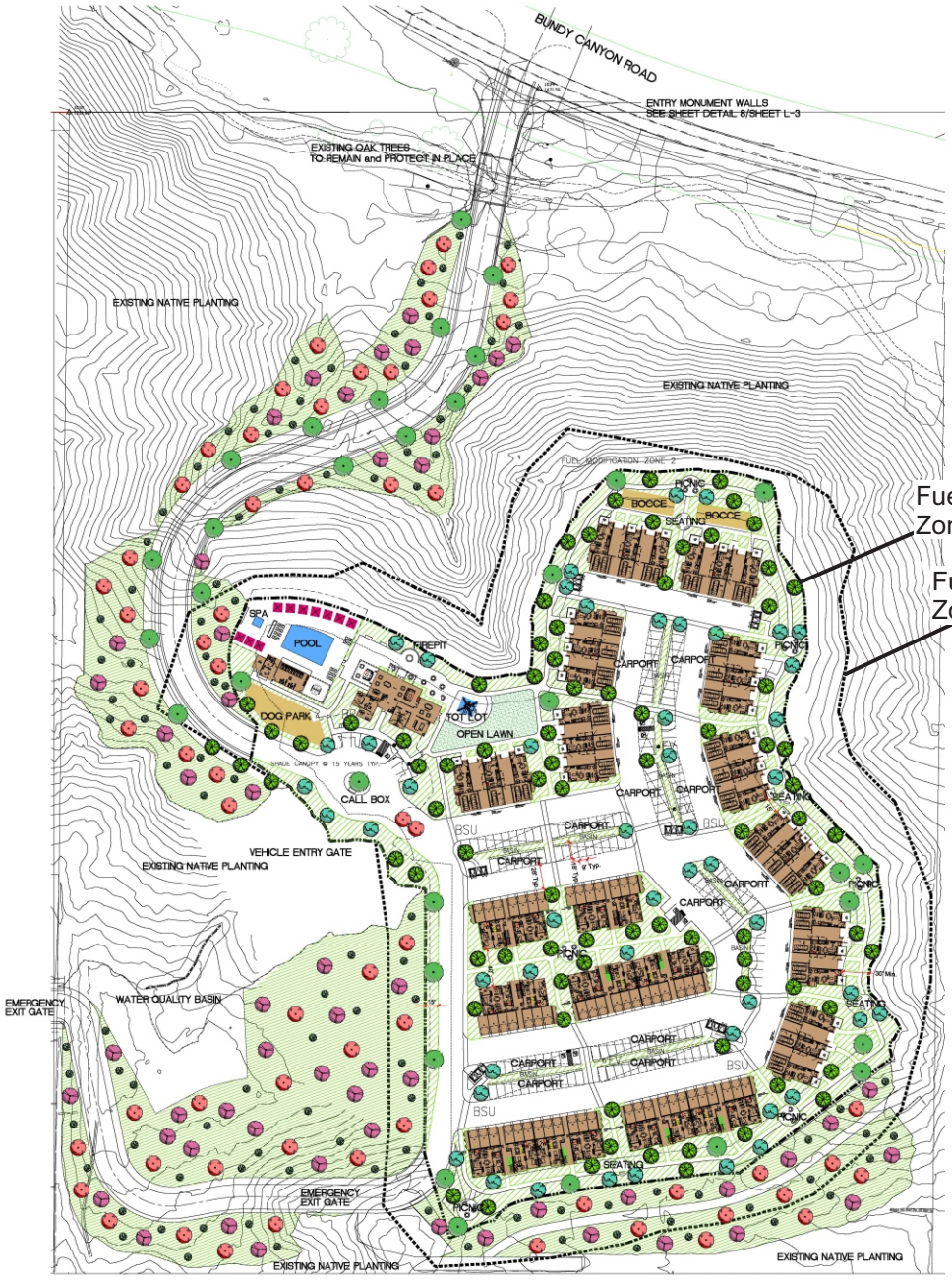
3.4.6.1 Landscape Concept

Landscaping of the Project site has been designed with the site's existing vegetation and topography in mind. As shown at Figure 3.4-4, the perimeter of the site would remain in its native vegetated state. To reduce potential fire hazards, two fuel modification zones have been designed separating the developed Project areas from adjacent vegetation. Zone 1, located nearest proposed structures, would comprise a 30-foot irrigated buffer between structures and Zone 2. Zone 2 would contain a mix of existing vegetation and a hydroseed mixture of appropriate groundcovers. Zone 2 would be a minimum of 100 feet wide and would not be irrigated. Interior portions of the Project site would feature drought tolerant urban plantings, including trees, shrubs, vines and groundcover. A drip irrigation system would be utilized throughout. The landscaping concept in total would comply with the City's Water Efficient Landscapes Ordinance as outlined in Chapter 17.276 of the Wildomar Municipal Code.

Certain of the existing oak trees along Bundy Canyon Road would be protected in place, and have been integrated into the Project design and landscape concept.

3.4.6.2 Lighting

The Project would include building-mounted, wall-mounted, and pole-mounted fixtures to properly illuminate Project entrances, walkways, and parking areas. All lighting would be provided consistent with Chapter 8.64 of the Wildomar Municipal Code that regulates light pollution.



Fuel Modification Zone 1

Fuel Modification Zone 2

PLANTING LEGEND

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	SIZE	NUMBER	REMARKS	WATER USE
	TREES:						
	QUE. AGR.	QUERCUS AGRIFOLIA	COAST LIVE OAK	36" BOX	33	TRIPLE STAKE / HEIGHT 10'-12' , SPREAD 5'-6' MIN.	L
	CHI. TAS.	CHITALPA TASHKENTENSIS 'PINK DAWN'	PINK FLOWERING CHITALPA	15 GAL	62	DOUBLE STAKE / HEIGHT 7'-8' , SPREAD 2'-3' MIN.	L
	CER. OCC.	CERCIS OCCIDENTALIS	WESTERN RED BUD	15 GAL	102	DOUBLE STAKE / HEIGHT 6'-7' , SPREAD 1'-2' MIN.	L
	ACA. STE.	ACACIA STENOPHYLLA	SHOESTRING ACACIA	15 GAL	55	DOUBLE STAKE / HEIGHT 7'-8' , SPREAD 2'-3' MIN.	L
	PIS. CHI.	PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	85	DOUBLE STAKE / HEIGHT 8'-10' , SPREAD 3'-4' MIN.	L
	OLE. E. 'W.'	OLEA EUROPEA 'WILSONII'	FRUITLESS OLIVE	24" BOX	50	DOUBLE STAKE / HEIGHT 8'-10' , SPREAD 3'-4' MIN.	L
	SHRUBS:						
	BAC. P. 'P.P.'	BACCHARIS PILULARIS 'PIDGEON POINT'	PROSTRATE COYOTE BUSH	1 GAL	–	TRIANGULAR SPACING @ 5' O.C.	L
	HES. PAR.	HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LEU. FRU.	LEUCOPHYLLUM FRUTICOSUM	TEXAS RANGER	5 GAL	–	FULL & BUSHY @ 5' O.C.	L
	ANA. FLA.	ANAGYZANTHUS FLAVIDUS 'VELVET AMBER'	AMBER KANGAROO PAWS	1 GAL	–	FULL & BUSHY @ 3' O.C.	L
	KNI. UVA.	KNIPHOFIA UVARIA	RED HOT POKER	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	AGA. 'SHA.'	AGAVE 'SHARKSKIN'	SHARKSKIN AGAVE	5 GAL	–	FULL & BUSHY @ 5' O.C.	L
	MUE. RIG.	MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LAV. STO.	LAVANDULA STOECHAS	SPANISH LAVENDER	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	SAL. GRE.	SALVIA GREGGI	AUTUMN SAGE	5 GAL	–	FULL & BUSHY @ 3' O.C.	L
	LOM. LON.	LOMANDRA LONGIFOLIA	LOMANDRA	1 GAL.	–	FULL & BUSHY @ 3' O.C. IN WATER QUALITY BASINS	M
	VINES:						
	DIS. BUC.	DISTICTUS BUCCINITORIA	BLOOD RED TRUMPET VINE	5 GAL	–	ATTACH TO WALLS & TRELLIS	M
	MULCH						
	WOOD MULCH	SHREDDED WOOD MULCH	MEDIUM GRIND WOOD MULCH	NA	AS REQ'D.	3" DEEP – INSTALL TO ALL PLANTING AREAS AS SHOWN	
	LAWN :						
	FES. ARU.	FESTUCA ARUNDIACEA	TURF TYPE TALL FESCUE	SOD	AS REQ'D.	INSTALL PER SPECIFICATIONS	H

N

NOT TO SCALE

Source: Alhambra Group

applied planning inc

Figure 3.4-4
Conceptual Landscape Plan

3.4.7 Infrastructure, Utilities, and Public Services

All public services, infrastructure systems, and utilities are currently available to service the Project site. No major new infrastructure or utilities improvements are proposed by the Project, nor are any required. Substantive off-site improvements are not proposed or required. The Project would implement necessary utilities improvements to include connections to existing services, and/or necessary realignment or modification of existing service lines. All connections to, and modification of, utilities necessary to serve the Project would be accomplished consistent with City and purveyor requirements. Please refer also to EIR Section 4.8, *Public Services and Utilities*.

3.4.7.1 Water Supply and Delivery

The Project site would be annexed into the Elsinore Valley Municipal Water District (EVMWD) Service Area, and water would be provided to the Project by EVMWD.[2] The Project would connect to one or more of the water service lines located in road rights-of-way adjacent to the Project site.

A 20-inch EVMWD water line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD water line is located in Windwood Lane at the southwesterly limits of the Project site.

To ensure that adequate fire flows are available to all Project uses, on-site water delivery improvements would be provided consistent with Riverside County Fire Department requirements. The Project would install recycled water distribution system for landscaping and connect to the EVMWD recycled water system when available to the Project site, reducing potable water demand with recycled, non-potable water.

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2 EVMWD receives imported water from Metropolitan Water District (MWD) through its member agency, Western Municipal Water District (WMWD). Because of this arrangement, no territory can be annexed into EVMWD without also annexing into the boundaries of WMWD and MWD. These annexations can be processed concurrently. After its Board takes action, WMWD is responsible for submitting all of the appropriate paperwork to MWD and to LAFCO. WMWD is most often the Lead Agency and MWD is the Responsible Agency through the Process.
See also: http://www.evmwd.com/depts/engineering/new_development/annexation.asp

3.4.7.2 Stormwater Management

Proposed stormwater management system concepts and Water Quality Management Plan (WQMP) elements are identified in the Project Hydrology Report, and Project WQMP presented at EIR Appendix F. All Project stormwater management system and WQMP improvements would be designed, constructed, and maintained consistent with City requirements. The City of Wildomar is required to comply with a Municipal Separate Storm Sewer System (MS4) Permit by the San Diego Regional Water Quality Control Board. This MS4 Permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential activities. The City lies within two watersheds (Santa Ana and Santa Margarita); however, the entire City is governed by the MS4 Permit for the Santa Margarita region. Consistent with provisions of the MS4 Permit, the Project would implement construction stormwater management improvements and practices pursuant to a City-approved Storm Water Pollution Prevention Plan (SWPPP).

The overall management of developed storm waters within the Project site would be accomplished through an on-site system of inlets, underground storm drains, surface drainage systems, and water quality management elements. Developed storm waters would be treated by implementation of physical features (e.g., landscape infiltration areas) and best management practices (BMPs) identified in the Project WQMP.

In combination, the Project SWPPP, on-site stormwater management system concept, and WQMP ensure that post-development stormwater discharge rates and volumes would not exceed the receiving system capacities; and further that any stormwater discharges from the Project site would meet or exceed water quality performance standards established by the City's MS4 Permit and related provisions of the City Jurisdictional Runoff Management Program (JRMP). Please refer also to the Project Hydrology Report, and WQMP presented at EIR Appendix F.

3.4.7.3 Other Utilities

The Project site is also provided natural gas service, electrical service and communications services as summarized below. All modification of, and connection to, existing services would be accomplished consistent with City and purveyor requirements.

- Natural Gas Service: Natural gas service would be provided by The Gas Company.

- Electrical Service: Electrical Service would be provided by Southern California Edison. As part of the Project, existing overhead electrical lines would be relocated underground. All new electrical connections would also be placed underground.

- Communications Service: Time Warner and Verizon currently provide communication/cable services to the City and these services would be available to the Project.

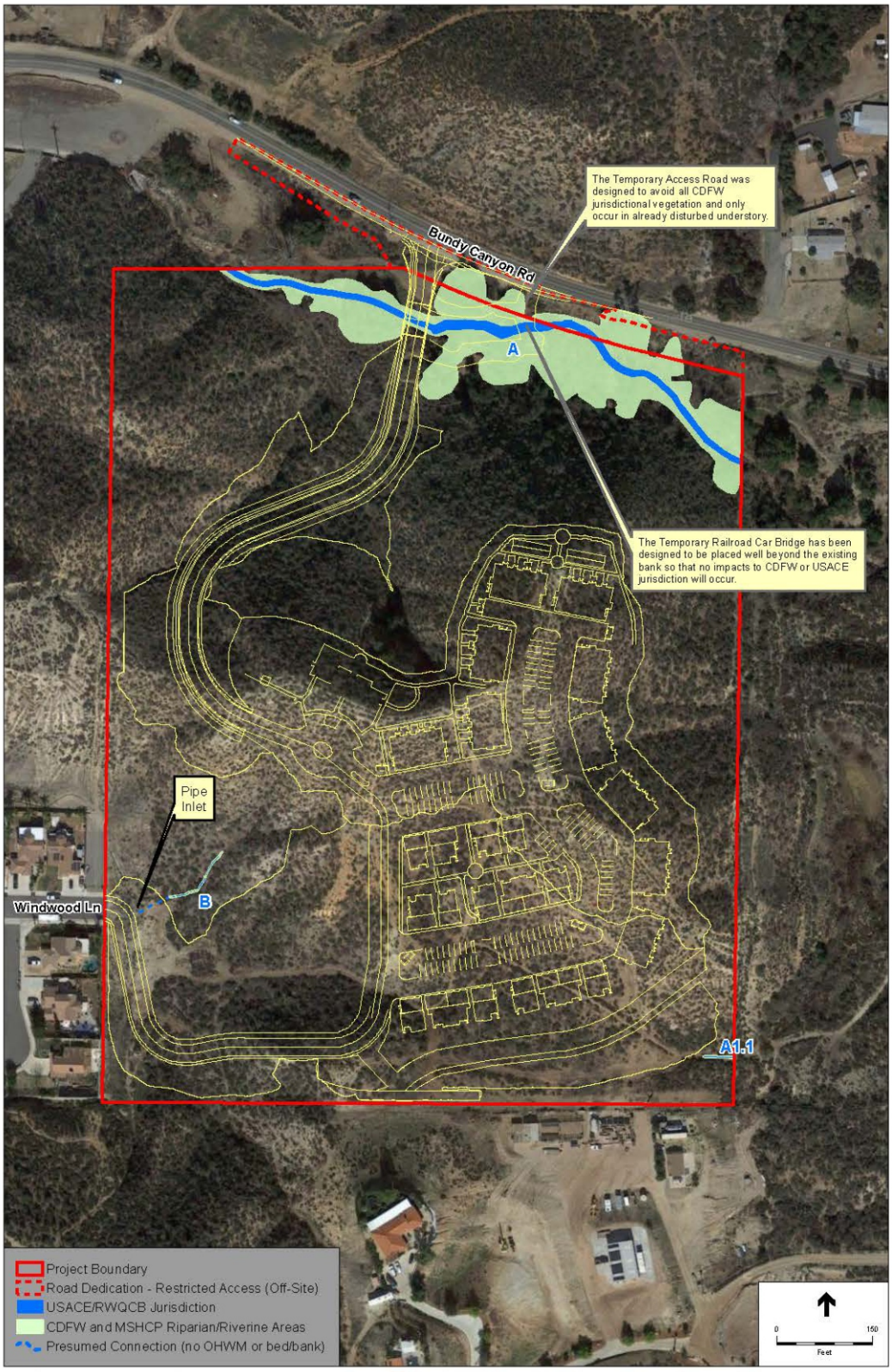
3.4.7.4 Public Services

The following public services are available to the Project:

- Fire Protection Services (Riverside County Fire Department/Cal Fire);
- Police Protection Services (Riverside County Sheriff's Department);
- Schools (Lake Elsinore Unified School District, K-12);
- Libraries (Mission Trail Community Library); and
- Parks (City of Wildomar).

3.4.8 Biological Resources Avoidance

Project avoidance of impacts to Jurisdictional Features and MSHCP Riparian/Riverine Areas is illustrated at Figure 3.4-5.



Source: ESA PCR

applied planning inc

Figure 3.4-5
Avoidance of Jurisdictional Areas
and MSHCP Riparian/Riverine Areas

A temporary access road and railroad car bridge would be implemented to facilitate access to the Project site during Project construction. The temporary access road and railroad car bridge would be implemented in areas that are already disturbed and do not support vegetation suitable for protected biological resources.

Additionally, a permanent bridge crossing would connect Road A to Bundy Canyon Road. The permanent bridge accessing the Project site would be designed to span the entirety of jurisdictional areas along the northerly project boundary, and all construction activities would occur outside jurisdictional areas and protected habitat, with no resulting disturbance to protected biological resources. The following measures are incorporated in the Project to ensure that protected biological resources are avoided during construction of the proposed permanent Road A bridge.

Prior to and During Construction of the Permanent Bridge Crossing access to Bundy Canyon Road:

- Permanent bridge and abutments shall be scheduled to commence outside of the least Bell's vireo nesting season (approximately April 10 until July 31, depending on when the birds arrive from and depart to wintering areas).

- Any bridge construction activities that commence during the least Bell's vireo nesting season (April 10 until July 31) shall incorporate habitat surveys to determine potential presence of least Bell's vireo. Such surveys shall be conducted by a qualified biologist within three days prior to construction. The survey area shall consist of the bridge impact area (bridge footprint and abutments) and a 500-foot buffer around the bridge impact area. If any active nests are detected within the survey area, a buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts. Supporting documentation in the form of the EIR Mitigation Monitoring Plan

shall be prepared and submitted to CDFW and/or USFWS on completion of construction to outline any proposed monitoring activities.

- If least Bell's vireo is observed within the survey area during the 3-day pre-construction survey, the following measures shall be taken to minimize potential indirect impacts to least Bell's vireo:

  - Prior to construction, a training program shall be developed and implemented by the Project biologist to inform all construction personnel workers about the listed species, its habitat, and the importance of complying with species avoidance and impact minimization measures.
  - All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Wildomar.
  - Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards. Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied least Bell's vireo habitat.
  - Construction contractors shall stage equipment in areas that would create the greatest distance between construction noise sources and habitat that is occupied during the breeding season.
  - If the Project biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of birds, the construction supervisor shall be informed and work shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within areas of occupied habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during

the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.

- If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of birds is still being affected, work shall again be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.

3.4.9 Energy Efficiency/Sustainability

3.4.9.1 General

The Project in total would comply with or surpass incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Title 24 Energy Efficiency Standards). Please refer also to related discussions presented at EIR Section 4.3, *Air Quality*, and EIR Section 5.6, *Energy Conservation*.

3.5 PROJECT OBJECTIVES

Project Objectives include the following:

- Capitalize on the site's location proximate to the I-15/Bundy Canyon Road interchange;

- Create a complementary mix of multi-family residential products and supporting amenities;

- Take advantage of available infrastructure; enhance and improve local infrastructure systems to the benefit of the Project and surrounding areas; and to maximize access opportunities for the convenience of residents and visitors;

- Maximize development potential of the subject site, while maintaining and protecting natural site features;

- Establish an efficient and sustainable development through clustering of multi-family residential products and supporting amenities;

- Provide a multi-family residential development that expands and diversifies the locally available housing stock; and that responds to the current and projected demand for multi-family residential products within the City.

3.6 PROJECT DISCRETIONARY ACTIONS, PERMITS, CONSULTATION

Discretionary actions, permits and related consultation(s) necessary to approve and implement the Project are summarized below.

3.6.1 City Discretionary Actions and Permits

CEQA Guidelines Section 15124 states in pertinent part that if "a public agency must make more than one decision on a Project, all its decisions subject to CEQA should be listed . . ." Requested decisions, or discretionary actions, necessary to realize the Project include, but may not be limited to the following:

- Certification of the EIR;
- Approval of a zone change from R-R (Rural Residential) to R-3 (General Residential); and
- Plot Plan approval for Project design and architectural details.

Additionally, the Project would require a number of non-discretionary construction, grading, drainage and encroachment permits from the City to allow implementation of the Project facilities.

3.6.2 Other Consultation and Permits

CEQA Guidelines Section 15124 also states that the EIR should, to the extent known, include a list of all the agencies expected to use the EIR in their decision-making (Responsible Agencies, Trustee Agencies), and a list other permits or approvals required to implement the Project. Based on the current Project design concept,

anticipated permits necessary to realize the proposal would likely include, but are not limited to the following:

- Permitting may be required by/through the South Coast Air Quality Management District (SCAQMD).

- Permitting may be required by/through the Santa Ana Regional Water Quality Control Board and/or the San Diego Regional Water Quality Control Board.

- Annexation to Elsinore Valley Municipal Water District would be required. Annexations to Western Municipal Water District, Elsinore Valley Municipal Water District and the Metropolitan Water District of Southern California will be necessary before water service is established for the subject reorganization. A condition of these annexations is the imposition of the standby charges. Overall, these annexations are administrative and fiscal actions, which do not result in a tangible change in the physical environment. Therefore, annexation impacts to the utility and service systems would be less than significant.

- Permitting (i.e., utility connection permits) may be required from utility providers.

- Various other ministerial permits necessary to realize all on- and off-site improvements related to the development of the site.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This chapter of the EIR analyzes and describes the potential environmental impacts associated with the adoption and implementation of the Bundy Canyon Resort Apartment Project (Project). The environmental impact analysis has been organized into a series of sections, each addressing a separate environmental topic. Environmental topics addressed in this EIR are presented in the following sections:

Section	**Topic**
4.1	Land Use and Planning
4.2	Transportation/Traffic
4.3	Air Quality
4.4	Global Climate Change and Greenhouse Gas Emissions
4.5	Noise
4.6	Hydrology/Water Quality
4.7	Geology and Soils
4.8	Public Services and Utilities
4.9	Population and Housing
4.10	Aesthetics
4.11	Biological Resources
4.12	Cultural Resources/Tribal Cultural Resources

Within each of the above topical Sections, the discussion is typically divided into subsections which: describe the "setting" or existing environmental conditions; identify regulations and policies, which through their observance typically resolve many potential environmental concerns; identify thresholds of significance applicable to potential environmental effects of the Project; describe the significance of Project-related environmental effects in the context of applicable significance thresholds; and for

impacts which are potentially significant or significant, recommend mitigation measures to eliminate or reduce their effects. In this latter regard, it is recognized that the intent of the California Environmental Quality Act (CEQA) is to focus on significant, or potentially significant adverse effects of the Project, and therefore, mitigation is proposed only for potential impacts of this magnitude.

As noted above, before potential impacts are evaluated, the standards or thresholds which will serve as the basis for judging the relative significance of impacts are presented. Often thresholds serve as a general guide or gauge for determining an impact's potential relative significance, rather than defining its absolute effects. Subsequent to identification of relevant significance thresholds, potential Project-related effects and impacts are identified and explained. If an impact is considered to be potentially significant, mitigation measures are proposed to avoid the impact, or reduce its effects to the extent feasible. In determining the potential significance of impacts, the adequacy of existing policies and regulations in addressing each impact is taken into consideration. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of mitigation measures.

In the environmental analysis, the following terms are used to describe the potential effects of the Project:

- **Less-Than-Significant Impacts**: Minor changes or effects on the environment caused by the Project which do not meet or exceed the criteria, standards, or thresholds established to gauge significance are considered to be less-than-significant impacts. Less-than-significant impacts do not require mitigation. In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation.

- **Potentially Significant Impacts**: Potentially significant impacts are defined as a substantial, or potentially substantial, adverse change in the environment. The *CEQA Guidelines* and various responsible agencies provide guidance for determining the significance of impacts. However, the determination of impact significance is ultimately based on the judgment of the lead agency. Similarly, the establishment of any criteria to be used in evaluating the significance of impacts is the responsibility of the lead agency. Wherever possible, mitigation is proposed in the EIR to avoid or reduce the magnitude of potentially significant impacts.

- **Significant Impacts**: Impacts identified in the EIR which cannot be mitigated below thresholds of significance through the application of feasible mitigation measures are categorized as "significant."

- **Cumulative Impacts**: A discussion of cumulative impacts is provided in Section 5.0 of this environmental analysis. Cumulative impacts refer to the impacts of the Project as they are combined or interact with anticipated impacts of other vicinity projects and physical effects of projected ambient regional growth.

4.1 LAND USE AND PLANNING

4.1 LAND USE AND PLANNING

Abstract

This Section identifies and addresses potential impacts that may result from land use and planning decisions necessary to implement the proposed development. Potential land use impacts may occur due to the type of development proposed by the Project, its location, and relation to existing and proposed land uses. Specifically, this Section evaluates the following CEQA land use and planning topical issues:

- *Potential to physically divide an established community or result in land use incompatibilities; and*

- *Potential to 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.*

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topic were previously determined to be less-than-significant and are not further discussed here:

- *Potential to conflict with any applicable habitat conservation plan or natural community conservation plan.*

As supported by the analysis presented in this Section, potential land use and planning impacts of the Project are less-than-significant.

4.1.1 INTRODUCTION

Land use refers to occupation and employment of properties for various purposes such as commerce, industry, open space, community services, infrastructure, and residential uses. Local land use plans, policies, and development regulations control the types, configurations, and intensities of land uses within the community. Changes in land use patterns resulting from new development can affect overall characteristics of an area, and may result in physical impacts to the environment. The Land Use and Planning Section of the EIR focuses on the Project's consistency with applicable land use plans, policies and regulations, and its potential incompatibilities with land use districts and existing and proposed vicinity development.

4.1.2 SETTING

4.1.2.1 Location

The Project site is located within the central portion of the City of Wildomar, within Riverside County. Specifically, the site is located along Bundy Canyon Road, approximately one mile easterly of Interstate 15. Bundy Canyon Road forms the site's northerly border. Vacant land exists to the north (across Bundy Canyon Road) and east. Rural residential uses exist to the south of the site. Single-family residential uses and a pocket of vacant land are located to the west. Please refer also to EIR Section 3.0, *Project Description*, Figure 3.2-1, *Project Location*.

4.1.2.2 Existing Land Uses

Project site and vicinity land uses are denoted in the aerial photograph presented in Figure 4.1-1; and area land uses are described in the following discussions. Please refer also to land use descriptions presented at EIR Section 3.0, *Project Description.*

Source: Google Earth; Applied Planning, Inc.

Figure 4.1-1
Existing Land Uses

Project Site Land Use

The Project site comprises vacant hilly terrain. The northerly portion of the Project site, adjacent to Bundy Canyon Road evidences substantial disturbance including trash dumping, tree cutting, and the construction of a complex of "jumps" used for off-road bicycling. The remainder of the Project site is moderately disturbed by human activities, including crossings by various paths and trails. Bundy Canyon Road forms the site's northerly border.

Topographically, the Project site manifests three main components: a relatively flat alluvial plain in the south; an east - west trending ridge of steep-sided hills traversing the central portion of the Project site; and a narrow riparian corridor along the Project site northerly boundary. Elevations within the Project site range from 1460 feet above mean sea level (AMSL) to 1676 feet AMSL. Steep gradients are evident along the site's central ridge, approaching a 1:1 slope (Project Phase I Cultural Resources Assessment, p. 5).

Vicinity Land Uses

Vacant land similar in character to the Project site exists to the north (across Bundy Canyon Road) and east. Estate density (0.5 du/acre) residential uses and limited agricultural uses exist southerly of the Project site. Properties developed with medium density (2–5 du/ac) single-family residential uses and an area of vacant land are located westerly adjacent to the Project site. Southwesterly adjacent to the Project site, properties are undeveloped and are reserved for open space and recreational uses.

4.1.2.3 Existing Land Use Designations

Existing General Plan Land Use and Zoning designations for the Project site and vicinity properties are depicted at Figures 4.1-2 and 4.1-3, respectively, and are described below.

Project Site Land Use Designation

General Plan Land Use

When the City of Wildomar incorporated in 2008, it adopted the Riverside County General Plan and the relevant portions of the Wildomar Area Plan as the City's General Plan, including the Land Use Element.[1]

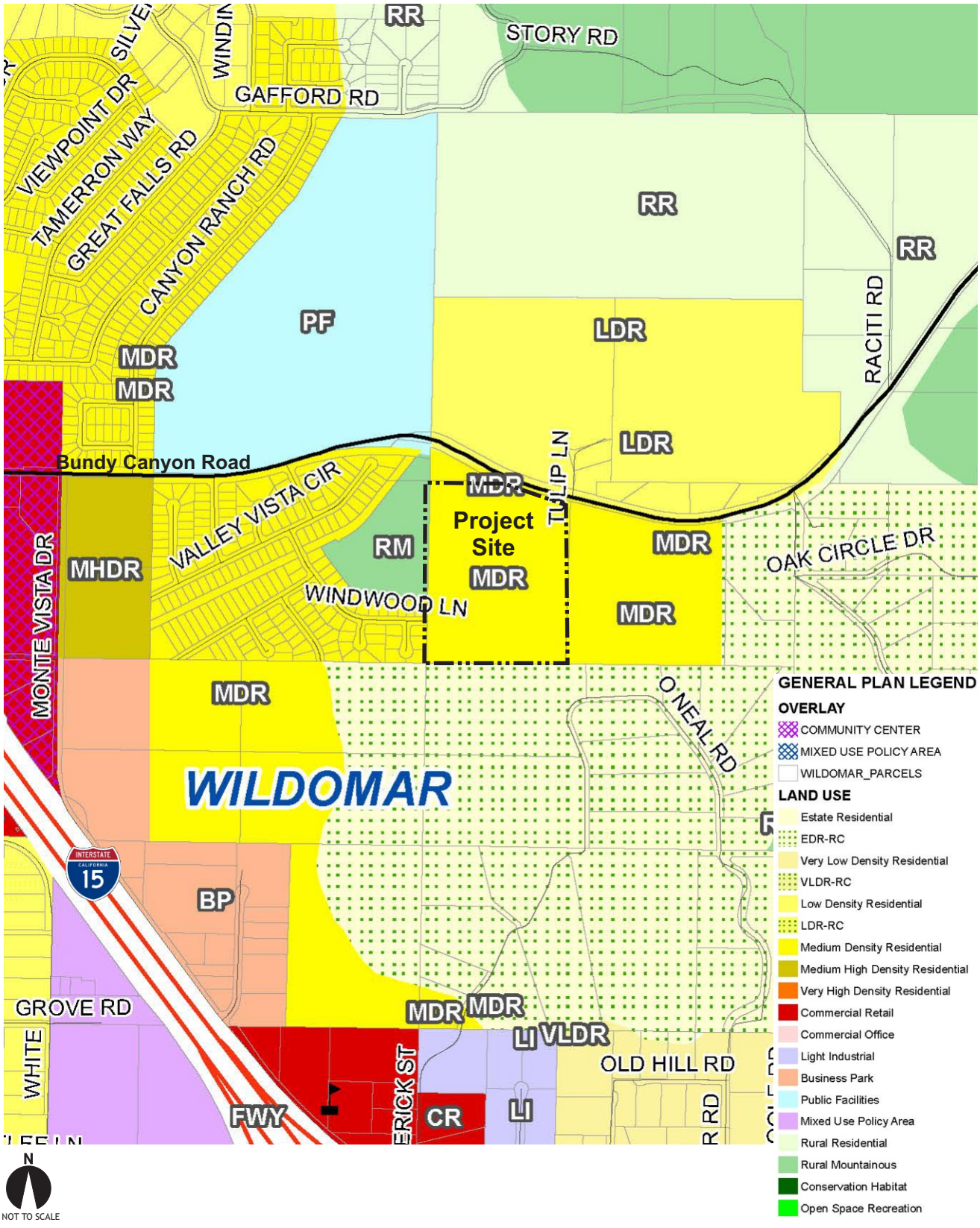
The General Plan Land Use Map designates the Project site as Medium Density Residential (MDR). The MDR General Plan Land Use allows for development with single-family detached and attached residential uses at 2 – 5 dwelling units/acre (du/ac), with an anticipated population density of 7 – 17 persons per acre. Limited agriculture and animal keeping are permitted. Intensive animal keeping is discouraged.

Zoning

Current zoning for the site is R-R (Rural Residential). The R-R Zone District provides for single-family rural residential development and related compatible and ancillary activities. The minimum R-R Zone District lot size is one-half acre, allowing for residential development at up to 2 du/ac. The Project proposes development of the approximately 28.3-acre Project site with up to 140 residential units, or at a residential density of approximately 5 du/ac. The Project therefore requires a zone change to allow for the proposed development intensity.

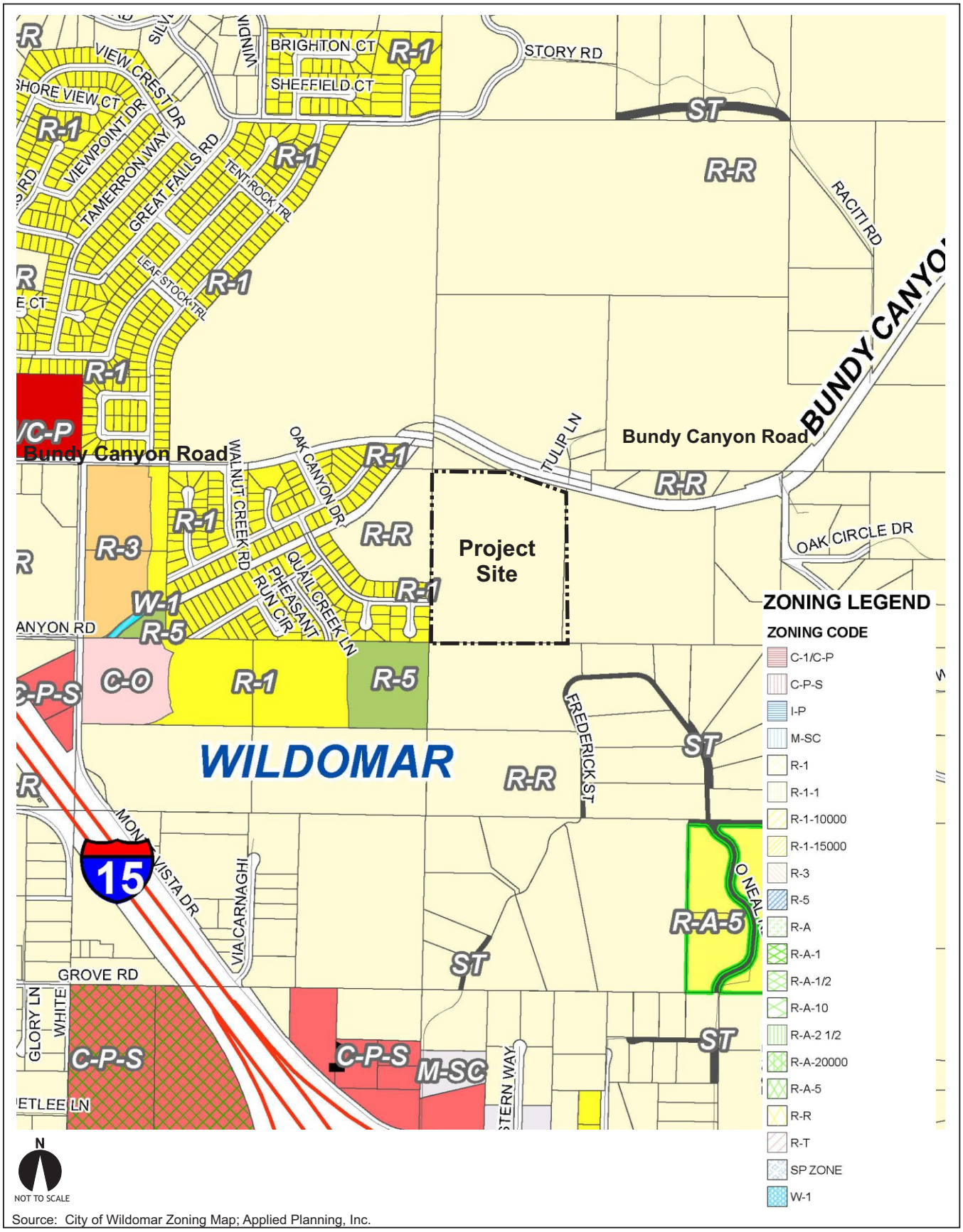
To permit development of the Project, the Project Applicant has requested a Zone Change from R-R (Rural Residential) to R-3 (General Residential). The R-3 Zone District would permit development of the Project site at 2 - 5 du/ac; and would therefore allow for development of the site at up to 5 du/ac as is proposed by the Project.

[1] The City has prepared a January 2015 Draft General Plan Update. As of this writing, the Draft General Plan Update has not yet been adopted by the City.



Source: City of Wildomar General Plan; Applied Planning, Inc.

Figure 4.1-2
General Plan Land Use Designations



Source: City of Wildomar Zoning Map; Applied Planning, Inc.

Figure 4.1-3
Existing Zoning Designations

Development proposed by the Project would be contingent on compliance with the R-3 Zone District Development Standards; and provided an approved plot plan is obtained pursuant to the provisions of City of Wildomar Municipal Code Chapter 17.216.

Please refer also to the listings and descriptions of City Zoning Districts, permitted and conditionally permitted uses, and applicable development standards available at: http://www.cityofwildomar.org/zoningcode/index.asp.

Vicinity Land Use Designations

General Plan Land Use

- North and northeasterly of the Project site, across Bundy Canyon Road, properties are designated as Low Density Residential (LDR) General Plan Land Uses. The LDR General Plan Land Use allows residential uses at densities of 1 – 2 dwelling units/acre. Limited agriculture, intensive equestrian and animal keeping uses are expected and encouraged. Population densities of 4 – 7 persons per acre are anticipated.

- Properties to the east of the Project site are designated as MDR General Plan Land Uses. The MDR General Plan Land Use allows for development with single-family detached and attached residential uses at 2–5 dwelling units/acre (du/ac), with an anticipated population density of 7 – 17 persons per acre. Limited agriculture and animal keeping are permitted. Intensive animal keeping is discouraged.

- Westerly of the Project site, properties are designated as MDR and Rural Mountainous (RM) General Plan Land Uses. The RM General Plan Land Use comprises areas of at least 10 acres where a minimum 70% of the area evidences slopes of 25% or greater. The RM General Plan Land Use allows for residential uses at up to 0.1 du/acre. Also allowed are limited animal keeping, recreational

uses, compatible resource development and associated uses, and government uses. Population densities of less than 0.1 person per acre are anticipated.

- Southerly of the Project site, properties are designated as Estate Density Residential/Rural Community (EDR/RC). The EDR/RC General Plan Land Use allows for residential uses at up to 0.5 du/ac. Limited agriculture, intensive equestrian, and animal keeping uses are expected and encouraged. Population densities of less than 2 persons per acre are anticipated.

Zoning

- Properties immediately located northwesterly, northerly, northeasterly, easterly, southeasterly, and southerly of the Project site are zoned R-R (Rural Residential). As previously discussed, the R-R Zone District provides for single-family rural residential development and related compatible and ancillary activities.

- Westerly of the Project site, properties are zoned R-R and R-1 (One Family Dwellings). The R-1 Zone District allows for single-family residential uses, limited agricultural, limited animal keeping, and various related and supporting uses.

- Southeasterly of the Project site, properties are zoned R-5 (Open Area Combining Zone, Residential Developments). The R-5 Zone District accommodates golf courses, various non-commercial recreational facilities shared between residential communities, and ancillary supporting uses. The R-5 Zone designation applies to common open space and recreational amenities provided as components of associated residential development(s).

Please refer also to the listings and descriptions of City Zoning Districts, their permitted and conditionally permitted uses, and applicable property development standards available at: http://www.cityofwildomar.org/zoningcode/index.asp.

4.1.3 LAND USE POLICIES AND REGULATIONS

The City has developed and adopted Land Use Goals, Policies and Development Standards/Regulations that act to promote orderly development of compatible land uses. In many instances, compliance with existing policies and standards eliminates, or substantially reduces, potential environmental effects. Existing policies and standards, to some extent, also indicate community and regional values and prerogatives relative to environmental concerns. As discussed below, Land Use Goals, Policies, and Development Standards germane to the Project are articulated within the City of Wildomar General Plan and Land Use Ordinance.

4.1.3.1 City of Wildomar General Plan

The City General Plan Land Use designations direct the general character and intensities of land uses within the City boundaries. All proposed development projects are evaluated for consistency with the intent and purpose of the applicable General Plan Land Use designation(s) and related General Plan Goals and Policies.

The City General Plan Land Use Map designates the Project site as Medium Density Residential (MDR). The MDR General Plan Land Use allows for development with single-family detached and attached residential uses at 2–5 dwelling units/acre (du/ac), with an anticipated population density of 7 – 17 persons per acre. Limited agriculture and animal keeping are permitted. Intensive animal keeping is discouraged.

Residential development proposed by the Project at a maximum of 5 du/ac under the proposed R-3 Zoning Designation is consistent with residential uses allowed under the site's current MDR Land Use designation. The Project would also implement supporting recreational, open space, and other community-supporting amenities.

The General Plan establishes a range of Land Use Goals and Policies that provide guidance and direction for land use decisions and development within the City. An assessment of Project support of, or consistency with, stated Goals/Policies is presented subsequently at Section 4.1.5, *Potential Impacts and Mitigation Measures*.

4.1.3.2 City of Wildomar Land Use Ordinance

The City of Wildomar Land Use Ordinance (Wildomar Municipal Code Title 17) is the primary tool for implementing the City General Plan. In contrast to the long-term, broad-based outlook of the General Plan, the City Land Use Ordinance establishes location-specific regulations and standards designed to control the locations, densities, and intensities of various land uses. To prevent incompatible land use relationships, the City Land Use Ordinance and accompanying Zoning Map designates different areas or "zones" for different types of land uses, and establishes standards for development. These standards may specify requirements for lot sizes, lot coverages, building heights, setbacks, parking, landscaping, and other development parameters. The California *Government Code*, Section 65860, requires that the City Land Use Ordinance be consistent with the City General Plan.

As previously discussed, the zoning for the Project site is R-R and does not permit the residential development intensities proposed by the Project. Accordingly, a Zone Change from R-R to R-3 is requested by the Applicant and is one of the Project discretionary actions. The proposed R-3 Zone would allow for the residential densities proposed by the Project. The City Land Use Ordinance at Chapter 17.44 R-3 General Residential Zone, Section 17.44.020, Development Standards, establishes requirements and regulations for development of the subject site as excerpted below:

> **17.44.020 Development standards.**
>
> The following standards of development shall apply in the R-3 zone, except that planned residential developments shall comply with the development standards contained in Section 17.180.010.
>
> A. The minimum lot area shall be 7,200 square feet with a minimum average width of 60 feet and a minimum average depth of 100 feet, unless different minimums are specifically required in a particular area.
>
> B. The minimum front and rear yards shall be 10 feet for buildings that do not exceed 35 feet in height. Any portion of a building which

exceeds 35 feet in height shall be set back from the front and rear lot lines no less than 10 feet plus two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from any existing or future street line as shown on any specific street plan of the City. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback.

C. The minimum side yard shall be five feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from each side lot line five feet plus two feet for each foot by which the height exceeds 35 feet; if the side yard adjoins a street, the side setback requirement shall be the same as required for a front setback. No structural encroachments shall be permitted in the front, side, or rear yard except as provided in Section 17.172.140.

D. No lot shall have more than 50% of its net area[2] covered with buildings or structures.

E. The maximum ratio of floor area to lot area shall not be greater than two to one, not including basement floor area.

F. All buildings and structures shall not exceed 50 feet in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230.

G. Automobile storage space shall be provided as required by Chapter 17.188. (Ord. 18 § 2, 2008, RCC § 17.44.020)

An assessment of Project consistency with applicable City of Wildomar Land Use Ordinance requirements and development is presented subsequently in Section 4.1.5, *Potential Impacts and Mitigation Measures*.

[2] The "*net* lot *area*" is defined as the total *area* contained within the property lines.

4.1.4 STANDARDS OF SIGNIFICANCE

Appendix G of the California Environmental Quality Act (*CEQA*) Guidelines, as employed by the City of Wildomar, indicates a project would normally have a potentially significant effect related to land use if it would:

- Physically divide an established community;

- 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; or

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.1.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.1.5.1 Introduction

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant land use and planning impacts, based on the previous discussions included within this Section and analysis presented within the EIR Initial Study (EIR Appendix A). As discussed within the Initial Study, the Project would not conflict with any applicable habitat conservation plan or natural community conservation plan. The Project would have a less-than-significant impact in these regards. These potential impacts are therefore not substantively discussed further within this Section. Please refer also to Initial Study Checklist Item XI., *Land Use and Planning*.

4.1.5.2 Impact Statements

Potential Impact: *Physically divide an established community or result in land use incompatibilities.*

Impact Analysis:

Land Use Compatibility Considerations

No established communities exist on the Project site. Moreover, the Project does not propose elements or aspects that would otherwise physically divide an established community. The Project site plan and design concepts reflect residential uses and supporting amenities that are consistent with the residential uses allowed under the site's current MDR Land Use designation. Further, the Project Site Plan Concept (EIR Section 3.0, *Project Description*, Figure 3.4-1) indicates the Project would be developed at a residential density of approximately 5 du/ac. This is consistent with the 2 – 5 du/ac development intensity anticipated for the MDR Land Use.

The current zoning designation for the Project site is R-R and does not permit the residential development intensities proposed by the Project. Accordingly, and to allow for the Project's proposed residential uses, a Zone Change from R-R to R-3 is requested as one of the Project discretionary actions. The R-3 Zone District permits or conditionally permits a variety of residential and ancillary uses, including those proposed under the Project.

The Project Site Plan Concept and associated discussion of design and operational elements presented in EIR Section 3.0, *Project Description*, indicate that Project would be developed consistent with rules and regulations applicable to the R-3 Zone District as summarized below.

17.44.020 Development standards.

The following standards of development shall apply in the R-3 zone, except that planned residential developments shall comply with the development standards contained in Section 17.180.010.

A. The minimum lot area shall be 7,200 square feet with a minimum average width of 60 feet and a minimum average depth of 100 feet, unless different minimums are specifically required in a particular area.

The Project site comprises approximately 28.3 acres. The Project site dimensions are approximately 1,000 feet by 1,300 feet. The Project site therefore conforms to area and dimension development standards for the R-3 Zone District. Subject to review and approval by the City, any Subsequent subdivision of the Project site would also conform to minimum lot area and lot dimension standards of the R – 3 Zone District.

B. The minimum front and rear yards shall be 10 feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from the front and rear lot lines no less than 10 feet plus two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from any existing or future street line as shown on any specific street plan of the City. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback.

Maximum building heights would approximate 38 feet above grade. The Project Site Plan Concept indicates the following property line setbacks for the Project uses:

North: +/- 370 feet to Bundy Canyon Road
South: +/- 110 feet
East: +/- 215 feet
West: +/- 105 feet

The Project would therefore comply with front yard and rear yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate front yard and rear yard setbacks are established throughout the Project site.

C. The minimum side yard shall be five feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from each side lot line five feet plus two feet for each foot by which the height exceeds 35 feet; if the side yard adjoins a street, the side setback requirement shall be the same as required for a front setback. No structural encroachments shall be permitted in the front, side, or rear yard except as provided in Section 17.172.140.

Maximum building heights would approximate 38 feet above grade. The Project Site Plan Concept indicates the following property line setbacks for the Project uses:

North: +/- 370 feet to Bundy Canyon Road
South: +/- 110 feet
East: +/- 215 feet
West: +/- 105 feet

The Project would therefore comply with front yard and rear yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate front yard and rear yard setbacks are established throughout the Project site.

D. No lot shall have more than 50% of its net area covered with buildings or structures.

The Project Site Plan indicates that the approximately 28.3 acre Project site would be developed with approximately 82,000 square feet of structures, or about

6.7 percent of the Project site would be covered with buildings and structures. The Project would therefore conform to lot coverage development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building areas would not exceed 50 percent of the net Project site.

E. The maximum ratio of floor area to lot area shall not be greater than two to one, not including basement floor area.

The Project Site Plan concept indicates that the total building floor area proposed is approximately 168,000 square feet, including residential attached garages and the Project clubhouse. The total Project floor area (190,450 square feet) to lot area (28.3 acres) is 0.154 to 1 and would therefore conform to the ratio of floor area to lot area development standard established for the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that the Project floor area to lot area building areas would not exceed 2:1.

F. All buildings and structures shall not exceed 50 feet in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230.

The Project Architectural Concepts indicates that buildings and other structures proposed by the Project would not exceed 38 feet above the adjacent grade. The Project would therefore conform to height development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building heights would not exceed 50 feet in height; or in applicable instances not greater than 75 feet as permitted under the provisions of Section 17.172.230.

G. Automobile storage space shall be provided as required by Chapter 17.188. (Ord. 18 § 2, 2008, RCC § 17.44.020).

Pursuant to Chapter 17.188, 266 parking spaces would be required for the Project uses. The Project Site Plan Concept indicates that 288 parking spaces would be

provided; or 22 spaces more than would be required by Ordinance. The Project would therefore conform to parking development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that parking provided by the Project comports with Municipal Code Chapter 17.188 requirements.

Moreover, the Project clustered site plan design in total conforms to, and supports, land use compatibility goals and intent underlying the City Zoning Ordinance development standards. More specifically:

- Clustering of uses reflected in the Project Site Plan Concept facilitates efficient and safe access to and between all Project uses.

- The Project proposes clustered residential development with proximate access to local and regional transportation facilities. Clustered and intensified development and associated focused ridership base that would result from the Project support existing and future transit opportunities. Enhanced transit use acts generally to reduce traffic congestion, and mobile-source air pollutant emissions.

- Clustered development proposed by the Project acts to preserve and maintain open space, natural resources and biologically sensitive resources. In these regards, the Project design focuses development within the central portion of the subject site, and maintains perimeter areas in their natural condition. This generally preserves natural resources within the Project site and specifically minimizes or avoids impacts to protected biological resources. This design also acts to screen views of the developed Project area from off-site vantages.

- Clustered development proposed by the Project acts to minimize site grading and terrain alteration and retains slopes in their natural condition. Corollary benefits include, but are not limited to, preservation of natural terrain;

generalized reduction in site disturbance (reduces potential construction-source air quality and noise impacts); and preservation of natural drainage patterns.

As supported by the preceding discussions, no established communities exist on the Project site. The Project does not propose elements or aspects that would otherwise physically divide an established community. The Project clustered site plan design in total conforms to, and supports, land use compatibility goals LU 8.4 and 11.1, and the intent underlying the City Zoning Ordinance development standards. Further, the Project would comply with land uses, development types, and development intensities allowed for the Project site under the current General Plan MDR Land Use, and proposed R-3 zoning designation. The potential for the Project to physically divide an established community or result in land use incompatibilities is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *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.*

Impact Analysis: The Project is subject to land use plans, policies, guidelines, and regulations as established by the City of Wildomar. Germane to the Project, these include the City General Plan Land Use Policies and R-3 Zone District Regulations and Development Standards. As summarized at Table 4.1-1, the Project is consistent with, and appropriately responds, to applicable City General Plan Land Use Policies. Substantiation of Project conformance with applicable R-3 Zone District Regulations and Development Standards is presented subsequently at Table 4.1-2.

Table 4.1-1
General Plan Land Use Goals and Policies Consistency

Policy		Remarks
Land Use Element		
Project Design		
4.1	Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts:	
4.1a	Compliance with applicable design standards.	As discussed herein, the Project would comply with applicable R-3 Zone District Development Standards. Please refer also to Table 4.1-6.
4.1b	Require that structures be constructed in accordance with the requirements of the City's zoning, building, and other pertinent codes and regulations.	As discussed herein, the Project would comply with applicable R-3 Zone District Development Standards. Please refer also to Table 4.1-6. As implemented through established City development and building permit review processes, the Project would comply with all applicable zoning, building, and other pertinent codes and regulations.
4.1c	Require that an appropriate landscape plan be submitted and implemented for development projects subject to discretionary review.	A final landscape and irrigation plan would be included as components of the Project Building Permit application submittal. Please refer also to Project Landscape Concept, EIR Figure 3.4-4.
4.1d	Require that new development utilize drought tolerant landscaping and incorporate adequate drought-conscious irrigation systems.	Drought tolerant species with low to moderate water demands are reflected in the Project Landscape Concept. The Project irrigation concept proposes an automatic, low precipitation system designed and operated to minimize run-off. All Project landscaping and irrigation system improvements would be designed, constructed and operated consistent with Wildomar Municipal Code Chapter 17.276 - Water Efficient Landscapes. The Project would install a "purple pipe" irrigation system in anticipation of recycled water to be provided by EVMWD. Please refer also to EIR Section 3.4.6.1 *Landscape Concept*.
4.1e	Pursue energy efficiency through street configuration, building orientation, and landscaping to capitalize on shading and facilitate solar energy, as provided for in Title 24 of the California Administrative Code.	As reviewed and approved by the City, the Project would comply with incumbent Title 24 Energy Efficiency requirements. Please refer also to EIR Section 3.4.8, *Energy Efficiency/Sustainability*.
4.1f	Incorporate water conservation techniques, such as groundwater recharge basins, use of porous pavement, drought-tolerant landscaping, and water recycling,	The Project stormwater management system concept incorporates detention/retention basins porous landscape detention (PLD) areas and other and low impact development (LID) strategies that would act to minimize stormwater runoff, treat and detain/retain

Table 4.1-1
General Plan Land Use Goals and Policies Consistency

Policy		Remarks
	as appropriate.	developed storm waters within the Project site, and allow for on-site infiltration of treated stormwater discharges. Drought tolerant species with low to moderate water demands are reflected in the Project Landscape Concept. All Project landscaping and irrigation system improvements would be designed, constructed and operated consistent with Wildomar Municipal Code Chapter 17.276 - Water Efficient Landscapes. The Project would install a "purple pipe" irrigation system in anticipation of recycled water to be provided by EVMWD. Please refer also to EIR Section 3.4.6.1 *Landscape Concept* and EIR Section 4.6, *Hydrology/Water Quality*.
4.1g	Encourage innovative and creative design concepts.	The Project architectural concepts (EIR Figures 3.4-2, 3.4-3) indicate contemporary residential community designs that would be consistent with City development standards. The final Project architectural design is subject to City review and approval.
4.1i	Include consistent and well-designed signage that is integrated with the building's architectural character.	As reviewed and approved by the City any signs within the Project site would conform standards articulated at City Municipal Code Chapter 17.252, *Sign Regulations*.
4.1j	Provide safe and convenient vehicular access and reciprocal access between adjacent commercial uses.	Final designs and specifications for driveways, traffic controls, and internal circulation improvements would be incorporated consistent with the requirements of the City Public Works Department. The Project does not propose commercial uses; reciprocal access between commercial uses is therefore not a part of the Project. Clustering of uses reflected in the Project Site Plan Concept facilitates efficient and safe access to and between all Project uses.
4.1k	Locate site entries and storage bays to minimize conflicts with adjacent residential neighborhoods.	Project site entries are located and designed to provide safe and convenient access to the Project. Specifically, controlled signalized access to the Project site would be provided at the proposed intersection of Street "A" at Bundy Canyon Road. This new intersection is separated from nearest adjacent roads intersecting Bundy Canyon Road by approximately 1,000 feet, providing adequate interval spacing between intersections. The design of the Street A/Bundy Canyon Road intersection incorporates an adequate westbound left-turn turn pocket for vehicles entering the Project site from Bundy Canyon Road, acting to preclude vehicle congestion at the Project entrance. Signalization of this intersection

Table 4.1-1
General Plan Land Use Goals and Policies Consistency

Policy		Remarks
		under Opening Year Conditions would further reduce potential traffic congestion and traffic conflicts. Internal to the Project site, adequate queuing would be provided for vehicles exiting the Project site onto Bundy Canyon Road, acting to preclude or minimize internal traffic congestion/traffic conflicts. Secondary access provided at the southwesterly corner of the Project site would be gated and controlled, and is intended for emergency purposes only. This secondary access point would therefore not cause or contribute to conflicts with adjacent residential neighborhoods.
4.1l	Mitigate noise, odor, lighting, and other impacts on surrounding properties.	The Project design concepts and operational programs articulated at EIR Section 3.0, *Project Description* act to avoid or minimize potential noise, odor, lighting, and other impacts on surrounding properties. The Project would comply with all ordinances and regulations adopted and other agencies acting to mitigate noise, odor, lighting, and other impacts on surrounding properties. As substantiated within this EIR, noise, odor, and lighting impacts are less-than-significant, less-than-significant as mitigated, or are mitigated to the extent practicable.
4.1m	Provide and maintain landscaping in open spaces and parking lots.	Please refer to remarks at 4.1c, 4.1d, and 4.1f.
4.1n	Include extensive landscaping.	Please refer to remarks at 4.1c, 4.1d, and 4.1f.
4.1p	Require that new development be designed to provide adequate space for pedestrian connectivity and access, recreational trails, vehicular access and parking, supporting functions, open space, and other pertinent elements.	The *Project Site Plan Concept* (EIR Figure 3.4-1) indicates adequate and appropriate access and parking for vehicles. Open space and recreational amenities are also incorporated in the *Project Site Plan Concept*. Please refer also to EIR Figure 3.4-1, *Project Site Plan Concept*, and EIR Section 3.4.4, *Access and Circulation*.
4.1q	Design parking lots and structures to be functionally and visually integrated and connected.	Parking provided by the Project would meet or exceed automobile storage space requirements and design standards identified in City Municipal Code Chapter 17.188. Parking areas are appropriately located and configured to support the proposed commercial uses; and are visually integrated and connected through, compatible architectural treatments and designs; cohesive surface and parking lot lighting elements; compatible and complementary signs; and common landscape/hardscape elements. Please refer also to EIR

Table 4.1-1
General Plan Land Use Goals and Policies Consistency

Policy		Remarks
		Section 3.0, *Project Description.*
4.1r	Site buildings access points along sidewalks, pedestrian areas, and bicycle routes, and include amenities that encourage pedestrian activity.	Internal to the project site, pedestrian walkways would be provided adjacent to proposed buildings, and within parking areas. Please refer also to the *Project Site Plan Concept*, EIR Figure 3.4-1.
4.1s	Establish safe and frequent pedestrian crossings.	Designated and signed pedestrian crossings would be provided consistent with City requirements.
4.1t	Create a human-scale ground floor environment that includes public open areas that separate pedestrian space from auto traffic or where mixed, it does so with special regard to pedestrian safety.	The Project site and architectural concepts (EIR Figures 3.4-1 through 3.4-3) reflect contemporary multi-family residential community designs. Orientations of buildings and internal landscape/hardscape elements act to visually break large expanses and provide varied perceptions of structures and facilities, contributing to a human-scale environment. Designated and signed pedestrian crossings would be provided consistent with City requirements.
Clustering In addition to the above Policies, the General Plan allows for and encourages clustered development, (such as that proposed by the Project), in all residential Land Use designations (see: General Plan, p. LU-42). Policies related to or supporting clustered development include, but are not limited to, those listed here.		
LU 8.4	Allow development clustering and/or density transfers in order to preserve open space, natural resources, and/or biologically sensitive resources.	Clustered development proposed by the Project acts to preserve and maintain open space, natural resources and biologically sensitive resources. In these regards, the Project design focuses development within the central portion of the subject site, and maintains perimeter areas in their natural condition. This generally preserves natural resources within the Project site and specifically minimizes or avoids impacts to protected biological resources. This design also acts to screen views of the developed Project area from off-site vantages.
LU 11.1 b	Allow development clustering to retain slopes in natural open space whenever possible.	Clustered development proposed by the Project acts to minimize site grading and terrain alteration and retains slopes in their natural condition. Corollary benefits include, but are not limited to, a generalized reduction in site disturbance (reduces potential construction-source air quality and noise impacts); and preservation of natural drainage patterns.

Sources: Policies from City of Wildomar General Plan; Remarks by Applied Planning, Inc.

Table 4.1-2
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
§17.44.010 Uses Permitted. **§17.44.010 (A). Uses Permitted Pursuant to an Approved Plot Plan.** **§17.44.010 (B). Uses Permitted by Conditional Use Permit.** **§17.44.010 (C). Outside Storage.**	**Consistent.** Sections 17.44.010 (A) and (B) list some thirty-five use categories that would be permitted or conditionally permitted within the Project site pursuant to the requested Zone Change from R-R to R-3, subject to an approved plot plan. Section 17.44.010 (C) establishes requirements and performance standards for outside storage of materials in the R-3 Zone District. The Project residential and supporting uses are included in the list of permitted or conditionally permitted uses. The Project does not propose or require substantive outside storage of materials. All development within the Project site would occur only pursuant to City approval of the requested Zone Change from R-R to R-3 and a City-approved plot plan.
§17.44.020 Development Standards.	**Consistent.** The Project Site Plan Concept and associated discussion of design and operational elements presented at EIR Section 3.0, *Project Description*, indicate that the Project would be developed consistent with applicable §17.44.020 Development Standards, as summarized below:
	§17.44.020 (A). The minimum lot area shall be 7,200 square feet with a minimum average width of 60 feet and a minimum average depth of 100 feet, unless different minimums are specifically required in a particular area. *The Project site comprises approximately 28.3 acres. The Project site dimensions are approximately 1,000 feet by 1,300 feet. The Project site therefore conforms to area and dimension development standards for the R – 3 Zone District. Subject to review and approval by the City, any Subsequent subdivision of the Project site would also conform to minimum lot area and lot dimension standards of the R – 3 Zone District.*

Table 4.1-2
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (B). The minimum front and rear yards shall be 10 feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from the front and rear lot lines no less than 10 feet plus two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from any existing or future street line as shown on any specific street plan of the City. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback. *Maximum building heights would approximate 38 feet above grade. The Project Site Plan Concept indicates the following property line setbacks for the Project uses:* *North: +/- 370 feet to Bundy Canyon Road* *South: +/- 110 feet* *East: +/- 215 feet* *West: +/- 105 feet* *The Project would therefore comply with front yard and rear yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate front yard and rear yard setbacks are established throughout the Project site.*

Table 4.1-2
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (C). The minimum side yard shall be five feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from each side lot line five feet plus two feet for each foot by which the height exceeds 35 feet; if the side yard adjoins a street, the side setback requirement shall be the same as required for a front setback. No structural encroachments shall be permitted in the front, side, or rear yard except as provided in Section 17.172.140. *Maximum building heights would approximate 38 feet above grade. The Project Site Plan Concept indicates the following property line setbacks for the Project uses:* *North: +/- 370 feet to Bundy Canyon Road* *South: +/- 110 feet* *East: +/- 215 feet* *West: +/- 105 feet* *The Project would therefore comply with side yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate side yard setbacks are established throughout the Project site.*
	§17.44.020 (D). No lot shall have more than 50% of its net area covered with buildings or structures. *The Project Site Plan indicates that the approximately 28.3 acre Project site would be developed with approximately 83,000 square feet of structures, or about 15 percent of the Project site would covered with buildings and structures. The Project would therefore conform to lot coverage development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building areas would not exceed 50 percent of the net Project site.*
	§17.44.020 (E). The maximum ratio of floor area to lot area shall not be greater than two to one, not including basement floor area. *The Project Site Plan concept indicates that the total building floor area proposed is approximately 168,000 square feet, including residential attached garages and the Project clubhouse. The total Project floor area (168,000 square feet) to lot area (28.3 acres) is 0.136 to 1 and would therefore conform to the ratio of floor area to lot area development standard established for the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that the Project floor area to lot area building areas would not exceed 2:1.*

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Table 4.1-2
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (F). All buildings and structures shall not exceed 50 feet in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230. *The Project Architectural Concepts indicates that buildings and other structures proposed by the Project would not exceed 38 feet above the adjacent grade. The Project would therefore conform to height development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building heights would not exceed 50 feet in height; or in applicable instances not greater than 75 feet as permitted under the provisions of Section 17.172.230.*
	§17.44.020 (G). Automobile storage space shall be provided as required by Chapter 17.188. (Ord. 18 § 2, 2008, RCC § 17.44.020). Pursuant to Chapter 17.188, 266 parking spaces would be required for the Project uses. The Project Site Plan Concept indicates that 288 parking spaces would be provided; or 22 spaces more than would be required by Ordinance. *The Project would therefore conform to parking development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that parking provided by the Project comports with Municipal Code Chapter 17.188 requirements.*

Sources: Regulations and Development Standards from City of Wildomar Municipal Code; Remarks by Applied Planning, Inc.

2016—2040 RTP/SCS Goals

As demonstrated at Table 4.1-3, the Project is consistent with applicable goals of the 2016 - 2040 SCAG Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

Table 4.1-3
Bundy Canyon Resort Apartment Project
Consistency with SCAG RTP/SCS Goals

RTP/SCS Goals	Remarks
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	***Consistent:*** The Project proposes contemporary multi-family residential products providing an opportunity for a large-scale investment in residential development on currently underutilized vacant land.
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	***Consistent:*** The transportation network in the Project area would be developed and maintained to meet local and regional transportation demands, and to ensure efficient mobility. Draft EIR Section 4.2, *Transportation/Traffic* addresses local and regional transportation, traffic, and transit in more detail.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	***Consistent:*** The Project TIA identifies improvements that would promote and facilitate the safe movement of people and goods. All transportation modes within the Project area would be required to comply with incumbent regulatory safety standards.
Goal 4: Preserve and ensure a sustainable regional transportation system.	***Consistent:*** The Project TIA assesses all new and existing roadways and identifies required improvements to the existing transportation network. Through payment of requisite transportation/traffic impact fees, the Project and other regional development ensure that improvements to accommodate existing and future traffic capacities are provided.
Goal 5: Maximize the productivity of our transportation system.	***Consistent:*** Pursuant to adopted plans and programs, local and regional transportation systems would be improved and maintained to encourage their efficiency and productivity. The City Public Works Department oversees the improvement and maintenance of all aspects of the public right-of-way on an as-needed basis. Please refer also to the Project TIA (Draft EIR Appendix B).

Table 4.1-3
Bundy Canyon Resort Apartment Project
Consistency with SCAG RTP/SCS Goals

RTP/SCS Goals	Remarks
Goal 6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	***Consistent:*** City capital improvement plans include a Class I bike path to be provided along the northerly side of Bundy Canyon Road adjacent to the Project site. The Project would accommodate and would not interfere with existing or planned bicycle facilities and improvements. .The Project would provide a pedestrian access network that internally links all uses.
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	***Consistent:*** EIR Section 3.4.8 *Energy Efficiency/Sustainability* notes that the Project in total would comply with or surpass incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Title 24 Energy Efficiency Standards). Please refer also to related discussions presented at EIR Section 4.3, *Air Quality*, and EIR Section 5.6, *Energy Conservation*.
Goal 8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	***Consistent:*** The Project proposes clustered residential development with proximate access to local and regional transportation facilities. Clustered and intensified development and associated focused ridership base that would result from the Project support existing and future transit opportunities. Project residents would also have ready access to the planned Class I bike path, to be provided along the northerly side of Bundy Canyon Road.
Goal 9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	***Consistent:*** The City of Wildomar is responsible for monitoring of existing and newly constructed roadways and transit routes to determine the adequacy and safety of these systems. The city and other local and regional agencies and organizations (e.g. RTA, Caltrans, and SCAG) cooperatively manage these systems. Security situations involving roadways and evacuations would be addressed in through City emergency response plans.

Sources: Goal Statements from: 2016–2040 RTP/SCS); Remarks by Applied Planning, Inc.

Summary

The Project residential and supporting land uses, site plan concept, and building designs reflect, and/or can be feasibly implemented consistent with applicable provisions of the City General Plan MDR Land Use, R-3 Zone District, and City Municipal Code. Prior to issuance of building permits, the City would review the final Project site plan and facilities designs to ensure consistency with applicable standards, design guidelines, and requirements. Based on the preceding analysis, the potential for the Project to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.2 TRANSPORTATION/TRAFFIC

4.2 TRANSPORTATION/TRAFFIC

Abstract

Detailed analysis of the Project's potential traffic and circulation impacts is presented in Wildomar Residential Traffic Impact Analysis, City of Wildomar, California *(Urban Crossroads, Inc.) October 11, 2016 (Project TIA, TIA). The Project TIA in its entirety is presented at EIR Appendix B. Potential traffic and circulation impacts are evaluated under Existing (2015) Conditions, Opening Year (2017) Conditions, and Horizon Year (2040) Conditions.*

This EIR Section summarizes analysis and findings of the Project TIA and substantiates whether the Project would:

- *Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;*

- *Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;*

- *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or*

- *Result in inadequate emergency access.*

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to be less-than-significant, and are not further discussed here:

- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or*

- *Result in conflicts with adopted policies, plans, or programs supporting alternative transportation.*

Project-Specific Impacts and Mitigation

The Project would construct traffic improvements necessary to mitigate its specific impacts, and ensure efficient and safe access to and within the Project site. At all Study Area locations and facilities, mitigation measures have been identified to ensure that potential Project-specific circulation system impacts are reduced to levels that are less-than-significant.

Cumulative Impacts and Mitigation

City of Wildomar Development Impact Fee Program (City DIF Program); Riverside County Transportation Uniform Mitigation Fee (TUMF) Program; and Project-related fair-share participation collectively provide funding for construction of necessary traffic improvements within the Study Area. Project mitigation responsibilities for incremental contributions to cumulative traffic impacts affecting Study Area facilities are fulfilled by payment of requisite traffic impact fees that would be assigned to the construction of necessary improvements. Notwithstanding, payment of traffic impact fees does not ensure timely completion of those traffic improvements necessary to mitigate potentially significant cumulative traffic impacts affecting the Study Area.

Improvements required to mitigate potentially significant impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the City capital improvements program. The City as the Lead Agency is considered authoritative in determining when and how City improvements should be programmed and implemented to ensure near-term and long-term adequacy of the City roadway system. Project proportional responsibilities for construction of necessary improvements is addressed through fee payments

noted previously. However, depending on jurisdictional improvements priorities and coordination with broader transportation planning objectives, timing of these off-site improvements may or may not coincide with construction and opening of the Project.

In these instances, Project-specific traffic impacts would not be individually significant, but would be considered cumulatively significant. On this basis, pending completion of required improvements, the Project's contributions to identified cumulative traffic impact deficiencies under Existing (2015), Opening Year (2017), and Horizon Year (2040) conditions are considered cumulatively significant and unavoidable.

Congestion Management Plan (CMP) Impacts and Mitigation

The Project would pay all requisite fees for improvements at Study Area CMP facilities. However, as discussed above, fee payments would not ensure timely completion of improvements required for mitigation of cumulatively significant impacts within the Study Area. Pending completion of required improvements, Project contributions to impacts affecting Study Area CMP facilities are therefore considered cumulatively considerable.

Other

Other areas of potential concern, e.g., increased hazards due to design features and adequacy of emergency access, have been evaluated in the context of the Project design concepts, City design and engineering requirements, and adopted plans and regulations. As discussed herein, these potential impacts are substantiated to be less-than-significant.

4.2.1 INTRODUCTION

The detailed evaluation of potential Project-related traffic and circulation impacts is presented in the *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016 (Project TIA). The Project TIA and supporting data are collectively presented at Draft EIR Appendix B.

4.2.2 STUDY AREA ANALYSIS LOCATIONS AND METHODOLOGIES

4.2.2.1 Overview

Discussions were held with the City of Wildomar and the Project Applicant to establish a comprehensive understanding of the Project, determine the Scope of work and Methodology and for the TIA, and define the TIA Study Area. The Scope of Work and Methodology for the Project TIA is also consistent with applicable Riverside County and California Department of Transportation (Caltrans) TIA guidelines. The TIA Study Area and key intersections are presented at Figure 4.2-1.

Discussions with the City defined the level-of-service (LOS) analysis methodology, and the determination of traffic impact significance. Past, present and reasonably foreseeable probable future projects ("related" projects) which would be considered as part of the cumulative development setting were also identified. For the purposes of the TIA, the Project Opening Year is assumed to be 2017.

Pursuant to the TIA Scope of Work and City requirements, analyses of traffic conditions are presented for Existing (2015) Conditions, Project Opening Year (2017) Conditions, and Horizon Year (2040) Conditions.

4.2.2.2 Study Area Intersections

Nine existing and future intersections within the Study Area were selected for evaluation as part of the Project TIA. Table 4.2-1 identifies these intersections, and indicates the jurisdiction for each. All Study Area intersections are under City jurisdiction, with the exception of the Interstate 15 (I-15) northbound (NB) and southbound (SB) ramps at Bundy Canyon Road (Study Area intersection No.s 2 and 3). The I-15 NB and SB ramps at Bundy Canyon Road are under Caltrans jurisdiction. Caltrans jurisdictional intersections within the Study Area are also designated Riverside County Congestion Management Plan (CMP) facilities.

LEGEND:

- 0 = EXISTING INTERSECTION ANALYSIS LOCATION
- 0 = FUTURE INTERSECTION ANALYSIS LOCATION
- 0 = RIVERSIDE COUNTY CMP LOCATION

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.2-1
Study Area Intersections

Table 4.2-1
Study Area Intersections

ID	Intersection Location	Jurisdiction
1	Orange St. / Bundy Canyon Rd.	Wildomar
2	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans (CMP Facility)
3	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans (CMP Facility)
4	Sellers Rd. / Bundy Canyon Rd.	Wildomar
5	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar
6	Canyon Ranch Rd. / Bundy Canyon Rd.	Wildomar
7	Walnut Creek Rd. / Bundy Canyon Rd.	Wildomar
8	Oak Canyon Dr. / Bundy Canyon Rd.	Wildomar
9	Road "A" / Bundy Canyon Rd.	Wildomar

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.

Intersection Level of Service (LOS) Descriptors

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels range from LOS "A," representing completely free-flow conditions, to LOS "F," representing breakdown in flow resulting in stop-and-go conditions.

Tables 4.2-2 and 4.2-3 present LOS descriptors for signalized and unsignalized intersections within the Study Area. Additional detail regarding assessment of intersection levels of service, including the specifics of modeling performed for intersections under Caltrans jurisdiction is included in the Project TIA (TIA Section 2, *Methodologies*).

Table 4.2-2
Signalized Intersection LOS Descriptors

Level of Service	Description	Average Control Delay (seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00

Table 4.2-2
Signalized Intersection LOS Descriptors

Level of Service	Description	Average Control Delay (seconds)
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up

Source: *Highway Capacity Manual* (Chapter 16).

Table 4.2-3
Unsignalized Intersection LOS Descriptors

Level of Service	Description	Average Control Per Vehicle (seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	50.01 and up

Source: *Highway Capacity Manual* (Chapter 17).

Intersection Capacity Analysis Methodology

LOS descriptions for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM), published by the Transportation Research Board (2000), methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

4.2.2.3 Study Area Freeway Off-Ramps

A ramp queuing analyses was performed for the freeway off-ramps at Study Area Intersection No. 2, I-15 SB Ramps/Bundy Canyon Road; and for the freeway off-ramps at Study Area Intersection No. 3, I-15 NB Ramps/Bundy Canyon Road. The queuing analysis evaluates the efficiency of the ramp-to-arterial intersections and related adequacy of ramps to accommodate anticipated vehicle queues.

Freeway Ramp Queuing Analysis Methodology

Consistent with Caltrans requirements, the progression of vehicles has been assessed to determine potential queuing issues at the freeway ramp intersections on Bundy Canyon Road at the I-15 Freeway. The queuing analysis identifies deficiencies based on available ramp storage lengths, and if that storage could accommodate the projected vehicle queue volumes.

4.2.2.4 Other

A queuing analysis was conducted at the intersection of Road "A" at Bundy Canyon Road for Horizon Year (2040) traffic conditions. The Road "A" at Bundy Canyon Road queuing analysis indicates the westbound left-turn pocket length necessary to accommodate Horizon Year 95th percentile queues.

4.2.2.5 Jurisdictional Definitions for System Capacity

Definitions for system capacities established by the City of Wildomar and other potentially affected jurisdictions are presented below. For intersections and roadway segments outside of the City of Wildomar, this EIR evaluates the Project impact on the LOS conditions adopted by the agency with jurisdiction over the intersection or roadway segment.

City of Wildomar

To determine whether the addition of Project traffic at a Study Area intersection would result in a deficient intersection LOS condition, the City of Wildomar utilizes the following standards:

- A deficiency would occur at a Study Area intersection if the addition of Project trips causes the peak hour level of service of the Study Area intersection to change from acceptable "pre-project" LOS to unacceptable LOS.

- For Study Area intersections already operating at unacceptable LOS, a deficiency would occur if the addition of Project-generated trips increases the pre-Project delay by more than 5.0 seconds.

Caltrans

Caltrans District 8 guidelines (excerpted below) were employed in the analysis of Caltrans facilities in the Study Area.

> The LOS for operating State highway facilities is based upon Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is "D."

LOS "D" is considered the limit of acceptable traffic operations for Caltrans-maintained facilities. LOS E and LOS F conditions affecting Caltrans facilities are therefore considered deficient. Construction of improvements that may be necessary to maintain or achieve acceptable LOS D conditions for Caltrans facilities are beyond the control or purview of the Project Applicant or the Lead Agency. The Project Applicant would however pay all requisite fees in support of improvements necessary to maintain or achieve acceptable LOS D conditions for Caltrans facilities. Acceptable jurisdictional LOS conditions for each Study Area intersection are summarized at Table 4.2-4.

Table 4.2-4
Acceptable Levels of Service at Study Area Intersections

ID	Intersection Location	Jurisdiction	Acceptable LOS
1	Orange St. / Bundy Canyon Rd.	Wildomar	D
2	I-15 SB Ramps / Bundy Canyon Rd.	Caltrans (CMP Facility)	D
3	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans (CMP Facility)	D
4	Sellers Rd. / Bundy Canyon Rd.	Wildomar	D*
5	Monte Vista Dr. / Bundy Canyon Rd.	Wildomar	D
6	Canyon Ranch Rd. / Bundy Canyon Rd.	Wildomar	C
7	Walnut Creek Rd. / Bundy Canyon Rd.	Wildomar	C
8	Oak Canyon Dr. / Bundy Canyon Rd.	Wildomar	C
9	Road "A" / Bundy Canyon Rd.	Wildomar	C

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
* LOS D is acceptable at this intersection based on proximity to the I-15 Freeway at Bundy Canyon Road interchange.

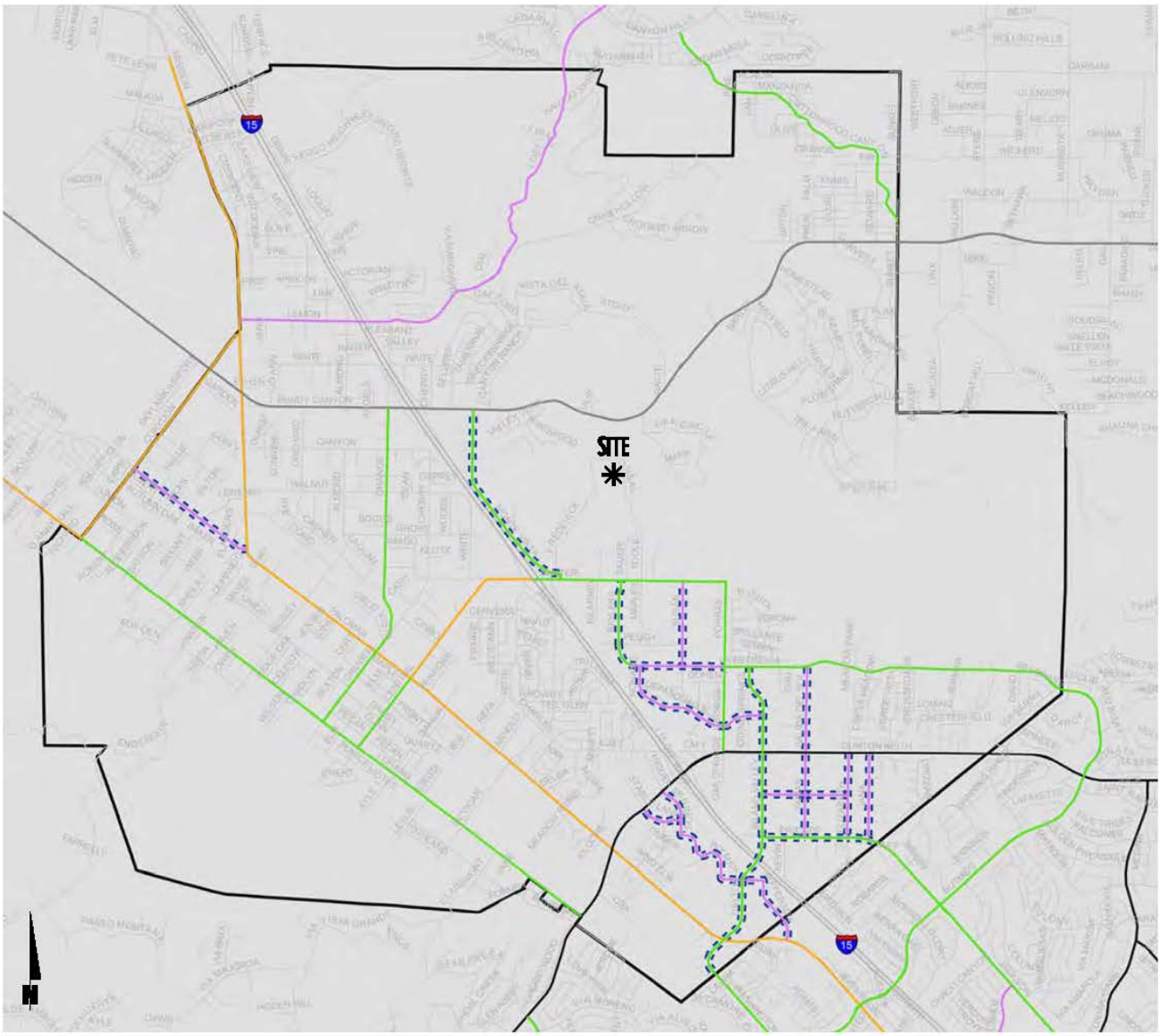
4.2.3 EXISTING CONDITIONS

4.2.3.1 Overview

The following discussions describe the existing Study Area roadway system and other transportation modes that exist within, or are available to, the Study Area.

4.2.3.2 Existing Roadway System

The Wildomar Circulation Plan (Figure 4.2-2) comprises local roads, collector streets and General Plan highways. General Plan highways include secondary, major and urban arterials. General Plan highway road sections provide 4 - 6 travel lanes with sidewalks, a raised center median, dedicated turn lanes, shoulder areas for parking and/or bicycle lanes on both sides. Expanded right of way widths at intersections are typically included with these types of highways to accommodate turning movements. Arterial roadways provide access to employment and retail centers, and may also serve residential areas. Collector roads typically comprise 1 - 3 travel lanes in each direction, and may have center medians and parking lanes. Local roadways provide direct access to homes and areas of less intense development. Local roads within the City evidence varying designs, typically incorporating a single travel lane in each direction, on-street parking and sidewalks. Standard City roadway cross-sections are presented at Figure 4.2-3.



LEGEND:

NOTE: CITY OF WILDOMAR DRAFT GENERAL PLAN UPDATE JANUARY 2015

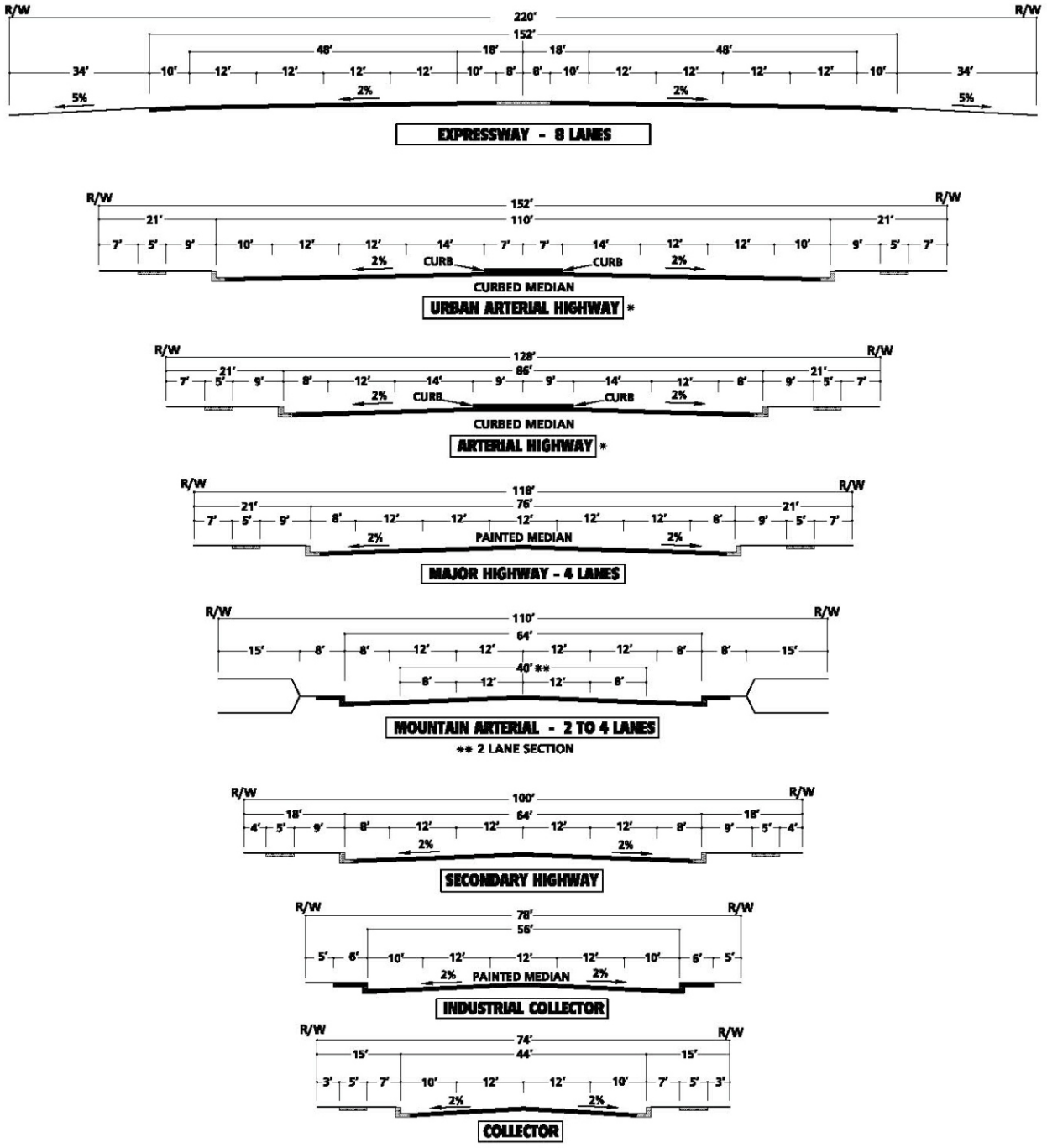
- URBAN ARTERIAL
- ARTERIAL
- MAJOR
- SECONDARY
- COLLECTOR
- WILDOMAR CITY BOUNDARIES

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.2-2
Wildomar Circulation Plan



* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

NOTE: THE CITY OF WILDOMAR HAS ADOPTED THE COUNTY OF RIVERSIDE'S GENERAL PLAN AND STANDARDS

Source: Urban Crossroads, Inc.

Figure 4.2-3
Standard City Roadway Cross-Sections

Regional Access

Interstate 15 (I-15) is a regional freeway providing access to the Project area. I-15 exists in a northeast – southwest alignment three-quarter mile westerly of the Project site. I-15 is currently a six-lane freeway in the Project vicinity, traversing southern Riverside and San Diego counties to the south, and Inland Empire and High Desert communities located in Riverside and San Bernardino counties to the north.

Local Access

Bundy Canyon Road provides direct access to the Project site. Bundy Canyon Road is an east-west arterial, interchanging with I-15 approximately three-quarter mile westerly of the Project site. Bundy Canyon Road adjacent to the Project site is currently a two-lane facility, but is designated as an Urban Arterial (with a 152-foot right-of-way) under the City General Plan. As part of the Project, the Applicant would construct Bundy Canyon Road at its ultimate half-section width as an urban arterial (152-foot right-of-way) between the Project's eastern and western boundaries.

4.2.3.3 Alternative Transportation Modes

Bus Service

Bus transit services are currently provided to the Project area by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region near the City of Wildomar. Transit service is currently not provided to the Project site. However, transit services are periodically reviewed and updated by RTA to address evolving ridership demands, budget opportunities/constraints and community preferences. Changes in land use can affect these periodic adjustments, which may lead to enhanced or altered service.

Pedestrian and Bicycle Facilities

Existing pedestrian and bicycle facilities in the Project vicinity are presented at Figure 4.2-4. In addition to the facilities indicated at Figure 4.2-4, City capital improvement plans include a Class I bike path, to be provided along the northerly side of Bundy Canyon Road adjacent to the Project site.

LEGEND:

- = SIDEWALK
- = BIKE LANE
- 0 = NO CROSSWALK
- 0 = FUTURE INTERSECTION
- 0 = CROSSWALK ON TWO APPROACHES
- 0 = SCHOOL CROSSWALK ON FOUR APPROACHES

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.2-4
Existing Pedestrian and Bicycle Facilities

4.2.3.4 Existing Traffic Volumes

Existing peak hour traffic volumes within the Study Area were determined by field traffic counts conducted during November 2015 (while schools were in session). Morning (AM) peak hour traffic conditions are represented by traffic counts conducted for the two-hour period between 7:00 and 9:00 a.m. Evening (PM) peak hour traffic conditions are represented by traffic counts conducted for the two-hour period from 4:00 to 6:00 p.m. The TIA traffic count data are considered typical of peak hour traffic conditions in the Study Area. Please refer to the Project TIA (EIR Appendix B) for detailed traffic count information.

4.2.3.5 Existing Conditions Intersection Operations Analysis

Table 4.2-5 summarizes existing intersection LOS deficiencies within the Study Area.[1]

Table 4.2-5
Intersection Deficiencies, Existing Conditions

ID #	Intersection Location	Traffic Control	Delay (in seconds)		LOS	
			AM	PM	AM	PM
1	Orange St. / Bundy Canyon Rd.	TS	**150.4**	**92.5**	**F**	**F**
4	Sellers Rd. / Bundy Canyon Rd.	CSS	**36.5**	**75.3**	**E**	**F**
6	Canyon Ranch Rd. / Bundy Canyon Rd.	CSS	**25.0**	17.8	**D**	C

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes: Bold text in the Delay and LOS columns indicates unacceptable delay/levels of service.
TS = Traffic Signal; CSS = Cross-street stop.

4.2.3.6 Existing Conditions Freeway Ramp Progression Analysis

A queue length analysis was performed for SB and NB off-ramps at the I-15 Freeway at Bundy Canyon Road interchange. Vehicle queues at the off-ramps and their potential to "spill back" onto the I-15 Freeway mainline are evaluated. All Study Area freeway ramps analyzed under existing conditions perform acceptably. [2]

[1] Existing LOS conditions at all Study Area intersections are presented at TIA Table 3-1.
[2] Existing LOS conditions at all Study Area Freeway Ramps are presented at TIA Table 3-2.

4.2.4 FUTURE TRAFFIC VOLUMES

The following discussions address traffic volumes anticipated to be generated by the Project, and traffic attributable to other growth and development within the Study Area.

4.2.4.1 Project Trip Generation

Trip generation represents the amount of traffic that 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 rates used in this analysis were obtained from Institute of Transportation Engineers (ITE) *Trip Generation Manual* (9th Edition, 2012). In order to establish a likely maximum trip generation scenario, the ITE trip generation rate for apartments was utilized to estimate Project-related traffic. The Specific ITE land use category employed was *Apartments*-ITE Land Use Code 220.

Based on the Project's ITE trip generation rate, the Project would generate approximately 931 net new weekday trips. During the morning peak period (7:00 to 9:00 a.m.), 71 trips would be generated. During the evening peak period (4:00 to 6:00 p.m.), 87 trips would be generated.

It is noted that while alternative travel modes (e.g., public transit, walking, or bicycling) may diminish the Project's forecasted traffic volumes, the traffic-reducing potentials of alternative travel modes were not considered in the Project trip generation estimates. Project traffic volumes considered in this analysis therefore represent the likely maximum traffic generation and traffic impact condition.

4.2.4.2 Project Trip Distribution

The trip distribution process establishes the directional orientation of traffic approaching and departing the site. Trip distribution is influenced by the location of the site in relation to nearby residential, employment and recreational opportunities, and proximity to the regional freeway system. Based on the trip distribution patterns, peak hour trips were assigned at Study Area intersections. Project trip distribution is illustrated at Figure 4.2-5. Please refer to the Project TIA (Draft EIR Appendix B, Sections 4.2 through 4.4) for additional details regarding the trip distribution and trip assignment processes.

4.2.5 FUTURE TRAFFIC GROWTH

4.2.5.1 Opening Year Traffic Conditions

To account for growth in traffic between Existing Conditions (2015) and the Project Opening Year (2017), a compounded annual traffic growth rate of 2 percent was assumed (4.04 percent aggregate growth in background traffic for the period 2015—2017). The 2 percent annual growth rate captures non-specific ambient traffic growth.

In context, the above-noted assumed 2 percent compounded annual growth rate is considered a reasonable approximation of future traffic growth when compared to demographic projections reflected in other local and regional growth modeling efforts. More specifically, the Southern California Association of Governments SCAG *2016—2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) growth forecasts for the City of Wildomar assume the City population to increase from 33,000 in 2012, to 56,200 by the year 2040, or an approximate 1.92 percent growth rate compounded annually.[3]

[3] *2016—2040 Regional Transportation Plan/Sustainable Communities Strategy, Demographics & Growth Forecast Appendix*; Table 11, *City Forecast 2040,* p. 28.

LEGEND:

10 = PERCENT TO/FROM PROJECT

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.2-5
Project Trip Distribution

Traffic generated by other known or probable related projects was then added to the TIA ambient traffic growth estimates. Related projects are listed at Table 4.2-6 and mapped at Figure 4.2-6. These related projects are in part already accounted for in the assumed annual 2 percent increase in ambient traffic growth noted above; and in certain instances, these related projects would likely not be implemented and functional within the 2017 Opening Year time frame assumed for the Project. The resultant assumed traffic growth rate employed in the TIA (2 percent annual ambient growth + traffic generated by all related projects) would therefore tend to overstate rather than understate background cumulative traffic impacts under 2017 conditions.

4.2.5.2 2040 Traffic Conditions

The TIA estimates of traffic volumes under 2040 conditions are consistent with post-processed traffic volumes derived from the Riverside Transportation Analysis Model (RivTAM). RivTAM is the vetted and accepted long-range traffic modeling protocol employed by municipalities within Riverside County. RivTAM growth projections and related growth in traffic volumes are aligned with RTP/SCS growth estimates. Cumulative traffic under 2040 conditions reflects the RivTAM estimates plus traffic that would be generated by the Project.

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
		City of Wildomar		
W1	Lennar Residential (TTM 36497, APN:380-280-004, 380-280-009 to 380-280-012)	Single Family Residential	67	DU
W2	Lesle Tract Map (TTM 36519, APN:367-170-029)	Single Family Residential	10	DU
W3	CV Communities (TTM 25122, TTM 32078, APN: 380-080-008,380-080-009, 380-140-001)	Single Family Residential	157	DU
W4	CV Communities (TTM 32535, APN:380-110-005, 380-110-006, 380-120-001, 380-120-002, 380-100-006, 380-100-005, 380-130-002, 380-130-018, 380-100-004)	Single Family Residential	84	DU
W5	Rancon Medical & Retail Center (PM 36492, APN:380-250-022)	Business Park	267.450	TSF
		General Office	45.000	TSF
		Medical Office	33.400	TSF
		Shopping Center	17.100	TSF
		Fast Food Restaurant W/ Drive-Thru	3.000	TSF

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
W6	Cornerstone Church Pre-School Expansion (PUP No. 778)	Pre-School/Day Care	180	STU
W7	Elm Street Subdivision (TTM 33840, APN:376-043-027)	Single Family Residential	14	DU
W8	Wildomar Walmart	Free-Standing Discount Superstore	200.000	TSF
		Specialty Retail	3.900	TSF
		Fast Food W/Drive-Thru	3.900	TSF
W9	McVicar Residential Project (TTM 32035, APN:380-040-005, 380-040-007, 380-040-008, 380-040-012)	Single Family Residential	49	DU
W10	TTM 31479	Single Family Residential	51	DU
W11	TTM 31667 (APN 380-060-007 & -008)	Single Family Residential	108	DU
W12	TTM 32024 (APN 367-140-007)	Single Family Residential/Commercial Office	70	DU
W13	Westpark Promenade Development (TPM 36122, APN:376-410-013, 376-410-023, 376-410-025)	Apartments	322	DU
		Shopping Center	86.000	TSF
W14	Sienna Apartment Project (Case No. 13-0089, APN:380-290-029)	Apartments	180	DU
W15	Baxter Village (Case No. 130040, APN:367-180-015, 367-180-047)	Single Family Residential	67	DU
		Apartments	204	DU
		Commercial Retail	75.000	TSF
W16	Prielipp Residential Development (APN 380-250-023)	Condo/Townhomes	146	DU
		Assisted Living	54	Beds
		Skilled Nursing	32	Beds
W17	Sycamore Academy Charter School	Charter School	401	STU
W18	Spring Meadow Ranch PAR (Case No. 12-0399)	Single Family Residential	1,192	DU
		Community Center Area	5.0	AC
		Open Space	42.0	AC
W19	Ione/Palmor Residential (TTM. 32206)	Single Family Residential	60	DU
W20	Orange Bundy (TPM 30522, APN: 367-100-024, 367-100-026)	Retail	79.497	TSF
		Fast Food W/Drive-Thru	1.500	TSF
		Gas Station W/ Market	6	VFP
W21	Oak Creek Canyon (Case No. 11-0261, TTM 36388)	Single Family Residential	275	DU
		Pharmacy	14.469	TSF
		Gas Station W/ Market/Car Wash	8	VFP
		Specialty Retail	2.550	TSF

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
W22	Bundy Canyon Plaza (Case No. 08-0179, TPM 32257, APN:367-100-019)	Retail	33.800	TSF
		Fast Food W/Drive-Thru	6.200	TSF
		Gas Station W/ Market	12	VFP
W23	15-0051 (APN 376-340-017 &027)	Single Family Residential	48	DU
W24	Grove Park	Apartments	162	DU
		Medical Office	35	TSF
		Commercial Retail	20	TSF
		Park	2	AC
W25	Clinton Keith Village	Discount Store	12.840	TSF
		Fast Food w/Drive-Thru	6.700	TSF
		Sit-Down Restaurant	4.500	TSF
		Retail	18.280	TSF
W26	Stable Lanes Retail Center (Case No. 08-0166, APN:380-120-012, 380-120-013)	Commercial/Retail	20.894	TSF
		Daycare Facility	9.305	TSF
W27	Wildomar Square Retail Center (Case No. 08-0072, PM 36080, APN:380-110-045)	Shopping Center	46.600	TSF
W28	Rancon Monte Vista Residential (TTM No. 31409, APN: 367-110-007, 367-110-008)	Single Family Residential	126	DU
City of Murrieta				
MUR 1	Murrieta Fields II	Single Family Residential	10	DU
	Sepulveda Building	General Light Industrial	2.500	TSF
	Golden City SP	Single Family Residential	502	DU
		Shopping Center	23.340	TSF
	Keller Commercial	Shopping Center	5.875	TSF
MUR 2	Murrieta Hills (SPO-012-3164)	Senior Adult Detached Housing	1,012	DU
MUR 3	The Orchard (DPO-03-161)	Shopping Center	215.850	TSF
MUR 4	Vineyard Shopping Center (DPO-2012-3260)	Shopping Center	78.489	TSF
		Hotel	91	RM
MUR 5	Phase 1 Kaiser (DP-2014-348)	Medical Office	80.000	TSF
	Physician Hospital	Hotel	241.294	TSF
MUR 6	Golden Cities Tract 28532 (SCO-004-066)	Single Family Residential	486	DU
MUR 7	Health South Rehab Hospital (DP-2015-571)	Hospital	50	Beds

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Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
MUR 8	CUP 03467	Home Improvement Store	137.627	TSF
		Fast Food w/ Drive-Thru	12.042	TSF
		Bank w/ Drive-Thru	4.014	TSF
		Shopping Center	134.972	TSF
		Gas Station	12	VFP
MUR 9	Murrieta Marketplace	Commercial Retail	548.055	TSF
MUR 10	Bear Creek Residential Development (DP0-011-3032)	Single Family Residential	11	DU
		Residential Condominium / Townhouse	90	DU
MUR 11	Space Creations Office and Daycare Facility (DP0-004-220)	Office	17.400	TSF
		Daycare	15.350	TSF
City of Lake Elsinore				
LE1	Spyglass Ranch	Single Family Residential	523	DU
		Residential Condominium / Townhouse	171	DU
		Shopping Center	145.00	TSF
LE2	South Shore I (Tract 31593)	Single Family Residential	521	DU
	South Shore II (Tract 32013)	Single Family Residential	400	DU
LE3	La Strada (Tract 32077)	Single Family Residential	134	DU
LE4	Tuscany West (Tract 25473)	Single Family Residential	164	DU
LE5	Marina Village Condos (Tract 33820)	Residential Condominium / Townhouse	94	DU
LE6	Watersedge	Single Family Residential	170	DU
		Residential Condominium / Townhouse	250	DU
		Apartments	110	DU
		General Office	54.600	TSF
		Hotel	150	RM
		Boat/Watercraft Dealers & Service	50.000	TSF
		Mini-Warehouse (Boat & Watercraft Storage)	76.000	TSF
		Shopping Center	86.600	TSF
	Cottages by the Lake	Residential Condominium / Townhouse	169	DU
LE7	Tessera	Single Family Residential	90	DU
LE8	TAG Property	New Car Sales	50.000	TSF
LE9	City Center Condos	Residential Condominium / Townhouse	144	DU

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Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
LE10	Lake View Villas	Residential Condominium / Townhouse	155	DU
LE11	Diamond Specific Plan	Residential Condominium / Townhouse	600	DU
		Hotel	150	RM
		General Office	425.000	TSF
		Shopping Center	472.000	TSF
LE12	The Colony	Apartments	211	DU
	Back Basin Specific Plan & East Lake Specific Plan	Single Family Residential	2,407	DU
		Residential Condominium / Townhouse	324	DU
	John Laing Homes (Phase 2)	Single Family Residential	506	DU
		Residential Condominium / Townhouse	1,141	DU
		Apartments	308	DU
		Shopping Center	117.000	TSF
LE13	Gruneto Hills	Single Family Residential	191	DU
LE14	Lake Elsinore Walmart	Free-Standing Discount Superstore	151.397	TSF
		Specialty Retail	5.300	TSF
		Fast-Food Without Drive-Thru	5.300	TSF
		Fast-Food Without Drive-Thru	6.800	TSF
LE15	Summerly	Single Family Residential	142	DU
LE16	Beazer	Single Family Residential	72	DU
	KB Homes	Single Family Residential	106	DU
	McMillin Homes	Single Family Residential	143	DU
	Richmond American	Single Family Residential	74	DU
LE17	Lakeshore Town Center	Mixed-Use Commercial	237.400	TSF
County of Riverside				
RIV1	Canyon Hills Estates (Tract 34249)	Single Family Residential	302	DU
	Canyon Hills (Multiple Tracts)	Single Family Residential	2,700	DU
		Apartments	1,575	DU
	Audie Murphy (Tract 36484)	Single Family Residential	109	DU
	Audie Murphy (Tract 36485)	Single Family Residential	1,003	DU
City of Menifee				
M1	UPS Expansion	General Light Industrial	30.000	TSF

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
M2	TR 34118	Single Family Residential	169	DU
M3	TR34600	Single Family Residential	153	DU
M4	TR 31811	Single Family Residential	559	DU
	TR 31812	Senior Adult Detached Housing	742	DU
M5	TR 30182	Single Family Residential	84	DU
	TR 33419	Single Family Residential	140	DU
	McLaughlin Village (PAR 2015-133)	Single Family Residential	56	DU
	TR 35143	Single Family Residential	15	DU
M6	TR 32314	Single Family Residential	33	DU
M7	TM 28859	Single Family Residential	246	DU
M8	TR 29777	Single Family Residential	192	DU
M9	Fleming Ranch Specific Plan	Single Family Residential	1,169	DU
		Apartments	556	DU
		Active Parks	16.1	AC
		City Parks	11.5	AC
		Elementary School	1,050	STU
		Business Park	163.000	TSF
M10	TR 29835	Single Family Residential	543	DU
	TR 31098	Single Family Residential	264	DU
M11a	CUP 03549	Shopping Center	81.700	TSF
M11b	Village at Junipero	Apartments	240	DU
M12a	TR 33446	Condo/Townhomes	180	DU
M12b	Menifee North Shopping Center	Free-Standing Discount Store	200.000	TSF
		Bank w/ Drive-Thru	5.500	TSF
		Fast-food w/ Drive-Thru	6.700	TSF
		Fast-food w/o Drive-Thru	5.500	TSF
		Coffee Shop w/ Drive-Thru	2.000	TSF
		Retail	7.500	TSF
M13	PP 19469R1	Senior Apartments	221	DU
M14	American Tire Depot (CUP 2013-157)	Auto Shop	7.171	TSF
M15	TR 34180	Single Family Residential	484	DU
		Elementary School	950	STU

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
	TR 34406	Single Family Residential	817	DU
		Shopping Center	228.690	TSF
M16	TR 31455	Single Family Residential	60	DU
	TR 31582	Single Family Residential	280	DU
M17	TR 32186	Single Family Residential	101	DU
	TR 32100	Single Family Residential	170	DU
	TR 32101	Single Family Residential	197	DU
	TR 32102	Single Family Residential	272	DU
M18	Nautical Cove Residential	Single Family Residential	235	DU
M19	Menifee Heights - TR32277	Single Family Residential	359	DU
		Active Parks	10.2	AC
M20	Menifee Lakes Shopping Center (PP 2009-052)	Shopping Center	120.848	TSF
		Gas Station & Market / Car Wash	12	VFP
		Hotel	71	ROOM
M21	SP 248 Newport Hub	Shopping Center	229.700	TSF
		General Office	97.580	TSF
		General Light Industrial	241.760	TSF
		Motel	100	ROOM
M22	Pechanga Commercial Site (PP 2010-123)	Shopping Center	208.160	TSF
M23	Menifee Town Center Specific Plan	Shopping Center	509.370	TSF
		Hotel	200	ROOM
		General Office	65.340	TSF
		Single Family Residential	577	DU
		Condo/Townhomes	475	DU
M24	Junction at Menifee	Shopping Center	526.800	TSF
	Menifee Shopping Center	Shopping Center	238.180	TSF
	Shops at Scott	Shopping Center	82.000	TSF
		Fast-Food Restaurant w/ Drive-Thru	9.000	TSF
M25a	TPM 2009-168 (PM 36720)	Retail	112.167	TSF
M25b	Newport Menifee Retail Shopping Center	Fast-Food w/ Drive-Thru	7.000	TSF
		Supermarket	45.272	TSF
		Bank w/ Drive-Thru	5.000	TSF

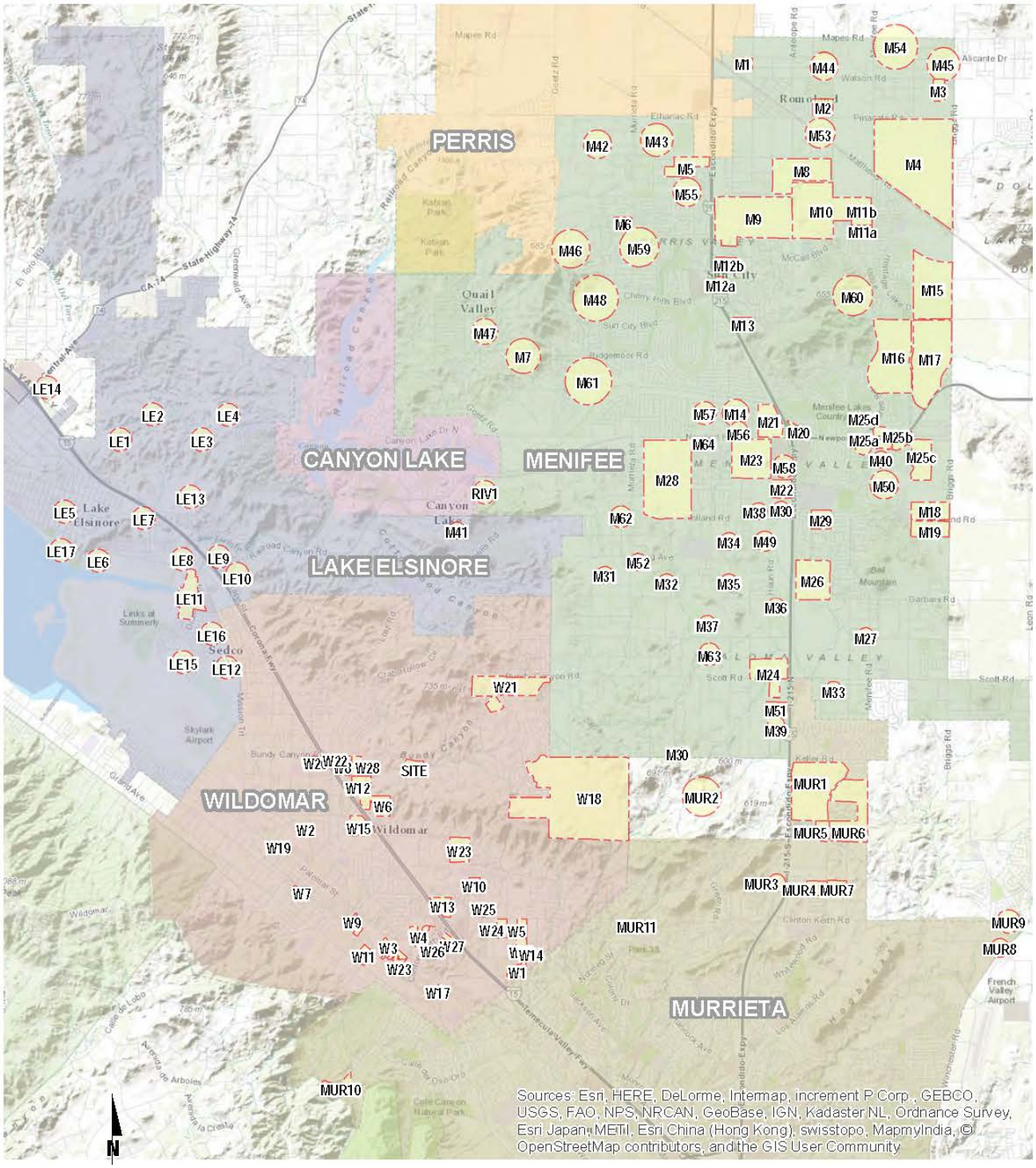
Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
		Pharmacy w/ Drive-Thru	14.576	TSF
		High Turnover (Sit-Down) Restaurant	7.360	TSF
		Retail	58.883	TSF
M25c	The Lakes TR 30422 (SP 247 Amendment 1)	Single Family Residential	992	DU
M25d	Arco Gas Station	Gas Station & Market	16	VFP
M26	TR 32628	Single Family Residential	364	DU
	TR 28206	Single Family Residential	148	DU
M27	Cantalena Specific Plan	Single Family Residential	353	DU
		Apartments	851	DU
M28	TR 28786	Single Family Residential	72	DU
	TR 28787	Single Family Residential	67	DU
	TR 28788	Single Family Residential	119	DU
	TR 28789	Single Family Residential	131	DU
	TR 28790	Single Family Residential	110	DU
	TR 28791	Single Family Residential	80	DU
	TR 28792	Single Family Residential	85	DU
	TR 28793	Single Family Residential	77	DU
	TR 28794	Single Family Residential	65	DU
	TR 30812	Single Family Residential	29	DU
M29	Del Oro (Holland Road Residential)	Single Family Residential	68	DU
		Apartments	238	DU
		Senior Housing	100	DU
M30	TR2015-053 / TR 36684	Single Family Residential	10	DU
M31	TR 29636	Single Family Residential	75	DU
M32	TR 30142	Single Family Residential	537	DU
M33	Antelope Square	Shopping Center	14.000	TSF
M34	TR 30465	Single Family Residential	8	DU
M35	TR 33883	Single Family Residential	51	DU
M36	PP 18014	Mini-warehouse	191.260	TSF
M37	TR 31194	Single Family Residential	483	DU
	TR 33511	Single Family Residential	71	DU
M38	TR 36303	Single Family Residential	97	DU

Table 4.2-6
Related Projects

ID	Project Name	Land Use Type	Quantity	Units
M39	Commerce Point (PP 21452 & PP 22280)	General Light Industrial	872.350	TSF
	PP 18570	Warehousing	109.940	TSF
	PP 20021	Warehousing	4.500	TSF
M40	Rite Aid	Pharmacy w/ Drive-Thru	17.185	TSF
		Fast Food w/ Drive-Thru	3.285	TSF
M41	Audie Murphy Ranch SP	Single Family Residential	2,355	DU
	Canyon Cove	Single Family Residential	198	DU
M42	TTM 34037	Single Family Residential	128	DU
M43	TTM 31856	Single Family Residential	79	DU
M44	TTM 35876	Single Family Residential	17	DU
M45	TTM 33738	Single Family Residential	52	DU
M46	Cimarron Ridge (TTM 36657 / PM 36658)	Single Family Residential	756	DU
M47	Quail Hill (TTM 32794)	Single Family Residential	152	DU
M48	Stonegate (TM31456)	Single Family Residential	177	DU
M49	PA 2014-218 / TR 2015-108	Single Family Residential	80	DU
M50	Stater Bros. (2014-091 / PM36728)	Commercial Retail	121.277	TSF
M51	All Star Storage (PP 2015-156)	Storage	242.150	TSF
M52	His Light (PUP 2009-077)	Church	47.030	TSF
M53	Motte Town Center	Industrial	97.564	TSF
M54	TR31536	Single Family Residential	44	DU
M55	McLaughlin Village (PAR 2015-133)	Townhomes	126	DU
M56	PP 2014-009	Commercial Retail	100.024	TSF
M57	CUP 2015-157	Self-Service Carwash w/ Drive-Thru	11.783	TSF
M58	Menifee Village	Commercial Retail	231.600	TSF
M59	Thorton Terraces (TTM 2014-225)	Townhomes	19	DU
M60	Chapparal Apartments/Condos (PP 2014-040)	Apartment/Condos	5,572	DU
M61	Oak Tree Industries (TTM 29015)	Single Family Residential	18	DU
M62	Alasia - Meritage Homes	Single Family Residential	86	DU
M63	TR 2014-073	Single Family Residential	30	DU
M64	Shops at Newport	Shopping Center	3.490	TSF
		Restaurant	6.467	TSF

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes: DU-Dwelling Unit; TSF-Thousand Square Feet; VFP-Vehicle Fueling Point.



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NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.2-6
Related Projects

4.2.6 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, traffic and circulation impacts would be considered potentially significant if the Project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access; or

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.2.7 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.2.7.1 Introduction

The following discussions focus on topical issues where it has been determined that the Project may result in potentially significant traffic and circulation impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. Of the CEQA threshold considerations identified above at Section 4.2.6, and as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics are determined to be less-than-significant. These topics are not further substantively discussed here.

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; and

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

All other CEQA topics concerning the Project's potential traffic/transportation impacts are discussed below. Please also refer to Initial Study Checklist Item XVI., *Transportation/Traffic*.

4.2.7.2 Impact Considerations

Study Area traffic conditions without and with the Project are summarized within the following discussions, followed by identification of the Project's potential impacts to Study Area transportation/circulation systems and facilities.

Under the CEQA topic: "Potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system . . ." potential impacts are identified for Existing, Opening Year and Horizon Year Conditions. Sub-topics evaluated under each of these scenarios include:

- Intersection LOS Analysis; and
- Freeway Ramp Progression (Queuing) Analysis.

Under the CEQA topic: "Conflict with an applicable congestion management program [CMP] but not limited to a level of service standards and travel demand measures. . ." CMP facilities within the Study Area are identified, and potentially significant Project impacts affecting these facilities are summarized. Interstate 15 (I-15) ramps and off-ramp intersections within the Study Area are designated CMP components. Project impacts to these facilities are coincident with analyses of Intersection LOS and Freeway Ramp Progression operations noted above.

Under the CEQA topics: "Substantially increase hazards to a design feature . . ." and "Result in inadequate emergency access . . ." the analysis presented summarizes Project design and operational concepts that act to avoid hazardous conditions and ensure adequate emergency access.

4.2.7.3 Mitigation Considerations

Mitigation or avoidance of potentially significant transportation/traffic impacts attributable to the Project would be achieved through Project construction of necessary improvements and Project fee payments that would be assigned to construction of required improvements.

Improvements Constructed as Part of the Project

The Project would construct improvements necessary to ensure safe and efficient access and operating conditions along roadways and at intersections adjacent to the Project site. These improvements are incorporated as components of the Project (please refer to EIR Section 3.0, *Project Description*, Section 3.4.4, *Access and Circulation*). For ease of reference, traffic/transportation improvements to be implemented by the Project are restated below.

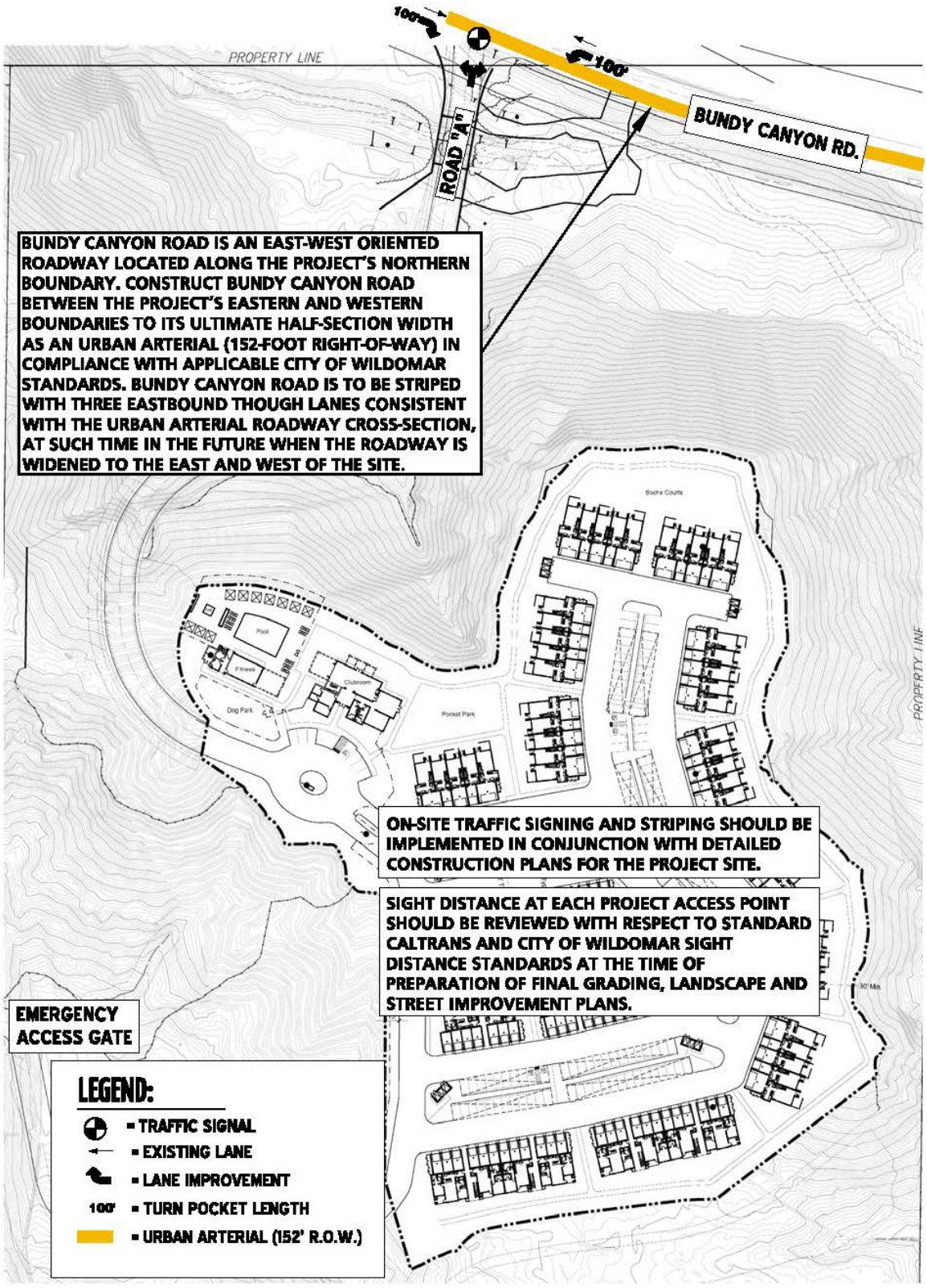
Primary access to the Project would be provided by Street "A" connecting to Bundy Canyon Road. Access to the Project via Street A would be controlled by an automatic

gate system. Emergency access would be provided at the Project's southwesterly boundary by an extension of Windwood Drive. Resident and/or visitor access via the Windwood Drive would be for emergency purposes only; this access point would remain closed under normal circumstances. Final designs and specifications for all Project driveways, traffic controls, and internal circulation improvements would be subject to review and approval by the City Engineering Department. Site access and site adjacent improvements to be implemented by the Project are presented at Figure 4.2-7, and are described below. Project improvements listed below would be completed pursuant to City Conditions of Approval, to include improvements timing.

- **Bundy Canyon Road** – Bundy Canyon Road is an east-west oriented roadway located along the Project's northern boundary. As part of the Project, Bundy Canyon Road between the Project's eastern and western boundaries would be constructed at its ultimate half-section width as an urban arterial (152-foot right-of-way) pursuant to applicable City of Wildomar standards. Bundy Canyon Road would be striped with three eastbound through lanes, consistent with the urban arterial roadway cross-section, at such time in the future when the roadway is widened to the east and west of the site.

- **Road "A" / Bundy Canyon Road**[4] – Install a stop control on the northbound approach and construct the intersection with the following geometrics:
  -Northbound Approach: One shared left-right turn lane. The queuing evaluation for the site access point indicates the 95th percentile northbound queue would not exceed 70 feet.
  -Southbound Approach: N/A
  -Eastbound Approach: One through lane and one right turn lane with a minimum of 100 feet of storage.
  -Westbound Approach: One left turn lane with a minimum of 100 feet of storage and one through lane.

[4] Although Bundy Canyon Road is designated under the General Plan as an urban arterial roadway (6 travel lanes, 3 in each direction), the Project TIA assumes only 2 lanes of travel in the eastbound and westbound direction. Other proposed access restrictions along Bundy Canyon Road are also reflected in the TIA. This is consistent with City of Wildomar's planned improvements for Bundy Canyon Road.



Source: Urban Crossroads, Inc.

Figure 4.2-7
Site Access and Site Adjacent Improvements

- The intersection of Road "A" and Bundy Canyon Road is anticipated to warrant a traffic signal with the development of the north side under long-range traffic conditions. The City would require that future development on the north side of Bundy Canyon Road within Assessor Parcel Numbers (APNs) 366-320-028, -048 provide access to Bundy Canyon Road in alignment with the Project Road "A."

- **Signing/Striping** - On-site traffic signing and striping plans will be developed and implemented consistent with City requirements.

- **Sight Distance** - Sight distance at each Project access point will be reviewed by the Lead Agency and Caltrans to ensure compliance with City of Wildomar and Caltrans design standards, respectively.

Other Required Improvements Funded by Fee Assessments and Constructed Pursuant to Capital Improvements Programs and Consistent with Demonstrated Demands

The Project would also pay all requisite fees directed to the completion of other necessary Study Area traffic improvements at locations where Project traffic would contribute to existing or projected circulation system deficiencies. Required Study Area Improvements and associated fee payments are identified for each of the analysis timeframes (Existing, Opening Year, Horizon Year); fees would, however, be assessed and collected in total prior to Project implementation; or timing as otherwise stipulated by the Lead Agency.

Improvements under each of the analysis scenarios (Existing, Opening Year, and Horizon Year) tier off the preceding scenario(s). That is, Opening Year improvements reflect improvements required under Existing conditions, plus any additional improvements required to address increased traffic demands under Opening Year conditions. Horizon Year improvements reflect improvements required under Existing and Opening Year Conditions, plus any additional improvements required to address increased traffic demands under Horizon Year conditions. This structure provides the Lead Agency with an estimated scope of required improvements and an approximate

timeframe for their implementation. The final configuration and timing of improvements identified herein is, however, subject to prerogatives and priorities of the City and other affected jurisdictions.

Fee assessment mechanisms and fee programs applicable to the Project would include "Fair Share" Fees, Riverside County Transportation Uniform Mitigation Fee Program (TUMF), and City of Wildomar Development Impact Fee (DIF) Program. Notwithstanding the Project's full compliance with fee assessments and fee programs noted above, Project payment of fees would not ensure timely completion of required improvements. Within these discussions, potentially significant impacts that are addressed through Project fee payments are recognized as significant and unavoidable pending completion of the required improvements. Traffic/transportation impact fees that would be assessed of the Project along with a description of fee program assessment and fee assignment mechanisms are summarized below.

Fair Share Fees

The Project TIA identifies recommended improvements for each potentially impacted facility within the Study Area, and compares these with improvements already identified and included in other established fee programs (e.g., TUMF, and City of Wildomar DIF). If an impacted facility requires improvements other than, or in addition to, those already identified within a regional or local fee program, the Project would contribute a "fair-share" percentage toward the costs of recommended improvements. Fair share fees assessed of the Project and collected by the City would be deposited to a dedicated Capital Improvement Project account, created for the express purpose of constructing the required improvements.

Table 4.2-7 summarizes traffic volumes that would be generated by the Project, and identifies Project fair share traffic volumes as a percentage of new traffic volumes that would be generated between Existing and Horizon Year Conditions. Project fair share traffic volumes also provide an indication of the relative effects of the Project in the context of traffic generated by other existing uses and anticipated development. The

Project's greatest traffic volume contributions (indicated in **bold**) represent the Project's fair share.

Table 4.2-7
Project Fair Share Traffic Volumes

ID No.	Intersection		Existing	Project	2040 WP	Total New Traffic	Project % of New Traffic[1]
1	Orange St. / Bundy Canyon Rd.	AM:	1,921	11	4,507	2,586	**0.4%**
		PM:	1,951	13	5,823	3,872	0.3%
2	I-15 SB Ramps / Bundy Canyon Rd.	AM:	2,285	32	4,856	2,571	**1.2%**
		PM:	2,381	39	6,236	3,855	1.0%
3	I-15 NB Ramps / Bundy Canyon Rd.	AM:	2,091	53	4,162	2,071	**2.6%**
		PM:	2,454	65	5,697	3,243	2.0%
4	Sellers Rd. / Bundy Canyon Rd.	AM:	1,372	54	3,769	2,397	**2.3%**
		PM:	1,682	65	5,555	3,873	1.7%
5	Monte Vista Dr. / Bundy Canyon Rd.	AM:	1,533	61	3,784	2,251	**2.7%**
		PM:	1,671	74	5,042	3,371	2.2%
6	Canyon Ranch Rd. / Bundy Canyon Rd.	AM:	1,452	60	3,284	1,832	**3.3%**
		PM:	1,658	74	4,342	2,684	2.8%
7	Walnut Creek Rd. / Bundy Canyon Rd.	AM:	1,316	60	3,061	1,745	**3.4%**
		PM:	1,591	74	4,108	2,517	2.9%
8	Oak Canyon Dr. / Bundy Canyon Rd.	AM:	1,271	60	3,167	1,896	**3.2%**
		PM:	1,536	74	4,075	2,539	2.9%
9	Road "A" / Bundy Canyon Rd.	AM:	1,217	71	3,029	1,812	**3.9%**
		PM:	1,504	87	3,936	2,432	3.6%

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016**.**

Riverside County Transportation Uniform Mitigation Fee (TUMF) Program

The TUMF Program (TUMF, Program) is administered by Western Riverside Council of Governments (WRCOG) based on a regional Nexus Study completed in early 2003. The Program identifies a network of backbone and local roadways that are needed to accommodate long-range growth of the region. The Program was established to ensure that new development contributes equitably to construction of area-serving facilities needed to maintain requisite level of services, and considered critical to regional mobility. Periodic updates to the Program address major changes in right-of-way acquisition and improvement cost factors.

TUMF assessments are imposed on new residential, industrial, and commercial development through application of the TUMF Ordinance, and assessed fees are collected at the building or occupancy permit stage. The current TUMF assessment for new multifamily residential development, such as that proposed by the Bundy Canyon Resort Apartment Project, is $6,231/dwelling unit.[5] At the current TUMF assessment rates, TUMF paid for the 140 dwelling unit Project would total approximately $873,000. TUMF assessments are adjusted on a regular basis to ensure that fees collected keep pace with inflation, and local construction and labor costs. The Project Applicant would pay requisite TUMF assessments at the rate then in effect pursuant to the TUMF Ordinance.

WRCOG has a demonstrated successful record of accomplishment of funding and overseeing the construction of TUMF Program improvements. Project payment of requisite TUMF assessments satisfies its obligations under the TUMF Ordinance. The Project TUMF payments constitute its "fair share" toward sustaining the regional transportation system. WRCOG is responsible for administration of the TUMF program, to include assignment of fees toward completion of TUMF-funded improvements within the region.

[5] TUMF WRCOG. Fee Calculation. *Current TUMF Fee Schedule.* Web. June 29, 2016. <http://www.wrcog.cog.ca.us/uploads/media_items/april-2013-current-fee-schedule.original.pdf

City of Wildomar Development Impact Fee (DIF) Program

The City of Wildomar has adopted and implemented a Development Impact Fee (DIF) program. Pursuant to the City DIF program, fees are assessed of new development projects for the purpose of providing facilities necessary to accommodate and support buildout of the City anticipated under the City General Plan.

The City has prepared an Impact Fee Study Report (*City of Wildomar Impact Fee Study Update Report* [Colgan Consulting Corporation] April 23, 2015; Impact Fee Study Report, Report). Fee structures and fee assignments identified within the Report, are reflected in the adopted City DIF program. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities identified in the list of improvements funded by the DIF program.

The timing and use of City DIF program funds is established through the City's Capital Improvement Program (CIP), overseen and periodically updated by the City Public Works Department. With specific regard to use of DIF monies for transportation/traffic improvements, the City conducts periodic traffic counts, review of traffic accidents, and a review of traffic trends in order to scope and prioritize CIP traffic improvements.

Street and intersection improvements funded though the City DIF program are listed in Impact Fee Study Report. Certain of the listed locations and facilities are coincident with Study Area locations/facilities recommended for improvements in the Project TIA. If current DIF-funded facilities within the Study Area are ultimately excluded from the DIF program, the Project Applicant would be responsible for, and would be required to pay, fair share fees for improvement of affected facilities.

The Impact Fee Study Report, Table ES-1: *Summary of Impact Fees Calculated in This Study* identifies transportation (road and signal) impact fees per unit of development, by development type. The impact fee listed for multi-family residential development, such as the proposed Bundy Canyon Resort Apartments Project, is currently $2,169/dwelling unit (roads); and $281/dwelling unit (signals). At the current Impact Fee Study Report assessment rate, City of Wildomar DIF paid for the 140-dwelling Project would total

approximately $343,000. The Project would be subject to DIF rates in effect at the time of building permit application.

4.2.8 IMPACT STATEMENTS

Potential Impact: *The Project would conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.*

Impact Analysis:

EXISTING, OPENING YEAR, AND HORIZON YEAR TRAFFIC CONDITIONS

OVERVIEW

The following discussions summarize traffic conditions within the Study Area reflecting implementation of the Project under Existing conditions, as well as the anticipated Opening Year, and Horizon Year scenarios. For each of the considered scenarios, potentially significant traffic impacts (deficient conditions) are identified. Less-than-significant impacts are noted, and mitigation measures are proposed for those impacts determined to be potentially significant impacts. Table 4.2-8 presents a summary of recommended improvements by analysis scenario (Existing, Opening Year, and Horizon Year); indicates funding sources for required improvements; and identifies Project traffic contributions as a percentage of new traffic at each affected facility/location.

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Table 4.2-8
Summary of Recommended Intersection Improvements by Analysis Scenario

ID No.	Intersection Location	Jurisdiction	Recommended Improvements						Funding Source[1]	Project % of New Traffic
			Existing (2015)	Existing With Project	2017 No Project	2017 With Project	2040 No Project	2040 With Project		
1	Orange St. / Bundy Canyon Rd.	Wildomar	2nd NB through lane	None	None	None	Same	Same	DIF	0.4%
							3rd EB through lane	Same	TUMF/DIF	
							2nd WB left turn lane	Same	Fair share	
							3rd WB through lane	Same	TUMF/DIF	
							WB right turn lane	Same	Fair share	
3	I-15 NB Ramps / Bundy Canyon Rd.	Caltrans, Wildomar	None	None	None	None	3rd EB through lane	Same	TUMF/DIF	2.6%
							3rd WB through lane	Same	TUMF/DIF	
4	Sellers Rd. / Bundy Canyon Rd.	Wildomar	Traffic Signal	Same	Same	Same	Same	Same	DIF	2.3%
					NB left turn lane	Same	Same	Same	Other[2]	
					NB shared left-through-right turn lane	Same	Same	Same	Other[2]	
					2nd EB through lane	Same	Same	Same	TUMF/DIF	
					3rd EB through lane	Same	Same	Same	TUMF/DIF	
					EB right turn lane	Same	Same	Same	Other[2]	
					WB left turn lane	Same	Same	Same	Other[2]	
					2nd WB through lane	Same	Same	Same	TUMF/DIF	
							3rd WB through lane	Same	TUMF/DIF	
5	Monte Vista Dr. / Bundy Canyon Rd.[3]	Wildomar	None	None	Traffic Signal	Same	Same	Same	DIF	2.7%
					NB left turn lane	Same	Same	Same	Other[2]	
					NB right turn lane	Same	Same	Same	Other[2]	
					2nd EB through lane	Same	Same	Same	TUMF/DIF	
					EB right turn lane	Same	Same	Same	Other[2]	

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Table 4.2-8
Summary of Recommended Intersection Improvements by Analysis Scenario

ID No.	Intersection Location	Jurisdiction	Recommended Improvements						Funding Source[1]	Project % of New Traffic
			Existing (2015)	Existing With Project	2017 No Project	2017 With Project	2040 No Project	2040 With Project		
					2nd WB through lane	Same	Same	Same	TUMF/DIF	
6	Canyon Ranch Rd. / Bundy Canyon Rd.[3,4]	Wildomar	2nd EB through lane	Same	Same	Same	Same	Same	TUMF/DIF	3.3%
			2nd WB through lane	Same	Same	Same	Same	Same	TUMF/DIF	
7	Walnut Creek Rd. / Bundy Canyon Rd.[3,4]	Wildomar	None	2nd EB through lane	Same	Same	Same	Same	TUMF/DIF	3.4%
				2nd WB through lane	Same	Same	Same	Same	TUMF/DIF	
8	Oak Canyon Dr. / Bundy Canyon Rd.[3]	Wildomar	None	None	None	None	2nd EB through lane	Same	TUMF/DIF	3.2%
					None	None	2nd WB through lane	Same	TUMF/DIF	
							Traffic Signal	Same	DIF	
9	Road "A" / Bundy Canyon Rd.[3]	Wildomar	None	None	None	Traffic Signal[5]	Same	Same	TUMF/DIF	3.9%
						2nd EB through lane	Same	Same	TUMF/DIF	
						2nd WB through lane	Same	Same	TUMF/DIF	
							SB shared left-through-right turn lane	Same	Other[2]	
							EB left turn lane	Same	Fair share	

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.

Notes: [1] Improvements included in TUMF Nexus or City of Wildomar DIF programs. Fair share fees would be collected by the City, and deposited to a dedicated Capital Improvement Project account, created for the express purpose of constructing the required improvements.

[2] "Other" indicates improvements required to be constructed by other development proposals within the Study Area.

[3] Study Area intersections along Bundy Canyon Road, east of Sellers Road, have been analyzed with 2 lanes of travel in the eastbound and westbound direction and other proposed access restrictions, consistent with City of Wildomar's planned improvements for Bundy Canyon Road.

[4] Intersection would be restricted to right-in/right-out access in conjunction with Bundy Canyon Road improvements.

[5] Associated NB, EB, and WB intersection approach improvements would be constructed by the Project and are not listed here. Please refer to EIR Section 3.0, *Project Description*, Section 3.4.4, *Access and Circulation*. Additional southbound approach improvements to be implemented by others concurrent with future potential development of properties northerly of the Project, across Bundy Canyon Road.

EXISTING CONDITIONS WITHOUT-PROJECT AND WITH-PROJECT TRAFFIC ANALYSIS

The Existing Conditions without-Project and with-Project Traffic Analysis identifies potential transportation/traffic impacts that would occur assuming implementation of the Project under Existing Conditions, and provides an indication of the incremental effects of the Project without the addition of assumed future cumulative traffic growth. This analysis indicates where Project traffic alone would cause or result in new potentially significant impacts.

The Existing-with-Project analysis identifies currently deficient LOS conditions to which the Project would contribute additional traffic. Improvements that would resolve these pre-existing and/or extra-jurisdictional or shared jurisdictional deficiencies are identified. Project mitigation responsibilities in these instances, where impacts are cumulative are addressed through payment of requisite traffic impact fees. Under the Existing-with-Project Condition, all site access and site-adjacent roadway facilities that would be constructed by the Project are assumed to be in place.

Intersection LOS Analysis–Existing Conditions

Potentially significant cumulative impacts resulting from Project traffic contributions under Existing Conditions are identified at Table 4.2-9. Recommended improvements for each of the potentially significant cumulative impacts are presented subsequently at Table 4.2-10.

Table 4.2-9
Summary of Existing-with-Project Intersection LOS Deficiencies

ID No.	Location	Existing (2015)				Existing plus Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
4	Sellers Rd./ Bundy Canyon Rd.	**36.5**	**75.3**	**E**	**F**	**40.4**	**89.3**	**E**	**F**	3.9	14.0	Wildomar/ LOS D	***Potentially Significant/*** The "With Project" delay (PM peak hour) would exceed 5.0 seconds, the City of Wildomar delay criteria for intersections with pre-Project LOS deficiencies.

Table 4.2-9
Summary of Existing-with-Project Intersection LOS Deficiencies

ID No.	Location	Existing (2015)				Existing plus Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
7	Walnut Creek Rd. / Bundy Canyon Rd.	19.7	23.8	C	C	20.9	**25.2**	C	**D**	1.2	1.4	Wildomar/ LOS C	***Potentially Significant***/ Transition from LOS C w/o Project, to LOS D w/ Project (PM peak hour) would exceed City of Wildomar LOS C Std.

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes: **BOLD** = LOS Deficiency.

Level of Significance: Potentially Cumulatively Significant. Under Existing-with-Project Conditions, traffic generated by the Project in combination with existing deficient conditions would result in potentially significant cumulative impacts at the following Study Area intersections:

- Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.

Mitigation Measures:

4.2.1 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-10. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.

- Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd.
  - Traffic Signal (DIF)
- Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.
  - 2nd EB through lane
  - 2nd WB through lane

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Table 4.2-10
Summary of Existing-Plus-Project Conditions,
Without and With Recommended Improvements

ID No.	Intersection	Traffic Control	Intersection Approach Lanes												Delay (Secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Sellers Rd. / Bundy Canyon Rd.																	
	- Without Improvements	CSS	0	0	0	1	0	d	1	1	0	0	1	1	**40.4**	**89.3**	**E**	**F**
	- With Improvements	**TS**	0	0	0	1	0	d	1	1	0	0	1	1	6.3	5.9	A	A
7	Walnut Creek Rd. / Bundy Canyon Rd.																	
	- Without Improvements	CSS	1	0	d	0	0	0	0	1	1	1	1	0	20.9	**25.2**	C	**D**
	- With Improvements	CSS	**0**	0	**1**	0	0	0	0	**2**	1	**0**	**2**	0	8.9	10.5	A	B

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes:
BOLD = LOS Deficiency.
When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d= Defacto Right Turn Lane; **1** = Improvement – includes access restrictions, e.g., a "**0**" lane improvement indicates that an intersection would be restricted to right-in/right-out access; TS = Traffic Signal; CSS = Cross Street Stop

Level of Significance after Mitigation: ***Cumulatively Significant and Unavoidable.*** The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Existing-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.1 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be capable of mitigating potentially significant impacts, these improvements cannot be assured.

Based on the preceding, pending completion of the required improvements, Project contributions to cumulative impacts under Existing-with-Project Conditions are recognized as cumulatively significant and unavoidable at the following Study Area intersections:

- Intersection No. 4 - Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 7 - Walnut Creek Rd. / Bundy Canyon Rd.

Freeway Ramp Progression Analysis, Existing-Plus-Project Conditions

Freeway ramp operations were evaluated for all peak hour periods under Existing-Plus-Project conditions. All Study Area freeway ramps would experience acceptable queue lengths under Existing-Plus-Project conditions (please refer to TIA Table 5-2).

OPENING YEAR WITHOUT-PROJECT AND WITH-PROJECT TRAFFIC ANALYSIS

Opening Year traffic volumes and levels of service are those expected based on Project completion and opening in the year 2017. The Opening Year without Project condition reflects existing (2015) traffic volumes, plus additional background traffic that would be generated by generalized ambient growth within the region over the next two years as well as traffic generated by known or probable related projects (please refer also to the discussion of "Future Traffic Growth") presented in this Section. Improvements that would be completed as part of the Project (see EIR Section 3.4.4, *Access and Circulation*) are also reflected in the analyses.

Intersection LOS Analysis–Opening Year Conditions

Potentially significant cumulative impacts resulting from Project traffic contributions under Opening Year Conditions are identified at Table 4.2-11. Recommended improvements for each of the potentially significant cumulative impacts are listed subsequently at Table 4.2-12.

Table 4.2-11
Summary of Opening Year-with-Project Intersection LOS Deficiencies

ID No.	Location	2017 Without Project				2017 With Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
4	Sellers Rd. / Bundy Canyon Rd.	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	*	*	Wildomar/ LOS D	***Potentially Significant***/ The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
5	Monte Vista Dr. / Bundy Canyon Rd.	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	*	*	Wildomar/ LOS C	***Potentially Significant***/ The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies
6	Canyon Ranch Rd. / Bundy Canyon Rd.	**98.2**	**40.1**	**F**	**E**	**120.7**	**43.0**	**F**	**F**	22.5	2.9	Wildomar/ LOS C	***Potentially Significant***/ The "With Project" delay (AM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
7	Walnut Creek Rd. / Bundy Canyon Rd.	**74.4**	**43.8**	**F**	**E**	**82.6**	**47.5**	**F**	**E**	8.2	3.7	Wildomar/ LOS C	***Potentially Significant***/ The "With Project" delay (AM peak hour) would exceed 5.0 seconds, the applicable

Table 4.2-11
Summary of Opening Year-with-Project Intersection LOS Deficiencies

ID No.	Location	2017 Without Project				2017 With Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
													delay criteria for intersections with pre-Project LOS deficiencies.
9	Road "A"/ Bundy Canyon Rd.	Does Not Exist				**45.8**	**36.9**	**E**	**E**	N/A	N/A	Wildomar/ LOS C	***Potentially Significant***/ The "With Project" LOS condition would exceed the applicable City of Wildomar LOS standard.

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes: BOLD = LOS Deficiency.
* Change in Delay undefined but would exceed 5.0 seconds.

Level of Significance: Potentially Cumulatively Significant. Under Opening Year-with-Project Conditions, traffic generated by the Project in combination with Opening Year cumulative traffic conditions would result in potentially significant cumulative impacts at the following Study Area intersections:

- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 6 Canyon Ranch Rd. / Bundy Canyon Rd.
- Intersection No. 7 Walnut Creek Rd. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Mitigation Measures:

4.2.2 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-12. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.

- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
  - Traffic Signal (DIF) Same as Existing with Project
  - NB left turn lane (Requirement of other Study Area project(s))
  - NB shared left-through-right turn lane (Requirement of other Study Area project(s))
  - 2nd EB through lane (TUMF/DIF)
  - 3rd EB through lane (TUMF/DIF)
  - EB right turn lane (Requirement of other Study Area project(s))
  - WB left turn lane (Requirement of other Study Area project (s))
  - 2nd WB through lane (TUMF/DIF)

- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
  - Traffic Signal (DIF)
  - NB left turn lane (Requirement of other Study Area project (s))
  - NB right turn lane (Requirement of other Study Area project (s))
  - 2nd EB through lane (TUMF/DIF)
  - EB right turn lane (Requirement of other Study Area project (s))
  - 2nd WB through lane (TUMF/DIF)

- Intersection No. 6 Canyon Ranch Rd. / Bundy Canyon Rd.
  - 2nd EB through lane (TUMF/DIF) - Same as Existing with Project
  - 2nd WB through lane (TUMF/DIF) - Same as Existing with Project

- Intersection No. 7 Walnut Creek Rd. / Bundy Canyon Rd.
  - 2nd EB through lane (TUMF/DIF) - Same as Existing with Project
  - 2nd WB through lane (TUMF/DIF) - Same as Existing with Project

- Intersection No. 9 Road "A" / Bundy Canyon Rd.
  - Traffic Signal (TUMF/DIF)
  - 2nd EB through lane (TUMF/DIF)
  - 2nd WB through lane (TUMF/DIF)

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Table 4.2-12
Summary of Opening Year-Plus-Project Conditions,
Without and With Recommended Improvements

ID No.	Intersection	Traffic Control	Intersection Approach Lanes												Delay (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
4	Sellers Rd. / Bundy Canyon Rd.																	
	- Without Project	**TS**	**1**	**1**	0	1	1	0	1	**3**	**1**	**1**	**2**	0	16.6	13.4	B	B
	- With Project	**TS**	**1**	**1**	0	1	1	0	1	**3**	**1**	**1**	**2**	0	17.5	13.7	C	D
5	Monte Vista Dr. / Bundy Canyon Rd.																	
	- Without Project	**TS**	**1**	0	**1**	0	0	0	0	**2**	**1**	1	**2**	0	12.2	26.3	B	C
	- With Project	**TS**	**1**	0	**1**	0	0	0	0	**2**	**1**	1	**2**	0	12.7	30.2	B	C
6	Canyon Ranch Rd. / Bundy Canyon Rd.																	
	- Without Project	CSS	0	0	0	0	**0**	**1**	1	**2**	0	0	**2**	d	19.3	14.1	C	B
	- With Project	CSS	0	0	0	0	**0**	**1**	1	**2**	0	0	**2**	d	20.2	14.3	C	B
7	Walnut Creek Rd. / Bundy Canyon Rd.																	
	- Without Project	CSS	0	**0**	1	0	0	0	0	**2**	1	**0**	**2**	0	9.7	12.4	A	B
	- With Project	CSS	0	**0**	1	0	0	0	0	**2**	1	**0**	**2**	0	9.7	12.9	A	B
9	Road "A" / Bundy Canyon Rd.																	
	- Without Project	Does Not Exist																
	- With Project	**TS**	0	**1**	0	0	0	0	0	**2**	0	**1**	**2**	0	18.2	17.5	B	B

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes:
BOLD = LOS Deficiency.
When a right turn is designated, the lane can be either striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d= Defacto Right Turn Lane; **1** = Improvement – includes access restrictions, e.g., a "**0**" lane improvement indicates that an intersection would be restricted to right-in/right-out access; TS = Traffic Signal; CSS = Cross Street Stop

Level of Significance after Mitigation: ***Cumulatively Significant and Unavoidable.*** The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Opening Year-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.2 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be capable of mitigating potentially significant impacts, these improvements cannot be assured.

Based on the preceding, pending completion of the required improvements, Project contributions to cumulative impacts under Opening Year-with-Project Conditions are recognized as cumulatively significant and unavoidable at the following Study Area intersections:

- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 6 Canyon Ranch Rd. / Bundy Canyon Rd.
- Intersection No. 7 Walnut Creek Rd. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Freeway Ramp Progression Analysis, Opening Year Conditions

The queue length analysis performed for Opening Year conditions found that under Without-Project and With-Project conditions, there would be no potential freeway ramp queuing issues (please refer to TIA Table 6-2).

HORIZON YEAR WITHOUT-PROJECT AND WITH-PROJECT TRAFFIC ANALYSIS

The Horizon Year without Project condition reflects 2040 traffic volumes as estimated under RivTAM and refined to reflect localized conditions. The Horizon Year with Project traffic conditions adds Project traffic to modeled Horizon Year Conditions and also reflects improvements to be completed as part of the Project (see EIR Section 3.4.4, *Access and Circulation*), and completion of City planned and programmed lane improvements and access restrictions along Bundy Canyon Road. Please refer also to the discussion at Section 4.2.5, *Future Traffic Growth* presented previously.

Intersection LOS Analysis–Horizon Year Conditions

Potentially significant cumulative impacts resulting from Project traffic contributions under Horizon Year Conditions are identified at Table 4.2-13. Recommended improvements for each of the potentially significant cumulative impacts are listed subsequently at Table 4.2-14.

Table 4.2-13
Summary of Horizon Year-with-Project Intersection LOS Deficiencies

ID No.	Location	Horizon Year Without Project				Horizon Year With Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
1	Orange St. / Bundy Canyon Rd.	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**	*	*	Wildomar/ LOS D	***Potentially Significant***/ The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
3	I-15 NB Ramps / Bundy Canyon Rd.	**88.9**	**89.7**	**F**	**F**	**95.2**	**93.4**	**F**	**F**	6.3	3.7	Caltrans/ LOS D	***Potentially Significant***/ The "With Project" delay (AM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
4	Sellers Rd. / Bundy Canyon Rd.	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	*	*	Caltrans/ LOS D	***Potentially Significant***/ The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.

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Table 4.2-13
Summary of Horizon Year-with-Project Intersection LOS Deficiencies

ID No.	Location	Horizon Year Without Project				Horizon Year With Project				Change in Delay (Secs.)		Jurisdiction/ LOS Std.	Project Impact Significance/ Remarks
		Delay (Secs.)		LOS		Delay (Secs.)		LOS					
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		
5	Monte Vista Dr. / Bundy Canyon Rd.	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	*	*	Wildomar/ LOS C	***Potentially Significant/*** The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
8	Oak Canyon Dr. / Bundy Canyon Rd.	**>100.0**	**>100.0**	**F**	**F**	**>100.0**	**>100.0**	**F**	**F**	*	*	Wildomar/ LOS C	***Potentially Significant/*** The "With Project" delay (AM and PM peak hour) would exceed 5.0 seconds, the applicable delay criteria for intersections with pre-Project LOS deficiencies.
9	Road "A" / Bundy Canyon Rd.	Does Not Exist				**104.7**	**>100.0**	**F**	**F**	N/A	N/A	Wildomar/ LOS C	***Potentially Significant/*** The "With Project" LOS condition would exceed the applicable City of Wildomar LOS standard.

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes:
BOLD = LOS Deficiency.
* Change in Delay undefined but would exceed 5.0 seconds.

Level of Significance: Potentially Cumulatively Significant. Under Horizon Year-with-Project Conditions, traffic generated by the Project in combination with Horizon Year cumulative traffic conditions would result in potentially significant cumulative impacts at the following Study Area intersections:

- Intersection No. 1 Orange St. / Bundy Canyon Rd.
- Intersection No. 3 I-15 NB Ramps / Bundy Canyon Rd.
- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 8 Oak Canyon Dr. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Mitigation Measures:

4.2.3 Prior to the issuance of building permits, the Project Applicant shall pay requisite fees toward the construction of improvements described below, listed at Table 4.2-8, and indicated at Table 4.2-14. Improvements funding sources are indicated parenthetically. Instances where improvements are the same as those required under previous scenarios are identified.

- Intersection No. 1 Orange St. / Bundy Canyon Rd.
  - 2nd NB through lane (DIF)
  - 3rd EB through lane (TUMF/DIF)
  - 2nd WB left turn lane (Fair Share)
  - 3rd WB through lane (TUMF/DIF)
  - WB right turn lane (Fair Share)

- Intersection No. 3 I-15 NB Ramps / Bundy Canyon Rd.
  - 3rd EB through lane (TUMF/DIF)
  - 3rd WB through lane (TUMF/DIF)

- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
  - Traffic Signal (DIF) - Same as Existing Conditions and Opening Year

  - NB left turn lane (Requirement of other Study Area project (s)) – Same as Opening Year
  - NB shared left-through-right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - 2nd EB through lane (TUMF/DIF) - Same as Opening Year
  - 3rd EB through lane (TUMF/DIF) - Same as Opening Year
  - EB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - WB left turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - 2nd WB through lane (TUMF/DIF) - Same as Opening Year
  - 3rd WB through lane (TUMF/DIF)

- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
  - Traffic Signal (DIF) - Same as Opening Year
  - NB left turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - NB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - 2nd EB through lane (TUMF/DIF) - Same as Opening Year
  - EB right turn lane (Requirement of other Study Area project(s)) – Same as Opening Year
  - 2nd WB through lane (TUMF/DIF) - Same as Opening Year

- Intersection No. 8 Oak Canyon Dr. / Bundy Canyon Rd.
  - 2nd EB through lane (TUMF/DIF)
  - 2nd WB through lane (TUMF/DIF)
  - Traffic Signal (DIF)

- Intersection No. 9 Road "A" / Bundy Canyon Rd.
    - Traffic Signal (TUMF/DIF) - Same as Opening Year
    - 2nd EB through lane (TUMF/DIF) - Same as Opening Year
    - 2nd WB through lane (TUMF/DIF) - Same as Opening Year
    - SB shared left-through-right turn lane (Requirement of other Study Area project(s))
    - EB left turn lane (Fair Share)

Level of Significance after Mitigation: ***Cumulatively Significant and Unavoidable.*** The Project Applicant would pay all requisite fees, acting to offset the Project's proportional contributions to potentially significant cumulative traffic impacts projected to occur under Horizon Year-with-Project Conditions. Notwithstanding, payment of fees pursuant to Mitigation Measure 4.2.3 would not ensure timely completion of required improvements. Thus, while the physical improvements identified may be capable of mitigating potentially significant impacts, these improvements cannot be assured.

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Table 4.2-14
Summary of Horizon Year-Plus-Project Conditions
Without and With Recommended Improvements

ID No.	Intersection	Traffic Control	Intersection Approach Lanes												Delay (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Orange St. / Bundy Canyon Rd.																	
	- Without Project	TS	0	**2**	1	0	1	1	1	**3**	d	**2**	**3**	**1**	53.9	51.8	D	D
	- With Project	TS	0	**2**	1	0	1	1	1	**3**	d	**2**	**3**	**1**	54.9	54.3	D	D
3	I-15 NB Ramps / Bundy Canyon Rd.																	
	- Without Project	TS	1	1	0	0	0	0	1	**3**	0	0	**3**	0	35.1	39.6	D	D
	- With Project	TS	1	1	0	0	0	0	1	**3**	0	0	**3**	0	40.7	44.0	D	D
4	Sellers Rd. / Bundy Canyon Rd.																	
	- Without Project	**TS**	**1**	**1**	0	1	1	0	1	**3**	**1**	**1**	**3**	0	25.0	42.4	C	D
	- With Project	**TS**	**1**	**1**	0	1	1	0	1	**3**	**1**	**1**	**3**	0	26.1	52.3	C	D
5	Monte Vista Dr. / Bundy Canyon Rd.																	
	- Without Project	**TS**	**1**	0	**1**	0	0	0	0	**2**	**1**	1	**2**	0	24.7	32.7	C	C
	- With Project	**TS**	**1**	0	**1**	0	0	0	0	**2**	**1**	1	**2**	0	25.4	46.1	C	D
8	Oak Canyon Dr. / Bundy Canyon Rd.																	
	- Without Project	**TS**	0	**1**	0	0	0	0	0	**2**	1	1	**2**	0	14.8	10.7	B	B
	- With Project	**TS**	0	**1**	0	0	0	0	0	**2**	1	1	**2**	0	27.3	25.3	C	C
9	Road "A" / Bundy Canyon Rd.																	
	- Without Project	Does Not Exist																
	- With Project	**TS**	0	**1**	0	0	**1***	0	**1**	**2**	0	**1**	**2**	0	27.2	29.1	C	C

Source: *Wildomar Residential Traffic Impact Analysis, City of Wildomar, California* (Urban Crossroads, Inc.) October 11, 2016.
Notes: BOLD = LOS Deficiency.
When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.
L = Left; T = Through; R = Right; d= Defacto Right Turn Lane; **1** = Improvement – includes access restrictions, e.g., a "**0**" lane improvement indicates that an intersection would be restricted to right-in/right-out access; TS = Traffic Signal; CSS = Cross Street Stop
* Southbound approach improvements to be implemented by others concurrent with future potential development of properties northerly of the Project, across Bundy Canyon Road.

Based on the preceding, pending completion of the required improvements, Project contributions to cumulative impacts under Horizon Year-with-Project Conditions are recognized as cumulatively significant and unavoidable at the following Study Area intersections:

- Intersection No. 1 Orange St. / Bundy Canyon Rd.
- Intersection No. 3 I-15 NB Ramps / Bundy Canyon Rd.
- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 8 Oak Canyon Dr. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Freeway Ramp Progression Analysis, Horizon Year Conditions

The queue length analysis performed for Horizon Year conditions found that under Without-Project and With-Project conditions, there would be no potential freeway ramp queuing issues (please refer to TIA Table 7-2).

Potential Policy Consistency Impacts

The Project is subject to plans, policies, guidelines, and regulations established by the City of Wildomar. As indicated at Table 4.2-15, the Project is consistent with, and appropriately responds to applicable Land Use and Transportation Goals and Policies, and the circulation objectives included in the City's General Plan.

Table 4.2-15
General Plan Circulation Goals and Policies Consistency

Policies	Applicability/Consistency
Land Use Policies	
LU 12.1 Provide land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use in order to minimize congestion and air pollution.	**Consistent.** Riverside Transit Authority (RTA) is a public transit agency that serves the unincorporated Riverside County region near the City of Wildomar. RTA does not currently provide service to the Project site. Notwithstanding, transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use and new development (such as the Project) can affect these periodic adjustments, and may lead to either enhanced or reduced service where appropriate. It is recommended that the Applicant work in conjunction with the City of Wildomar and RTA to determine the feasibility of providing future bus service within walking distance (approximately ¼ mile or less) of the Project site. Internal sidewalks would be constructed as part of the Project facilitating pedestrian access within the Project site. City capital improvement plans include a Class I bike path, to be provided along the northerly side of Bundy Canyon Road adjacent to the Project site. Securable bicycle racks and lockers would be provided on-site consistent with City requirements, thereby facilitating and encouraging use of bicycles. Pedestrian and bicycle improvements, including sidewalks and bicycle racks, would be designed and constructed consistent with City development standards. Project consistency with design/development standards is implemented through the City's Site Plan and Building Permit review processes.

Table 4.2-15
General Plan Circulation Goals and Policies Consistency

Policies	Applicability/Consistency
LU 12.6 Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use.	**Consistent.** Prior to the first Certificate of Occupancy, site-adjacent improvements would be completed ensuring that there is adequate and appropriate access to the Project site. The Project TIA has examined the adequacy of existing and proposed circulation off-site facilities, and identified mitigation, to reduce the effects cumulative impacts that are found to be potentially significant. The Project Applicant would pay requisite fees in support of improvements necessary to address potentially significant cumulative traffic impacts within the Study Area.
Circulation Policies	
C 2.1 Maintain the following countywide target Levels of Service: • LOS "C" along all County-maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections. • LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.	**Consistent.** Please refer to remarks provided at Policy LU 12.6.
C 2.3 Traffic studies prepared for development entitlements (tracts, plot plans, public use permits, conditional use permits, etc.) shall identify project related traffic impacts and determine the "significance" of such impacts in compliance with CEQA.	**Consistent.** The Project TIA has been prepared pursuant to the City's requirement for the evaluation of potential traffic impacts. This Draft EIR identifies all potentially significant impacts, along with mitigation to reduce the effects of any impacts that are found to be potentially significant.
C 2.4 The direct project related traffic impacts of new development proposals shall be mitigated via conditions of approval requiring the construction of any improvements identified as necessary to meet level of service standards.	**Consistent.** The Project TIA has identified direct Project-related impacts, and this EIR has identified improvements necessary to mitigate these impacts.

Table 4.2-15
General Plan Circulation Goals and Policies Consistency

Policies	Applicability/Consistency
C 2.5 The cumulative and indirect traffic impacts of development may be mitigated through the payment of various impact mitigation fees such as County Development Impact Fees, Road and Bridge Benefit District Fees, and Transportation Uniform Mitigation Fees to the extent that these programs provide funding for the improvement of facilities impacted by development.	**Consistent.** The Draft EIR identifies applicable TUMF, DIF, and Fair Share fees to be paid by the Project. Payment of requisite fees fulfills Project mitigation responsibilities for its contributions to cumulative impacts. Nonetheless, the EIR conservatively assumes that irrespective of fee payments, cumulative impacts at affected Study Area intersections would be significant and unavoidable pending completion of required improvements.
C 3.2 Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.	**Consistent.** Transportation improvements to be implemented by the Project support this policy. Project implementation would not conflict with future transportation network expansion, or with the development of alternative travel modes.

Source: Policy statements from *Wildomar General Plan*, Land Use and Circulation Elements; Remarks by Applied Planning.

As outlined above, the Project would be implemented consistent with applicable provisions of the City's General Plan. Prior to the issuance of building permits, the City will review the final Project site plan and circulation designs to ensure consistency with applicable standards, design guidelines, and Municipal Code requirements. Based on the preceding analysis, the potential for the Project to conflict with any applicable circulation plan, policy, or regulation is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *The Project would conflict with an applicable congestion management program, including, but not limited to a level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.*

Impact Analysis: Interstate 15 (I-15)/Bundy Canyon Road ramps and off-ramp intersections are the only facilities within the Study Area that are designated Riverside County Congestion Management Plan (CMP) components. For the purposes of this analysis, LOS "D" is the threshold condition employed for CMP facilities within the

Study Area. Project CMP impacts are coincident with impacts at the Interstate 15/Bundy Canyon Road ramps and off-ramp facilities summarized herein; as is mitigation of these impacts, also summarized herein.

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to Mitigation Measure 4.2.3.

Level of Significance After Mitigation: Cumulatively significant and unavoidable.
The Project would pay all requisite fees for improvements at Study Area CMP facilities. However, timely completion of improvements required for mitigation of cumulatively significant impacts at CMP facilities within the Study Area cannot be assured. Pending completion of required improvements, Project contributions to impacts affecting Study Area CMP facilities are considered cumulatively considerable.

Potential Impact: *Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.*

Impact Analysis: The Project would construct improvements necessary to ensure safe and efficient access and operating conditions along roadways and at intersections adjacent to the Project site. These improvements are incorporated as components of the Project (please refer to EIR Section 3.0, *Project Description*, Section 3.4.4, *Access and Circulation*). For ease of reference, traffic/transportation improvements to be implemented by the Project are restated below.

Primary access to the Project would be provided via a signalized driveway off Bundy Canyon Road. Access to the Project would be controlled by an automatic gate system. Secondary, emergency-only access would be provided from the southwest via an extension of Windwood Drive. Resident and/or visitor access via the Windwood Drive would be for emergency purposes only; this access point would remain closed under normal circumstances. Final designs and specifications for all Project driveways, traffic

controls, and internal circulation improvements would be subject to review and approval by the City Engineering Department. Access and site adjacent improvements to be implemented by the Project are presented at previous Figure 4.2-7, and are described below.

- **Bundy Canyon Road** – Bundy Canyon Road is an east-west oriented roadway located along the Project's northern boundary. As part of the Project, Bundy Canyon Road between the Project's eastern and western boundaries would be constructed at its ultimate half-section width as an urban arterial (152-foot right-of-way) pursuant to applicable City of Wildomar standards. Bundy Canyon Road would be striped with three eastbound through lanes, consistent with the urban arterial roadway cross-section, at such time in the future when the roadway is widened to the east and west of the site.

- **Road "A" / Bundy Canyon Road**[6] – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

  -Northbound Approach: One shared left-right turn lane. The queuing evaluation for the site access point indicates the 95th percentile northbound queue would not exceed 70-feet.
  -Southbound Approach: N/A
  -Eastbound Approach: One through lane and one right turn lane with a minimum of 100 feet of storage.
  -Westbound Approach: One left turn lane with a minimum of 100-feet of storage and one through lane.

[6] Although Bundy Canyon Road is designated under the General Plan as an urban arterial roadway (6 travel lanes, 3 in each direction), the Project TIA assumes only 2 lanes of travel in the eastbound and westbound direction. Other proposed access restrictions along Bundy Canyon Road are also reflected in the TIA. This is consistent with City of Wildomar's planned improvements for Bundy Canyon Road.

- The intersection of Road "A" and Bundy Canyon Road is anticipated to warrant a traffic signal with the development of the north side under long-range traffic conditions. The City would require that future development on the north side of Bundy Canyon Road within Assessor Parcel Numbers (APNs) 366-320-028, -048 provide access to Bundy Canyon Road in alignment with the Project Road "A."

- **Signing/Striping** - On-site traffic signing and striping plans will be developed and implemented consistent with City requirements.

- **Sight Distance** - Sight distance at each Project access point will be reviewed by the Lead Agency and Caltrans to ensure respectively, compliance with City of Wildomar and Caltrans design standards.

To ensure appropriate design and implementation of all Project circulation improvements, the final design of the Project site plan, to include locations and design of proposed driveways, shall be reviewed and approved by the City Traffic Engineer. In addition, representatives of the City's Police and Fire Departments will review the Project's plans in regard to emergency access. Efficient and safe operations of the Project are provided by on-site and localized circulation and intersection improvements included as components of the Project.

It is also recognized that temporary and short-term traffic detours and traffic disruption could result during Project construction activities including implementation of Project access and circulation improvements. Accordingly, the Project Applicant would be responsible for the preparation of a construction area traffic management plan (Plan) to be submitted to the City. Typical elements and information incorporated in the Plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number.**

- **Identification of Construction Contract Responsibilities** - For example for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations (if any).**

- **Location and Description of Construction Trailer (if any).**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the City for review and approval. All right-of-way encroachments would require permitting through the City.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way will be maintained (including dust control).

The Plan must be reviewed and approved by the City prior to the issuance of the building permit. The Plan and its requirements would also be provided to all contractors as one component of building plan/contract document packages.

As supported by the preceding discussions and information presented in the EIR Project Description, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.3 AIR QUALITY

4.3 AIR QUALITY

Abstract

This Section identifies and addresses potential air quality impacts that may result from construction and implementation of the Project. More specifically, the air quality analysis evaluates the potential for the Project to result in the following impacts:

- *Conflict with or obstruct implementation of the applicable air quality plan;*
- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors; or*
- *Expose sensitive receptors to substantial pollutant concentrations.*

As substantiated within this Section, the above impacts are either less-than-significant or can be reduced to levels that are less-than-significant with application of proposed mitigation measures.

As substantiated in the Initial Study, potential impacts under the following topic were previously determined to have a less-than-significant impact, and are not further discussed here:

- *Create objectionable odors affecting a substantial number of people.*

Please refer also to Initial Study (EIR Appendix A) Checklist Item III. Air Quality.

4.3.1 INTRODUCTION

This Section presents existing air quality conditions and identifies potential air quality impacts resulting from construction and operations of the Project. Local and regional climate, meteorology and air quality are discussed, as well as existing federal, state and regional air quality regulations. The information presented in this Section is summarized from *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015 (Project Air Quality Impact Analysis, AQIA). The Project Air Quality Impact Analysis, including all supporting air quality modeling data, is presented in its entirety at Draft EIR Appendix C.

4.3.2 AIR QUALITY FUNDAMENTALS

Air pollution comprises many substances generated from a variety of sources, both man-made and natural. Since the rapid industrialization of the twentieth century, almost every human endeavor, especially those relying on the burning of fossil fuels, creates air pollution. Most contaminants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. Motor vehicles are by far the most significant source of air pollutants in urban areas, emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Air pollutants are generally classified as either primary or secondary pollutants. Primary pollutants are generated daily and emitted directly from the source, whereas secondary pollutants are created over time resulting from atmospheric chemical and photochemical reactions. Examples of primary pollutants include carbon monoxide (CO), oxides of nitrogen (NO_2 and NO), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and various hydrocarbons or volatile organic compounds (VOC). Examples of secondary pollutants include ozone (O_3), which is a product of the reaction between NO_x and VOC in the presence of sunlight. Other secondary pollutants include photochemical aerosols.

To aid in the review of discussions presented subsequently in this Section, recurring terms, abbreviations, and acronyms are defined as follows: PPM - Parts per Million; $\mu g/m^3$ - Micrograms Per Cubic Meter; PM_{10} - Particulate Matter Less Than 10 Microns In Diameter; $PM_{2.5}$ - Particulate Matter Less Than 2.5 Microns In Diameter.

4.3.2.1 Criteria Air Pollutants

Criteria air pollutants are those air contaminants for which air quality standards currently exist. Currently, state and federal air quality standards exist for ozone, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), suspended particulate matter (PM_{10} and $PM_{2.5}$), and lead. California has also set standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride. Evaluated criteria air contaminants, or their precursors, typically also include volatile organic compounds (VOC), oxides of nitrogen (NO_x), sulfur oxides (SO_x), and respirable particulate matter (PM_{10} and $PM_{2.5}$). The Project site is located in the South Coast Air Basin (Basin) within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In general, the Basin as a whole has experienced decreases in criteria air pollutant levels when compared to historic conditions (please refer to EIR Section 4.3.5, Regional Air Quality Trends). Pollutant properties and sources, and potential health effects are summarized below.

Carbon Monoxide

Properties and Sources

Carbon monoxide (CO) is a colorless, odorless, toxic gas formed by incomplete combustion of fossil fuels. CO levels tend to be highest during the winter mornings, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest CO concentrations are generally found near congested transportation corridors and intersections. Other sources include aircraft, off-road vehicles, stationary equipment (e.g., fuel-fired furnaces, gas water heaters, fireplaces, gas stoves, gas dryers, charcoal grills), and landscape maintenance equipment such as lawnmowers and leaf blowers.

Human Health Effects

A consistent association between increased ambient CO levels and higher-than-average rates of hospital admissions for heart diseases (such as congestive heart failure) has been observed. Carbon monoxide can cause decreased exercise capacity, and adversely affects conditions with an increased demand for oxygen supply (fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels). Exposure to CO can cause impairment of time interval estimation and visual function.

Ozone

Properties and Sources

Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOC) and oxides of nitrogen (NO_x), which are 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 the pollutant.

Human Health Effects

Short-term exposure to ozone can cause a decline in pulmonary function in healthy individuals including breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Additionally, an increase in the frequency of asthma attacks, cough, chest discomfort and headache can result.

A correlation has been reported between exposure to elevated ambient ozone levels and increases in daily hospital admission rates and mortality rates. A risk to public health implied by altered connective tissue metabolism and host defense in animals has also been reported.

Oxides of Nitrogen

Properties and Sources

Oxides of nitrogen (NO_x) serve as integral participants in the process of photochemical smog production. During combustion, oxygen reacts with nitrogen to produce NO_x. Two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). Natural causal sources or originators of NO_x include lightning, soils, wildfires, stratospheric intrusion, and the oceans. Natural sources accounted for approximately seven percent of 1990 emissions of NO_x for the United States (EPA 1997). Atmospheric deposition of NO_x occurs when atmospheric or airborne nitrogen is transferred to water, vegetation, soil, or other materials. Acid deposition involves the deposition of nitrogen and/or sulfur acidic compounds that can harm natural resources and materials. The major source of NO_x in the Basin is on-road vehicles. Stationary commercial and service-source fuel combustion are other contributors.

Human Health Effects

Exposure to NO_x may alter sensory responses or impair pulmonary function, and may increase incidence of acute respiratory disease including infections and respiratory symptoms in children. Difficulty in breathing in healthy individuals as well as bronchitic groups may also occur. NO_x is also an ozone precursor. Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Sulfur Dioxide

Properties and Sources

Sulfur dioxide (SO_2) is a colorless, pungent gas. At levels greater than 0.5 ppm, SO_2 has a strong odor. Sulfuric acid is formed from sulfur dioxide, which is an aerosol particle component that affects acid deposition. Anthropogenic, or human-caused, sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing.

Volcanic emissions are a natural source of sulfur dioxide. SO_2 is a precursor to sulfates and PM_{10}.

Human Health Effects

Health effects of SO_2 include higher frequencies of acute respiratory symptoms (including airway constriction in some asthmatics, reduction in breathing capacity and diminished ventilatory function in children. Very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Lead

Properties and Sources

Lead (Pb) is a solid heavy metal that can exist in air pollution as an aerosol particle component. An aerosol is a collection of solid, liquid, or mixed-phase particles suspended in the air. It was first regulated as an air pollutant in 1976. Leaded gasoline was first marketed in 1923 and was used in motor vehicles until around 1970. The exclusion of lead from gasoline helped to decrease emissions of lead in the United States from 219,000 to 4,000 short tons per year between 1970 and 1997. Lead-ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources emanate from the dust of soils contaminated with lead-based paint and solid waste disposal.

Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Lead is no longer a gasoline additive, accounting for substantive reductions in airborne lead concentrations throughout the Basin.

Human Health Effects

Lead adversely affects the development and function of the central nervous system, leading to learning disorders, distractibility, lower IQ and increased blood pressure. An

increase in blood lead levels may impair or decrease hemoglobin synthesis. Lead poisoning can cause anemia, lethargy, seizures, and death.

Particulate Matter

Properties and Sources

Particulate matter is a generic term that defines a broad group of chemically and physically different particles (either liquid droplets or solids) that can exist over a wide range of sizes. Examples of atmospheric particles include those produced from combustion (diesel soot or fly ash), light (urban haze), sea spray (salt particles), and soil-like particles from re-suspended dust. Fugitive dust is defined as any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly because of human activities (Rule 403, Fugitive Dust, SCAQMD).

Within air quality analyses, particulate matter is categorized by diameter: PM_{10} and $PM_{2.5}$. PM_{10} refers to particulate matter that is 10 microns or less in diameter (1 micron is one millionth of a meter, or one micrometer [μm]). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter. The size of particles can determine the residence time of the material in the atmosphere. $PM_{2.5}$ has a longer atmospheric lifetime than PM_{10} and can therefore be transported over longer distances.

Particulate matter originates from a variety of stationary and mobile sources. Stationary sources that generate particulate matter include: fuel combustion for electric utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources that generate particulate matter include highway vehicles, non-road vehicles and fugitive dust from paved and unpaved roads. Diesel Particulate Matter (DPM) is a mixture of many exhaust particles and gases that is produced when an engine burns diesel fuel. As the result of California Air Resources Board (CARB) regulatory actions, DPM emissions within the Basin have been reduced when compared to historic levels. Continuing reductions in DPM emissions are

anticipated due to regulatory actions, and as vehicle fleets transition to newer and cleaner technologies.

Human Health Effects

A consistent correlation between elevated ambient PM_{10} levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed.

Many compounds found in diesel exhaust are carcinogenic, including sixteen compounds that are classified as possibly carcinogenic by the International Agency for Research on Cancer. DPM includes the particle-phase constituents in diesel exhaust. Some short-term (acute) effects of diesel exhaust include eye, nose, throat and lung irritation, as well as coughs, headaches, light-headedness and nausea. Diesel exhaust is a major source of ambient particulate matter pollution, and numerous studies have linked elevated particle levels in the air to increased hospital admission, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. DPM in the Basin poses the greatest cancer risk of all identified toxic air pollutants.

Valley Fever may also be transmitted through PM_{10} and $PM_{2.5}$ emissions. "Valley Fever is a fungal infection caused by coccidioides organisms. It can cause fever, chest pain and coughing, among other signs and symptoms. Two species of coccidioides fungi cause valley fever. These fungi are commonly found in the soil in specific areas and can be stirred into the air by anything that disrupts the soil, such as farming, construction and wind. The fungi can then be breathed into the lungs and cause valley fever, also known as acute coccidioidomycosis. Mild cases of valley fever usually resolve on their own. In more severe cases, doctors prescribe antifungal medications that can treat the underlying infection."[1]

[1] Mayo Clinic Staff. "Diseases and Conditions-Valley Fever." *Mayo Clinic*. N.p., 27 May 2015. Web. 13 Oct. 2015.

Volatile Organic Compounds

Properties and Sources

Volatile Organic Compounds (VOCs), also termed Reactive Organic Gases (ROGs) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there is no state or national ambient air quality standard for VOCs because they are not classified as criteria pollutants. They are regulated, however, because a reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The major sources of VOCs in the Basin are on-road motor vehicles and solvent evaporation. VOCs are also an ozone precursor.

Benzene is a commonly occurring VOC within the Basin. Typical sources of benzene emissions include: gasoline service stations (fuel evaporation), motor vehicle exhaust, tobacco smoke, and oil and coal incineration. Benzene is also sometimes employed as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from seeds and nuts. It is also used in the manufacture of detergents, explosives, dyestuffs, and pharmaceuticals.

Human Health Effects

Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Benzene is a known carcinogen. Short-term (acute) exposure to high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, unconsciousness can occur. Long-term (chronic) occupational exposure to high doses by inhalation has caused blood disorders, including aplastic anemia and lower levels of red blood cells.

4.3.3 SETTING

4.3.3.1 Local and Regional Climate

The City of Wildomar and the Project site are located within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAQMD has jurisdiction over an area of approximately 12,000 square miles, consisting of the four-county South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties), and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin. The approximately 6,745-square-mile South Coast Air Basin (Basin) is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

Regional climate and variations in temperature, wind, humidity, precipitation, and amount of sunshine influence air quality within the Basin. The annual average temperatures throughout the Basin vary from the low to middle 60s (degrees Fahrenheit). Due to a decreased marine influence, the eastern portion of the Basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the Basin, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the Basin have recorded maximum temperatures above 100°F.

Although the climate of the Basin can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This

shallow layer of sea air is an important modifier of Basin climate. Humidity restricts visibility in the Basin, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the Basin is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. It should be noted that these effects decrease with distance from the coast.

More than 90 percent of the Basin's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the Basin, with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the Basin. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14-½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the Basin is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the Basin is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal areas.

In the Basin, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire Basin. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_x and CO from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

4.3.3.2 Existing Air Quality

Existing air quality is monitored and evaluated in the context of National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). These Standards are the levels of air quality that are considered safe, with an adequate

margin of safety, to protect the public health and welfare. For further information regarding NAAQS and CAAQS currently in effect, please refer to the Project Air Quality Impact Analysis at Table 2-1, "Ambient Air Quality Standards." Current NAAQS and CAAQS are also available through CARB.[2]

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards.

Regional Air Quality

The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations throughout the air district. In 2010, the federal and state standards were exceeded on one or more days for ozone, PM_{10}, and $PM_{2.5}$ at most monitoring locations. Attainment designations for the Basin are provided at Table 4.3-1.

Table 4.3-1
Basin Attainment Status

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead*	Nonattainment	Nonattainment

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.
Notes: *The State and Federal nonattainment designation for lead is only applicable for the Los Angeles County portion of the Basin. The Basin is otherwise classified as attainment for lead.

[2] California Air Resources Board. Ambient Air Quality Standards (AAQS). Web. June 2016. <http://www.arb.ca.gov/research/aaqs/aaqs.htm.>

Local Air Quality

The nearest long-term air quality monitoring site in relation to the Project is the SCAQMD Lake Elsinore monitoring station (SRA 25) located approximately 10 miles northwesterly of the Project site. Inhalable Particulates (PM_{10}) monitoring data was obtained from the Perris monitoring station (SRA 24) located approximately 15.8 miles northeasterly of the Project site. Monitoring data for Ultra-Fine Particulates ($PM_{2.5}$) was obtained from the Metropolitan Riverside County 2 monitoring station (SRA 23), located approximately 39.7 miles northwesterly of the Project site. Monitoring data from the cited Perris and Riverside County 2 monitoring stations was utilized only in instances where such data was not available from the Lake Elsinore monitoring station.

Table 4.3-2 presents the three latest years of available representative local air quality monitoring data, and shows the number of days that standards were exceeded for the Study Area. Data for SO_2 (Sulfur Dioxide) was omitted, since attainment standards for this pollutant are regularly met within the Basin, and few monitoring stations continue to measure SO_2 concentrations.

Table 4.3-2
Project Area Air Quality Monitoring Summary 2012-2014

Pollutant	Standard	2012	2013	2014
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)	---	0.111	0.102	0.104
Maximum 8-Hour Concentration (ppm)	---	0.089	0.089	0.086
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	10	6	4
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	29	25	13
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	0	0	0
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	17	12	6
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)	---	--	--	2.0
Maximum 8-Hour Concentration (ppm)	---	0.7	0.6	1.4
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	--	0	0

Table 4.3-2
Project Area Air Quality Monitoring Summary 2012-2014

Pollutant	Standard	2012	2013	2014
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	0
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	0
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.048	0.047	.045
Annual Arithmetic Mean Concentration (ppm)		0.010	0.008	0.008
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Inhalable Particulates (PM_{10})				
Maximum 24-Hour Concentration ($\mu g/m^3$)		62	70	87
Number of Samples		60	57	60
Number of Samples Exceeding State Standard	> 50 $\mu g/m^3$	1	10	8
Number of Samples Exceeding Federal Standard	> 150 $\mu g/m^3$	0	0	0
Ultra-Fine Particulates ($PM_{2.5}$)				
Maximum 24-Hour Concentration ($\mu g/m^3$)		30.2	53.7	48.9
Annual Arithmetic Mean ($\mu g/m^3$)		11.4	11.28	12.4
Number of Samples Exceeding Federal 24-Hour Standard	> 35 $\mu g/m^3$	0	1	5

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

4.3.3.3 Air Pollutant Emissions Generated by Existing Activities

The approximately 28.3-acre Project site is currently vacant and other than possible generation of fugitive dust during wind events, is not a substantive source of air pollutant emissions.

4.3.4 REGULATORY BACKGROUND

4.3.4.1 Federal Regulations

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_x, SO_2, PM_{10}, and lead. The U.S. 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 U.S. EPA also establishes emission standards for vehicles

sold in states other than California. Automobiles sold in California must comply with stricter CARB emission requirements.

The Federal Clean Air Act (CAA), enacted in 1955, has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the National Ambient Air Quality Standards (NAAQS), and specifies Standards compliance dates. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for areas noncompliant with the NAAQS. SIPs must include pollution control measures demonstrating timely Standards compliance.

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 (Non-Attainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$.

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, NO_2, NO_3) which are emitted as byproducts of the combustion process.

4.3.4.2 California Regulations

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal

CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the Basin because they are not considered a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the SCAQMD, regulate air pollutant emissions generated by commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- A District-permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NO_x, CO and PM_{10}. However, air basins may use alternative emission reduction strategy

that achieves a reduction of less than five percent per year under certain circumstances.

4.3.4.3 Regional Air Quality Management Planning

Currently, the NAAQS and CAAQS are exceeded in most parts of the Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided subsequently within the analysis discussion in this Section.

4.3.5 REGIONAL AIR QUALITY TRENDS

SCAQMD is the agency responsible for regulating stationary air pollution sources within the Basin.[3] To these ends, SCAQMD develops comprehensive plans and regulatory programs for the region in order to attain federal air quality standards by dates specified under federal law. SCAQMD responsibilities also include attainment of state air quality standards at the earliest achievable date, employing reasonably available control measures.

SCAQMD rule development through the 1970s and 1980s realized substantial improvement in Basin air quality. Subsequent SCAQMD pollution prevention and control programs developed during the 1990s relied on: (i) development and application of cleaner technologies; (ii) add-on emission controls; and (iii) uniform CEQA review throughout the Basin. Industrial-source air pollutant emissions within the Basin have been significantly reduced through this approach. Additionally, Basin-wide vehicular-source emissions have been reduced by technologies implemented at the state level by the California Air Resources Board (CARB).

[3] Separately, the California Air Resources Board (CARB) regulates mobile-source air pollutants within the Basin.

4.3.5.1 Criteria Pollutants Reduced Basin-wide

Air Quality Management Plans (AQMPs) prepared and periodically updated by SCAQMD establish air quality attainment targets and related strategies intended to achieve federal and state air quality standards. The Basin's historical improvement in air quality since the 1970's is the direct result of the comprehensive, multi-year air pollution reduction strategies outlined in the AQMP(s), and by utilizing uniform CEQA review throughout the Basin. Under the AQMPs, Basin-wide Ozone, NO_x, VOC, and CO emissions have demonstrably decreased since 1975; with continuing substantive decreases anticipated through 2020.

Diminished air pollutant emissions with the Basin are primarily the result of replacement of older vehicles with newer more fuel-efficient and/or alternative fuel vehicles; and increasingly effective motor vehicle emissions controls, including evaporative emissions controls. Because of the mandated controls on motor vehicles and the replacement of older polluting vehicles, although vehicle miles traveled in the Basin continue to increase, NO_x and VOC levels continue to decrease. NO_x emissions resulting from electric power generation have also decreased, largely due to use of cleaner fuels and renewable energy. Relative decreases in ambient levels of Ozone, particulate matter (PM_{10} and $PM_{2.5}$), and CO are evident Basin-wide. Ozone air quality in the Basin has improved substantially over historic conditions. For example:

- During the 1960s, maximum 1-hour concentrations exceeded 0.60 ppm. Currently, maximum measured concentrations approximate 0.20 ppm or less;

- The 2007 peak 8-hour indicator value for Ozone was 42 percent lower than the 1988 value;

- The 2008 three-year average of the maximum 8-hour concentration for Ozone was over 41 percent lower than in 1990; and

- The number of days that the Basin Ozone levels exceeded state and federal standards has also declined dramatically.

Trends for particulate matter emissions (PM_{10} and $PM_{2.5}$) also show an overall improvement when compared to historic conditions. Direct emissions of PM_{10} have remained somewhat constant in the Basin and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area-wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions. Despite the overall decrease, ambient concentrations still exceed the State annual and 24-hour PM_{10} standards. The Basin is also currently designated as nonattainment under the State and national $PM_{2.5}$ standards. Measures adopted under the Basin $PM_{2.5}$ State Implementation Plan (SIP), as well as programs to reduce ozone and diesel particulate matter (DPM) effect reductions in regional ambient $PM_{2.5}$ levels.

CO concentrations in the Basin have also decreased markedly when compared to past conditions — evidenced by a more than 72 percent in the peak 8-hour CO indicator since 1988. The number of CO exceedance days has also declined. During 1988 there were 73 days above the State standard and 65 days above the national standard. However, since 2003, there were no exceedance days for either standard. The Basin in its entirety is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

4.3.6 STANDARDS OF SIGNIFICANCE

As identified within the *CEQA Guidelines*, air quality impacts would be considered potentially significant if the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors;

- Expose sensitive receptors to substantial pollutant concentrations; or

- Create objectionable odors affecting a substantial number of people.

4.3.6.1 SCAQMD Thresholds

The SCAQMD's CEQA Air Quality Significance Thresholds (Revision: March 2015)[4] indicate that projects in the Basin with emissions exceeding applicable SCAQMD thresholds would be considered as having individually and cumulatively significant air quality impacts. Conversely, air quality impacts for projects not exceeding applicable emissions thresholds would be considered individually and cumulatively less-than-significant. While the final determination of significance thresholds is within the purview of the Lead Agency, the SCAQMD recommends that its regional and local air quality thresholds for regulated pollutants (summarized below) be employed by lead agencies in determining whether criteria air pollutant emissions impacts generated by construction or operations of a given project are significant.

Regional Thresholds

SCAQMD regional significance thresholds for maximum daily emissions of regulated pollutants are listed at Table 4.3-3. Project emissions exceeding these thresholds would be considered potentially significant.

[4] "SCAQMD Air Quality Significance Thresholds." *South Coast Air Quality Management District*. South Coast Air Quality Management District, n.d. Web. June 2016.

Table 4.3-3
Maximum Daily Emissions-Regional Thresholds

Pollutant	Threshold	
	Construction-source	Operational-source
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Carbon Monoxide Concentrations (CO "hot spots") Thresholds

CO "hot spots" are areas carbon monoxide concentrations exceeding national or state air quality standards. CO hotspots typically occur because of excessive vehicular idling, often associated with traffic backups at underperforming intersections or congested roadway links. SCAQMD also recommends an evaluation of potential localized CO "hot spot" impacts for projects, which may adversely affect, or substantially contribute to, level of service impacts along area roadway segments or at area intersections.

Pursuant to SCAQMD thresholds, a project's localized CO emissions impacts would be potentially significant if they exceed the following California standards for localized CO concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm);
- 8-hour CO standard of 9.0 ppm.

Localized Significance Thresholds (LSTs)

LSTs represent the maximum localized emissions concentrations that would not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard (NAAQS or CAAQS) at the nearest residence or sensitive receptor. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less

than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). The SCAQMD states that the Lead Agency may, at the Agency's discretion, employ LSTs as another indicator of significance in air quality impact analyses. SCAQMD Localized Significance Thresholds employed in this analysis are summarized at Table 4.3-4.

Table 4.3-4
Maximum Daily Emissions-Localized Significance Thresholds

Pollutant	Threshold
NOx	371 lbs/day
CO	1,965 lbs/day
PM_{10}	13 lbs/day
$PM_{2.5}$	8 lbs/day

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

4.3.7 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.3.7.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant air quality impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. In this regard, as substantiated in the Initial Study, the Project's potential to create objectionable odors affecting a substantial number of people was previously determined to be less-than-significant. Please refer to EIR Appendix A, Initial Study Checklist Item III., *Air Quality*. All other potential air quality impacts of the Project are discussed below.

4.3.7.2 Impact Statements

Potential construction-source and operational-source air pollutant emissions impacts that would be caused by or result from the Project are considered below. For each topical discussion, potential impacts are evaluated in the context of applicable criteria identified above at Section 4.3.6, *Standards of Significance.*

Potential Impact: ***Conflict with or obstruct implementation of the applicable air quality plan.***

Impact Analysis: The Project site is located within the Basin, which is characterized by relatively poor air quality in the context of NAAQS and CAAQS. The SCAQMD has jurisdiction over an approximately 12,000-square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, and local governments, as well as state and federal agencies to control and reduce Basin air pollutant emissions.

Currently, NAAQS and CAAQS are exceeded in most parts of the Basin. In response, the SCAQMD has developed and adopted a series of Air Quality Management Plans (AQMPs) outlining strategies to achieve state and national ambient air quality standards. AQMPs are periodically updated to reflect technological advances, recognize new or pending regulations, more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

AQMP Consistency

The SCAQMD AQMP, last updated in 2012, incorporates the latest scientific and technical information and planning assumptions; updated emission inventory methodologies for various emissions source categories; and reflects information, plans, and programs presented in the SCAG 2012 Regional Transportation Plan/Sustainable Communities Strategy (2012 RTP). Air quality conditions and trends presented in the 2012 AQMP assume that regional development would occur in accordance with population growth projections identified by SCAG in its 2012 RTP.

The SCAG 2012 RTP in turn derives its assumptions, in part, from general plans of cities located within the SCAG region. Accordingly, if a project is consistent with the development and growth projections reflected in the adopted general plan, it is considered consistent with the growth assumptions in the 2012 AQMP. The 2012 AQMP

further assumes that development projects within the region would implement appropriate strategies to reduce air pollutant emissions, thereby promoting timely implementation of the AQMP.

Criteria for determining consistency with the AQMP are identified at Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD *CEQA Air Quality Handbook* (1993), as listed below. Project consistency with, and support of these criteria is presented subsequently.

- **Criterion No. 1**: The project under consideration would not result in an increase in the frequency or severity of existing NAAQS/CAAQS air quality violations or cause or contribute to new NAAQS/CAAQS violations; or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- **Criterion No. 2**: The project under consideration would not exceed the assumptions in the AQMP in 2011 or increments based on the years of Project build-out phase.

Criterion No. 1

The CAAQS and NAAQS comprise, and are reflected in, the SCAQMD Localized Significance Thresholds (LSTs) described within this Section. As discussed subsequently in this Section, the Project LST analysis substantiates that Project construction-source emissions and operational-source emissions would not exceed applicable LSTs, and therefore would not violate NAAQS or CAAQS Further, the Project would implement applicable best available control measures (BACMs), and would comply with applicable SCAQMD rules, acting to further reduce its already less-than-significant air pollutant emissions. Additionally, Project incorporation of contemporary energy-efficiency/energy conservation technologies and operational programs; and compliance with SCAQMD emissions reductions and control requirements act to reduce stationary-source air emissions. These Project attributes and features are consistent with and support AQMP air pollution reduction strategies and

promote timely attainment of AQMP air quality standards. On the basis of the preceding discussion, the Project is determined to be consistent with the first criterion.

Criterion No. 2

Criterion No. 2 addresses consistency (or inconsistency) of a given project with approved local and regional land use plans, and associated potential AQMP implications. That is, AQMP emissions models and emissions control strategies are based in part on land use data provided by local general plan documentation; and complementary regional plans, which reflect and incorporate local general plan information. Projects that propose general plan amendments may increase the intensity of use and/or result in higher traffic volumes, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. However, if a given project is consistent with and does not otherwise exceed the growth projections in the applicable local general plan, then that project would be considered consistent with the growth assumptions in the AQMP and would not affect the AQMP's regional emissions inventory for the Basin.

The Project does not propose or require any change in City of Wildomar General Plan Land Use designations, nor any increase in development intensity beyond that currently anticipated for the subject site. Because the land uses and development intensities proposed by the Project are consistent with the currently adopted City of Wildomar General Plan, the Project complies with Consistency Criterion No. 2.

AQMP Consistency Conclusion

The Project would not result in or cause NAAQS or CAAQS violations. The Project does not propose or require any change in General Plan Land Use designations, nor any increase in development intensity beyond that currently anticipated for the subject site. The Project would not generate operational-source criteria pollutant emissions not already reflected in the current AQMP regional emissions inventory. Based on the preceding, the Project is considered consistent with the AQMP. The potential for the Project to conflict with or obstruct implementation of the applicable air quality plan is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Violate any air quality standard or contribute substantially to an existing or projected air quality violation.***

Impact Analysis: The latest SCAQMD/California Air Pollution Control Officers Association (CAPCOA)-approved version of the California Emissions Estimator Model (CalEEMod, v2013.2.2) was utilized to estimate Project-related air pollutant emissions levels. Project emissions levels were then compared to applicable SCAQMD thresholds in order to determine if air quality standards would be exceeded; or if Project emissions would contribute substantially to existing or projected air quality violations. Unless otherwise noted, CalEEMod default values and assumptions were applied throughout.

REGIONAL IMPACTS

Construction-Source Air Pollutant Emissions

Project construction activities and sources listed below would generate CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$ emissions.

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

Within the Project construction-source emissions estimates, vehicular emissions generated by construction worker commutes and construction materials deliveries are also reflected.

The approximate Project construction schedule is summarized at Table 4.3-5. Air pollutant emissions based on the construction schedule presented here represents a "worst-case" analysis scenario. That is, should construction occur any time after the

dates presented here, incremental and aggregate construction-source emissions would likely decrease since emission factors for construction equipment would progressively decrease in the future. This is due to the natural turnover of the older vehicle fleet and replacement with more fuel-efficient equipment with enhanced emissions controls; and implementation of more stringent regulations, which collectively act to reduce construction-source (and operational-source) emissions.

A summary of construction equipment use by activity is provided at Table 4.3-6. Construction activities and associated equipment use represents a reasonable approximation of the types and quantity of construction equipment that would be employed on any given day. Modeled maximum daily construction-source air quality impacts reflecting the above information are summarized at Table 4.3-7.

Table 4.3-5
Project Construction Schedule

Activity	Start Date	End Date	Number of Days Total
Site Preparation	06/01/2016	06/14/2016	10
Grading	06/15/2016	07/26/2016	30
Building Construction	07/27/2016	09/19/2017	300
Paving	09/20/2017	10/17/2017	20
Architectural Coating	10/18/2017	11/14/2017	20

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Table 4.3-6
Summary of Construction Equipment Use by Activity

Activity	Equipment Type	Number of Equipment	Hours per day
Site Preparation	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Graders	Graders	2	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	3	8
Building Construction	Cranes	1	8

Table 4.3-6
Summary of Construction Equipment Use by Activity

Activity	Equipment Type	Number of Equipment	Hours per day
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Paving & Site Finishes	Paving Equipment	2	8
	Rollers	2	8
	Pavers	2	8
Architectural Coating	Air Compressors	1	8

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Table 4.3-7
Maximum Daily Construction-Source Air Pollutant Emissions Summary
Without Mitigation (pounds per day)

	Pollutant					
	VOC	**NOx**	**CO**	**SOx**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**187.43**	**54.72**	**42.13**	**0.05**	**21.21**	**12.69**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Level of Significance: Potentially Significant. As shown at Table 4.3-7, maximum daily Project construction-source VOC emissions would exceed applicable SCAQMD regional thresholds. This is a potentially significant impact. It is noted, however, that the impacts stated do not take credit for pollutant emissions reductions achieved through implementation of Best Available Control Measures (BACMs), or reductions achieved through standard regulatory requirements (e.g., SCAQMD Rule 403). To ensure their timely implementation and monitored compliance, application of standard BACMs and mandated SCAQMD rule compliance are restated as construction-source air quality impact mitigation measures. These measures are presented below.

Mitigation Measures:

4.3.1 The following requirements shall be incorporated into Project plans and specifications in order to ensure implementation of SCAQMD Rule 403 and limit fugitive dust emissions:

- *All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 miles per hour;*
- *The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project site 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; and*
- *The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are limited to 15 miles per hour or less.*

4.3.2 Grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling. This requirement is based on the California Air Resources Board regulation in Title 13, Chapter 10, Section 2485, Division 3 of the California Code of Regulations, which imposes a requirement that heavy duty trucks accessing the site shall not idle for greater than five (5) minutes at any location. This measure is intended to apply to construction traffic.

4.3.3 All off-road diesel-powered construction equipment ≥ 150 hp shall meet California Air Resources Board (CARB) Tier 4 emission standards.

4.3.4 Only "Zero-Volatile Organic Compounds" paints (no more than 50 grams/liter of VOC) and/or High Volume Low Pressure (HVLP) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used. To the extent practicable, construction materials that are pre-painted, or that do not require painting should be employed.

Level of Significance after Mitigation: Less-Than-Significant. As indicated at Table 4.3-8, implementation of Mitigation Measures 4.3.1 through 4.3.4 would reduce Project construction-source air pollutant emissions in aggregate, and in so doing would achieve SCAQMD regional thresholds for VOC emissions.

Table 4.3-8
Maximum Daily Construction-Source Air Pollutant Emissions Summary
With Mitigation (pounds per day)

Year	Pollutant					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**70.69**	**54.72**	**42.13**	**0.05**	**10.19**	**6.63**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Operational-Source Air Pollutant Emissions

Stationary/area and mobile sources of air pollutant emissions associated with Project operations are described below. Operational-source air pollutants generated would include VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions.

Area Sources *(other than energy consumption)*

Architectural Coatings

Over time, Project building maintenance activities including application of paints, varnishes, primers, and other surface coatings would generate air pollutant emissions.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form ozone and other photochemically reactive pollutants.

Hearths/Fireplaces

The Project is required to comply with SCAQMD Rule 445, which prohibits the use of wood burning stoves and fireplaces in new development. In order to account for the requirements of this Rule, CalEEMod model estimates were adjusted to remove wood burning stoves and fireplaces.

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel.

Natural Gas and Electricity Consumption

Electricity and natural gas are consumed by almost every project, resulting in generation of criteria pollutant emissions. Because electrical generating facilities for the Project are located outside the region and the Basin, criteria pollutant emissions from offsite generation of electricity is generally excluded from the evaluation of Project energy source emissions, and only natural gas use is considered.

Mobile Sources

Approximately 75 percent of the Project operational source emissions would derive from Project vehicular sources (traffic). Vehicular-source air pollutant emissions impacts are dependent on total daily Project vehicle trip generation, peak-hour Project traffic volumes and Study Area traffic operations The Project Traffic Impact Analysis (*Wildomar Residential Traffic Impact Analysis, City of Wildomar* [Urban Crossroads, Inc.] establishes the basis for trip generation and traffic characteristics employed in his analysis.

Operational Emissions Summary

Maximum daily Project operational-source air pollutant emissions are summarized at Table 4.3-9. Applicable SCAQMD regional significance thresholds are also indicated.

Table 4.3-9
Maximum Daily Operational-Source Emissions Summary
Unmitigated (pounds per day)

Summer Scenario						
Emissions Source	**Emissions (pounds per day)**					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	6.55	0.14	11.68	6.10E-04	0.25	0.25
Energy Combustion	0.05	0.41	0.17	0.00	0.03	0.03
Mobile Sources	3.34	10.54	37.34	0.10	6.90	1.94
Total Maximum Daily Emissions	**9.94**	**11.09**	**49.19**	**0.10**	**7.18**	**2.22**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter Scenario						
Emissions Sources	**Emissions (pounds per day)**					
	VOC	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	6.55	0.14	11.68	6.10E-04	0.25	0.25
Energy Combustion	0.05	0.41	0.17	2.62E-03	0.03	0.03
Mobile Sources	3.25	10.99	34.83	0.09	6.90	1.94
Total Maximum Daily Emissions	**9.85**	**11.54**	**46.68**	**0.09**	**7.18**	**2.22**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Level of Significance: Less-Than-Significant. As indicated at Table 4.3-9, Project maximum daily operational-source emissions would not exceed applicable SCAQMD thresholds, and would therefore be less-than-significant.

Regional Air Quality Impact Summary

- With the application of mitigation, Project maximum daily construction-source emissions would not exceed applicable SCAQMD thresholds and would therefore be considered less-than-significant.
- Unmitigated Project maximum daily operational-source emissions would not exceed applicable SCAQMD thresholds and would therefore be considered less-than-significant.

LOCALIZED IMPACTS

Localized Significance Threshold Analysis

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the national and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, the NAAQS/CAAQS establish Localized Significance Thresholds (LSTs).

LSTs were developed in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. More specifically, to address potential Environmental Justice implications of localized air pollutant impacts, the SCAQMD adopted LSTs indicating whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard at the nearest residence or sensitive receptor. Though not required, lead agencies may employ LSTs as another indicator of significance in air quality impact analyses.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of the project are above or below California Ambient Air Quality Standards (CAAQS). In the case of CO and NO_2, if ambient levels are below the State Standards, a potentially significant impact would occur if project emissions result in an exceedance of one or more of the Standards. For the nonattainment pollutants PM_{10} and $PM_{2.5}$, background ambient concentrations already exceed CAAQS and/or National Ambient Air Quality Standards (NAAQS). LSTs for PM_{10} and $PM_{2.5}$ are therefore based on SCAQMD Rules 403/1303 (construction-source/operational-source emissions respectively) and are established as an allowable change in concentration. Background concentrations are irrelevant.

Emissions Considered/Methodology

LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). The Project LST analysis incorporates, and is consistent with, protocols and procedures established by the SCAQMD *Final Localized Significance Threshold Methodology* (Methodology) (SCAQMD, June 2003). The SCAQMD Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs." Therefore, for purposes of the LST analysis, only "on-site" emissions were considered.

Receptors

Localized air quality impacts were evaluated at the nearest sensitive receptor land use. In the case of the Project, the nearest sensitive receptor is the residential community abutting the southwesterly Project site boundary.[5] Please refer to Figure 4.3-1.

[5] Notwithstanding, the *Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.*" Therefore, LSTs for receptors located at 25 meters were utilized in the analysis.

LEGEND:

Sensitive Receptor Location

N

NOT TO SCALE

Source: Google Earth; Applied Planning, Inc.

Figure 4.3-1
Nearest Sensitive Receptor

Construction-Source Emissions LST Analysis

Construction-source LST impacts for the Project were modeled after AQMD's *Summary of Five Acre Site Example Results By Phase and Equipment*. The maximum daily disturbed-acreage of five acres was used in concert with applicable SCAQMD's LST "Look-up Tables." The Look-up Tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs. This methodology is consistent with recent recommendations made by SCAQMD Staff.

Table 4.3-10 presents the Project's maximum potential localized construction-source emissions impacts at the nearest sensitive receptor. These emissions levels do not reflect implementation of BACMs. As indicated, absent application of BACMs, localized construction-source emissions would exceed SCAQMD LSTs for emissions of PM_{10} and $PM_{2.5}$.

Table 4.3-10
Maximum Construction-Source Localized Emissions Summary
Unmitigated (pounds per day)

	Pollutant			
	NO_x	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**54.60**	**41.11**	**21.00**	**12.60**
SCAQMD Localized Threshold	371	1,965.00	13	8
Threshold Exceeded?	**NO**	**NO**	**YES**	**YES**

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.3.5 *To ensure that localized construction-source emissions do not exceed modeled estimates presented in the AQIA, daily site disturbance during site preparation and grading shall not exceed 5 acres per day. Additionally, BACMs per Mitigation Measures 4.3.1 through 4.3.4 shall be implemented to reduce and control localized emissions.*

Level of Significance after Mitigation: Less-Than-Significant. As indicated at Table 4.3-11, implementation of Mitigation Measure 4.3.5 would reduce localized Project construction-source air pollutant emissions in aggregate, and in so doing would achieve SCAQMD LSTs for PM_{10} and $PM_{2.5}$ emissions.

Table 4.3-11
Maximum Construction-Source Localized Emissions Summary
Mitigated (pounds per day)

	Pollutant			
	NO_x	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**54.6**	**41.11**	**9.98**	**6.58**
SCAQMD Localized Threshold	371	1,965.00	13	8
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Operational-Source Emissions LST Analysis

The Project proposes construction and operation of 140 apartment units. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a proposed project, if the project under consideration includes substantive stationary emissions sources, or attracts mobile sources that may queue or idle for extended periods at the site (e.g., commercial or industrial uses). The Project does propose or require such uses. Accordingly, an operational-source emissions LST analysis is not required.

Level of Significance: Less-Than-Significant.

CO "Hot Spot" Analysis

As discussed below, the Project would not result in potentially adverse localized CO concentrations or "hot spots." Adverse localized CO concentrations ("hot spots") are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain

vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentrations in the Project vicinity have declined over time, and have not violated applicable AAQS in the last three years of record.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. When the SCAQMD CEQA Handbook was first prepared in 1993, the Basin was designated nonattainment under the California AAQS and National AAQS for CO. As identified in the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) and subsequently within the SCAQMD's 2003 AQMP, peak carbon monoxide concentrations in the Basin were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection.

To establish a more accurate record of baseline CO concentrations affecting the Basin, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon traffic periods. This hot spot analysis did not predict any violation of CO standards. It can therefore be reasonably concluded that projects (such as the Project) that are not subject to the extremes in vehicle volumes and vehicle congestion that was evidenced in the 2003 Los Angeles hot spot analysis would similarly not create or result in CO hot spots.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. The Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix in order to generate a significant CO impact.

The Project considered herein would not produce the volume of traffic required to generate a CO hotspot, either in the context of the 2003 Los Angeles hot spot study, or

based on representative BAAQMD CO threshold considerations. Therefore, CO hotspots are not an environmental impact of concern for the Project.

Level of Significance: Less-Than-Significant.

Localized Air Quality Impact Analysis Summary

As substantiated by the preceding discussions, as mitigated, maximum Project localized emissions would not exceed applicable SCAQMD LSTs at the nearest sensitive receptor. Nor would the Project create or result in localized CO hot spots. On this basis, the potential for Project localized emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Expose sensitive receptors to substantial pollutant concentrations.***

Impact Analysis: Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. As concluded in the above discussion of Localized Air Quality Impacts, the sensitive receptors nearest the Project site would not be subject to emissions exceeding SCAQMD LSTs. Nor would the Project create or result in localized CO hot spots. On this basis, the potential for the Project to expose sensitive receptors to substantial pollutant concentrations is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or***

state ambient air quality standard, including releasing emissions, which exceed quantitative thresholds for ozone precursors.

Impact Analysis: The Project area is designated as an extreme non-attainment area for ozone; a serious non-attainment area for PM_{10}; and a non-attainment area for $PM_{2.5}$. Germane to these regional non-attainment conditions, the Project-specific evaluation of emissions presented in this Section indicates that with application of mitigation, Project construction-source; and further that unmitigated operational-source emissions would not exceed applicable SCAQMD regional significance thresholds. The fact that the Project emissions would not exceed applicable SCAQMD thresholds indicates that the Project impacts in these regards would be less-than-significant on an individual basis, and under SCAQMD significance criteria, would be cumulatively less-than-significant.

Level of Significance: Less-Than-Significant.

4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

4.4 GLOBAL CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

Abstract

This Section identifies and addresses potential greenhouse gas (GHG) emissions and global climate change impacts that may result from the Project. More specifically, the GHG emissions impacts analysis evaluates the potential for the Project to cause or result in the following impacts:

- *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or*

- *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

On the basis of the analysis presented in the Project GHG Analysis as summarized herein, the Project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The Project's potential GHG emissions impacts are therefore determined to be less-than-significant.

4.4.1 INTRODUCTION

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the Earth with respect to temperature, precipitation, and storms. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Most scientists believe that recent increases in greenhouse gases resulting from human activity and industrialization have accelerated and amplified GCC effects.

An individual development proposal, such as the Project considered herein, cannot generate enough greenhouse gas (GHG) emissions to effect a discernible change in global climate. However, the Project may contribute to the global climate change through its increment of greenhouse gases in combination with the cumulative increase in GHGs from all other sources, which when taken together constitute potential influences on global climate change. This Section summarizes the potential for the Project GHG emissions to have a potentially significant environmental impact. Detailed analysis and substantiation of the Project's potential GHG/GCC impacts is presented in *Wildomar Residential Greenhouse Gas Analysis*, *City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015 (Project GHG Analysis, EIR Appendix D).

4.4.2 EXISTING CONDITIONS

4.4.2.1 Global Climate Change

Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2 (Carbon Dioxide), N_2O (Nitrous Oxide), CH_4 (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the atmosphere, but prevent heat from escaping, thus warming the atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. According to the California Air Resources Board (CARB), the climate change that is currently in effect

differs from previous climate changes in both rate and magnitude (CARB, 2004, *Technical Support document for Staff Proposal Regarding Reduction of Greenhouse Gas Emissions from Motor Vehicles*).

4.4.2.2 Greenhouse Gases

Gases that trap heat in the atmosphere are often referred to as greenhouse gases or GHGs. Greenhouse gases are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently. The accumulation of these gases in the atmosphere is considered to be the cause for the observed increase in the Earth's temperature.

Although California's rate of growth of greenhouse gas emissions is slowing, the state is still a substantial contributor. In 2004, the state is estimated to have produced 492 million gross metric tons of carbon dioxide equivalent greenhouse gas emissions. For the purposes of this analysis, Project-related emissions of carbon dioxide, methane, and nitrous oxide were evaluated because these gases are the primary contributors to global climate change from development projects. Emissions from Project facilities and stationary sources as well as emissions generated by Project-related vehicular traffic were included in the evaluation of potential GHG emissions impacts.

Greenhouse gases exhibit varying global warming potentials (GWPs). GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is utilized as the baseline GWP reference gas, and thus has a GWP of 1. The atmospheric lifetime and GWP of greenhouse gases typically generated by urban development, and that would be generated by the Project, are summarized at Table 4.4-1.

Table 4.4-1
Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide	50 - 200	1
Methane	12 (+/-3)	25
Nitrous Oxide	120	298

Source: *Wildomar Residential Greenhouse Gas Analysis*, City of Wildomar (Urban Crossroads, Inc.) November 30, 2015.

The following discussions summarize and describe commonly occurring greenhouse gases, their sources, and general characteristics.

Water Vapor

Water vapor (H_20) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water 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 water is involved is critically important to projecting future climate change.

As the temperature of the atmosphere rises, more water 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 water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water 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 water 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. For example, increased atmospheric water vapor translates to increased cloud cover and increased reflection of

incoming solar radiation (thus diminishing potential radiant heating of the Earth's surface).

The main source of water vapor is evaporation from the oceans (approximately 85 percent). Other sources include evaporation from other water bodies; sublimation (change from solid to gas) from sea ice and snow; and transpiration from plant leaves.

Carbon Dioxide

Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide 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. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

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, CO_2 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 carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

Methane

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs. No health effects are known to occur from exposure to methane.

Methane 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 methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas. Nitrous oxide can cause dizziness, euphoria, and slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, 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 racecars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

Chlorofluorocarbons

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_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).

CFCs have no natural source; and 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.

Hydrofluorocarbons

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. The HFCs with the greatest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. Not until the PFCs reach the mesosphere, about 60 kilometers above Earth, do very high-energy ultraviolet rays from the sun destroy them. 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_2F_6). The U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900). The U.S. EPA indicates that concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride 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.

4.4.2.3 Greenhouse Gases Emissions Inventories

Global

Worldwide anthropogenic (man-made) GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Man-made GHG emissions data for Annex I nations are available through 2011. Global GHG emissions are summarized at Table 4.4-2. As indicated, global emissions totaled approximately 25,285,543 gigagrams (Gg) Carbon Dioxide Equivalent (CO_2e) for the Year 2011. The GHG emissions in more recent years may differ from the inventories presented in Table 4.4-2; however, the data is representative of currently available inventory data.

National

Table 4.4-2 summarizes 2011 GHG emissions inventories by major source countries. As indicated at Table 4.4-2, the United States was the number two producer of GHG emissions in 2011. The primary greenhouse gas emitted by human activities in the United States was CO_2, representing approximately 83 percent of U.S. total greenhouse gas emissions. Carbon dioxide from fossil fuel combustion accounted for approximately 78 percent of U.S. GHG emissions.[1]

[1] Project GHG Analysis, p. 11.

Table 4.4-2
Global GHG Emissions by
Major GHG Source Countries-2011

Source Countries	GHG Emissions (Gg CO_2e)
China	10,975,500
United States	6,665,700
European Union (27 member countries)	4,544,224
Russian Federation	2,322,220
India	3,013,770
Japan	1,344,580
Total	**28,865,994**

Source: *Wildomar Residential Greenhouse Gas Analysis*, City of Wildomar (Urban Crossroads, Inc.) November 30, 2015.

State of California

CARB compiles GHG inventories for the State of California. CARB GHG inventory data indicates that in 2013 (the most recent inventory of record) California GHG emissions totaled approximately 459.3 Million Metric Tons of Carbon Dioxide Equivalent ($MMTCO_2e$).[2] "In 2010, California accounted for 6.8 percent of all emissions in the country [United States], and ranked second highest among the states with total emissions of 453 $MMTCO_2e$, only behind Texas with 763 $MMTCO_2e$. From a per capita standpoint, California has the 45th lowest emissions with 12.1 $MMTCO_2e$ /person in 2010."[3]

City of Wildomar

Wildomar is a member agency of the Western Riverside Council of Governments (WRCOG). WRCOG has prepared a Subregional Climate Action Plan (Subregional CAP) for its member agencies. As part of its Subregional CAP efforts, WRCOG prepared a community-wide 2010 GHG emissions inventory for the City of Wildomar.

[2] Cal EPA. "California Greenhouse Gas Emission Inventory - 2015 Edition." *California's Greenhouse Gas Emission Inventory*. Cal EPA, n.d. Web. 29 Oct. 2015.
[3] California Environmental Protection Agency. Air Resources Board. *California's Greenhouse Gas Emission Inventory - 2014 Edition* (May 2014), p. 28.

The WRCOG greenhouse gas inventory estimates the City's year 2010 GHG emissions at 176,046 metric tons CO2e.[4]

Project Site Greenhouse Gas Emissions

The Project site is currently undeveloped and is not a substantive source of GHG emissions.

4.4.2.4 Effects of Global Climate Change

Climate

Scenarios of Climate Change in California: An Overview (California Climate Change Center) February 2006 (Climate Scenarios Report) is generally instructive about the potential effects of Global Climate Change within California. The Climate Scenarios Report employs a range of emissions scenarios developed by the Intergovernmental Panel on Climate Change (IPCC) to project a series of potential "warming ranges" that may occur in California during the 21st century: lower warming range (3.0-5.5°F); medium warming range (5.5-8.0°F); and higher warming range (8.0-10.5°F). The Climate Scenarios Report then presents an analysis of future climatic conditions in California under each warming range, that while uncertain, are descriptive of potential impacts of global climate change trends in California.

California Climate Adaptation Strategy (California Natural Resources Agency) August 5, 2009 (Climate Adaptation Strategy) presents a range of potential vulnerabilities arising from climate change including: temperature extremes, sea level rise, wildfires, floods, droughts, and altered precipitation patterns. The Climate Adaptation Strategy responds to the Executive Order S-13-2008 requiring state agencies to develop strategic responses to anticipated climate impacts.

[4] WRCOG Subregional Climate Action Plan http://www.wrcog.cog.ca.us/uploads/media_items/wrcog-climate-action-plan-final-draft-april-2014.original.pdf

The Climate Scenarios Report and Climate Adaptation Strategy indicate that substantial temperature increases arising from increased GHG emissions could result in a broad range of impacts to the people, economy, and environment of California. Impacts of global climate change in California have the potential to include, but are not limited to, the following.

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 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°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 network of man-made reservoirs and aqueducts captures and transports water throughout the state. 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 may be years with marginal insufficient snow for skiing and snowboarding, as was evidenced for the period 2013–2014.

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 source of fresh water for the state.

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 they need. Although higher CO_2 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 O_3 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 global climate change 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 global climate change could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

Global climate change 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 (e.g., precipitation, winds, temperature, terrain, and vegetation) future risks would likely not be uniform throughout the state.

Moreover, continued global climate change 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 global climate change.

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. Increased sea level elevations of this magnitude would inundate low-lying coastal areas with salt water, 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 to 14 inches.

4.4.2.5 GHG Health Effects

Health effects of greenhouse gases are summarized below.

Water Vapor

There are no known direct health effects related to water vapor at this time. Water vapor may however act as a transport mechanism for pollutants to enter the human body.

Carbon Dioxide

The National Institute for Occupational Safety and Health (NIOSH) has determined that high concentrations of carbon dioxide can result in health effects including headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. Current concentrations of carbon dioxide in the earth's atmosphere are estimated at approximately 370 ppm, while 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 (NIOSH 2005).

Methane

Methane is extremely reactive with oxidizers, halogens, and other halogen-containing compounds, may displace oxygen in an enclosed space and act as an asphyxiant (Occupational Safety and Health Administration [OSHA] 2003).

Nitrous Oxide

Nitrous Oxide is often referred to as laughing gas; it is a colorless greenhouse gas. The health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations, and in extreme cases of elevated concentrations nitrous oxide can also cause brain damage (OSHA 1999).

Chlorofluorocarbons

CFCs are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, 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.

Fluorinated Gases (HFCs, PFCs, SF_6)

High concentrations of fluorinated gases can also result in adverse health effects such as asphyxiation, dizziness, headache, cardiovascular disease, cardiac disorders, and in extreme cases, increased mortality (NIOSH 1989, 1997).

4.4.2.6 Regulatory Setting

Western Regional Council of Governments Subregional Climate Action Plan (WRCOG Subregional CAP, WRCOG CAP)

WRCOG, in coordination with its member agencies, has prepared a Subregional Climate Action Plan (CAP). The WRCOG CAP is the result of an analysis of existing GHG reduction programs and policies that have already been implemented in the subregion and of applicable best practices from other regions to assist in meeting the 2020 subregional reduction target. The resulting GHG reduction measures

presented in the WRCOG CAP were chosen by the subregion based on their GHG reduction potential, cost benefit characteristics, funding availability, and feasibility of implementation. The level of implementation of each measure was determined by each community; however, this CAP presents the results collectively, demonstrating the collaborative effort and partnership that will facilitate implementation (WRCOG CAP, p., 1-3). The City of Wildomar is a participant in the WRCOG CAP.

The WRCOG CAP identifies an emissions reduction target of 15% below 2010 levels by 2020 for the City of Wildomar and other cities within the sub region. WRCOG's target is consistent with the AB 32 target and ensures that cities within the WRCOG will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions. Because WRCOG's CAP addresses GHG emissions reductions and is consistent with the requirements of AB 32 and international efforts to reduce GHG emissions, compliance with the CAP fulfills the description of mitigation found in the *CEQA Guidelines*.

Western Regional Climate Action Initiative (WCI)

The Western Regional Climate Action Initiative (WCI) is a partnership among seven states, including California, and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15% below 2005 levels by 2020. When the WCI adopted this goal in 2007, it estimated that this would require 2007 levels to be reduced worldwide between 50% and 85% by 2050. California is working closely with the other states and provinces to design a regional GHG reduction program that includes a cap-and-trade approach.

EPA Actions and the Clean Air Act

Coinciding the 2009 meeting in Copenhagen, on December 7, 2009, the U.S. Environmental Protection Agency (EPA) issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of

greenhouse gases. The Endangerment Finding notes that greenhouse gas emissions threaten public health and welfare and are subject to regulation under the Clean Air Act. Current EPA GHG emissions initiatives, plans, and standards can be accessed at: http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html.

Vehicle Standards

Other regulations have been adopted to address vehicle standards including United States Environmental Protection Agency (USEPA) and National Highway Traffic Safety Administration (NHTSA) joint rulemaking for vehicle standards. Recent actions are summarized below:

- USEPA and NHTSA have issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal greenhouse gas and fuel economy standards for model year 2017–2025 light-duty vehicles. The NHTSA intends to set standards for model years 2022–2025 in a future rulemaking.

- USEPA and the NHTSA have established enhanced fuel economy and GHG standards for medium- and heavy-duty vehicles, which applies to vehicles from model years 2014–2018.

- USEPA and the NHTSA have proposed enhanced fuel economy and GHG standards for medium- and heavy-duty vehicles for model years 2018 and beyond.

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA, Act) was signed into law. Among other key measures, the Act promotes nation-wide GHG emissions reductions from mobile and non-mobile sources.

California Title 24 Energy Standards

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency, and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The Energy Commission's most recent, 2013 Building Energy Efficiency Standards, took effect on January 1, 2014. The *2013 Building Energy Efficiency Standards for Residential and Nonresidential Buildings* Abstract summarizes key attributes and anticipated environmental benefits of the 2013 Standards, as excerpted below:

> The 2013 Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings, and include requirements that will enable both demand reductions during critical peak periods and future solar electric and thermal system installations. The most significant efficiency improvements to the residential Standards are proposed for windows, envelope insulation and HVAC system testing. The most significant efficiency improvements to the nonresidential Standards are proposed for lighting controls, windows, unitary HVAC equipment and building commissioning. New efficiency requirements for process loads such as commercial refrigeration, data centers, kitchen exhaust systems and compressed air systems are included in the nonresidential Standards. The 2013 Standards include expanded criteria for acceptance testing of mechanical and lighting systems, as well as new requirements for code compliance data to be collected in a California Energy Commission-managed repository.
>
> The 2013 Standards also include updates to the energy efficiency divisions of the California Green Building Code Standards (Title 24, Part 11). A set

> of prerequisites has been established for both the residential and nonresidential Reach Standards, which include efficiency measures that should be installed in any building project striving to meet advanced levels of energy efficiency. The residential Reach Standards have also been updated to require additional energy efficiency or on-site renewable electricity generation to meet a specific threshold of expected electricity use. Both the residential and nonresidential Reach Standards include requirements for additions and alterations to existing buildings.
>
> Energy Commission staff estimates that the implementation of the 2013 Building Energy Efficiency Standards may reduce statewide annual electricity consumption by approximately 613 gigawatt-hours per year, electrical peak demand by 195 megawatts, and natural gas consumption by 10 million therms per year. The potential effect of these energy savings to air quality may be a net reduction in the emission of nitric oxide by approximately 59 tons per year, sulfur oxides by 2.4 tons per year, carbon monoxide by 41 tons per year and particulate matter less than 2.5 microns in diameter by 10 tons per year. Additionally, Energy Commission staff estimates that the implementation of the 2013 Standards may reduce statewide carbon dioxide equivalent emissions by 215 thousand metric tons per year (*2013 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*, Abstract).

The 2013 Standards also include updates to the energy efficiency divisions of the California Green Building Code Standards, (CALGreen Code, Title 24, Part 11). The stated purpose of the CALGreen Code is to "improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality" (2013 CALGreen Code, p. 1). The

CALGreen Code is not intended to substitute or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). The CBSC has released the 2010 California Green Building Standards Code on its web site. Unless otherwise noted in the regulation, all newly constructed buildings in California are subject of the requirements of the CALGreen Code.

California Assembly Bill No. 1493 (AB 1493)

California Assembly Bill 1493 requires CARB to develop and adopt the nation's first greenhouse gas emission standards for automobiles. The Legislature declared in AB 1493 that global warming was a matter of increasing concern for public health and environment in California; and stated that technological solutions to reduce greenhouse gas emissions would stimulate the California economy and provide jobs.

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) adding GHG emission standards to California's existing motor vehicle emission standards in 2004. Amendments to CCR Title 13 Sections 1900 (CCR 13 1900) and 1961 (CCR 13 1961) and adoption of Section 1961.1 (CCR 13 1961.1) require automobile manufacturers to meet fleet average GHG emission limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes beginning with the 2009 model year. Emission limits are further reduced each model year through 2016. Subsequent lawsuits filed against CARB prevented enforcement of CCR 13 1900 and CCR 13 1961 as amended by AB 1493 and CCR 13 1961.1.

Litigation against CARB culminated in the USEPA and the U.S. Department of Transportation adoption of a federal program to reduce greenhouse gases and improve fuel economy from passenger vehicles in order to achieve greenhouse gas benefits equivalent to, or greater than, benefits that would be realized pursuant to AB 1493 regulations. Additionally, the State of California committed to (1) revise its standards to allow manufacturers to demonstrate compliance with the fleet-average GHG emission

standard by "pooling" California and specified State vehicle sales; (2) revise its standards for 2012–2016 model year vehicles so that compliance with USEPA-adopted GHG standards would also comply with California's standards; and (3) revise its standards, as necessary, to allow manufacturers to use emissions data from the federal Corporate Average Fuel Economy (CAFE) program to demonstrate compliance with the AB 1493 regulations.

Executive Order S-3-05

Executive Order S-3-05 proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total greenhouse gas emission targets. Specifically, emissions are to be reduced to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce greenhouse gas emissions to the target levels. The Secretary also is required to submit biannual reports to the Governor and state Legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of the CalEPA created a Climate Action Team (CAT) made up of members from various state agencies and commission. CAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government and community actions, as well as through state incentive and regulatory programs.

Executive Order B-30-15

On April 29, 2015, the Governor issued Executive Order B-30-15 establishing a statewide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. Senate Bill 32, signed by the Governor in September 2016 incorporates the provisions of Executive Order B-30-15 as new Section under the California Global Warming Solutions Act of 2006 (California Health & Safety Code § 38566). CARB is

currently updating the AB 32 Scoping Plan to reflect the 2030 target as established in Executive Order B-30-15.

California Assembly Bill 32 (AB 32)

California Assembly Bill 32 (AB 32), the California Climate Solutions Act of 2006, requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. To date, this reduction is being accomplished through an enforceable phased statewide cap on GHG emissions. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 indicates further that regulations adopted in response to AB 1493 should address GHG emissions from vehicles. Assembly Bill 32 contingencies also include provisions stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that CARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

In November 2007, CARB completed its estimates of 1990 GHG levels. Net emission 1990 levels were estimated at 427 million metric tons CO_2 equivalent ($MMTCO_2e$). Accordingly, 427 $MMTCO_2e$ was established as the emissions limit for 2020. In comparison, CARB's estimate for baseline GHG emissions was 473 $MMTCO_2e$ for 2000 and 532 $MMTCO_2e$ for 2010. "Business as usual" conditions (estimated GHG emissions levels absent CARB regulatory actions) for 2020 were projected to be 596 $MMTCO_2e$.

In December 2007, CARB approved a regulation for mandatory reporting and verification of GHG emissions for major sources. This regulation covered major stationary sources such as cement plants, oil refineries, electric generating facilities/providers, and co-generation facilities, which comprise 94 percent of the point source CO_2 emissions in the State.

On December 11, 2008, CARB adopted a Scoping Plan (CARB Scoping Plan, Scoping Plan) to reduce GHG emissions to 1990 levels. The Scoping Plan's recommendations for reducing GHG emissions to 1990 levels by 2020 include emission reduction measures, including a cap-and-trade program linked to Western Climate Initiative partner jurisdictions, green building strategies, recycling and waste-related measures, as well as Voluntary Early Actions and Reductions. In order to achieve 2020 greenhouse gas emissions reductions targets, the CARB Scoping Plan indicates that implementation of individual measures should have been initiated no later than January 1, 2012. The Project Greenhouse Gas Analysis (Project GHG Analysis, EIR Appendix D) summarizes estimated year 2020 GHG emissions reductions from regulations and programs outlined in the Scoping Plan.

On May 22, 2014, CARB approved the First Update to the Scoping Plan. The Update recalculates 1990 GHG emissions using new global warming potentials identified in the IPCC Fourth Assessment Report released in 2007. Using those GWPs, the 427 MTCO2e 1990 emissions level and 2020 GHG emissions limit identified in the 2008 Scoping Plan would be slightly higher, at 431 MTCO2e. Based on the revised 1990 GHG emissions estimates and the revised 2020 emissions level projections, achieving the 1990 emissions level in 2020 would require a reduction of 78 MTCO2e (down from 509 MTCO2e), or approximately 15.3 percent (down from 28.5 percent), from the BAU condition. Although CARB has released an Update to the Scoping Plan and reduction targets from BAU, citation to the previous 28.5% reduction from BAU is appropriate since the modeling tools available are not able to easily disaggregate effects of renewable portfolio standards and Pavley requirements that are now included in the revised BAU

scenario (Project GHG Analysis, p. 24). CARB is currently updating the AB 32 Scoping Plan to reflect the 2030 target as established in Executive Order B-30-15.

California Senate Bill No. 1368

In 2006, the State Legislature adopted Senate Bill 1368 (SB 1368), which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a greenhouse gas emission performance standard (EPS) for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than five years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Coal-fired plants cannot meet this standard because such plants emit roughly twice as much carbon as combined cycle natural gas power plants.

SB 1368 effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California energy demand.

CEQA Guidelines

CEQA Guidelines § 15064.4(a) states "A lead agency shall have discretion to determine, in the context of a particular project, whether to: (1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use . . .; or (2) Rely on a qualitative analysis or performance based standards."

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (See: *CEQA Guidelines* Section 15130(f)).

4.4.3 GCC Significance Thresholds and Performance Standards

4.4.3.1 CEQA Guidelines

The *CEQA Guidelines* do not identify a threshold of significance for greenhouse gas emissions, nor do they prescribe assessment methodologies or specific mitigation measures. Rather, the *Guidelines* call for a "good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project" (*CEQA Guidelines* §15064.4 [a]).

The *Guidelines* encourage lead agencies to consider many factors in performing a CEQA analysis and preserve lead agencies' discretion to make their own determinations based upon substantial evidence. The *Guidelines* also encourage public agencies to make use of programmatic mitigation plans and programs from which to tier when they perform individual project analyses.

4.4.3.2 South Coast Air Quality Management District Recommendations

In April 2008, the South Coast Air Quality Management District (SCAQMD), in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, convened a "GHG CEQA Significance Threshold Working Group." The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

In its most recent guidance, the SCAQMD Working Group has proposed a screening-level threshold of 3,000 MTCO2e/year for all land use types. Alternatively the following land-use-specific screening-level thresholds may be employed: 1,400 MTCO2e for commercial projects, 3,500 MTCO2e for residential projects, or 3,000 MTCO2e for mixed-use projects. Pursuant to the Working Group threshold guidance, if GHG emissions are less than the applicable screening-level threshold, project-level and cumulative GHG emissions would be less-than-significant.

4.4.3.3 City of Wildomar

The City of Wildomar has not adopted a numeric threshold for determining the significance of project-level greenhouse gas (GHG) emissions impacts. For the purposes of this analysis, the above-noted SCAQMD screening-level threshold of 3,000 MTCO2e/year is employed in determining the significance Project GHG emissions. Project GHG emissions not exceeding the 3,000 MTCO2e/year screening level threshold would be considered less-than-significant.

4.4.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.4.4.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant air quality impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. In this regard, as substantiated in the Initial Study, all Project GHG/GCC impacts are considered potentially significant and are discussed below.

4.4.5 IMPACT STATEMENTS

Potential Impact: ***Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.***

Impact Analysis:

Overview

CEQA Guidelines 15064.4 (b) (1) states that a Lead Agency may employ a model or methodology of its choice to quantify greenhouse gas emissions associated with a project. The SCAQMD-approved California Emissions Estimator Model (CalEEMod, Model) is accepted by the Lead Agency for modeling of greenhouse gas (GHG) emissions, and was employed in the analysis of Project GHG emissions impacts.

CalEEMod calculates air pollutant/GHG emissions from direct and indirect sources, and quantifies pollutant/GHG emissions reductions achieved from mitigation measures. The Model includes and evaluates GHG emissions from the following source categories: construction, area, energy, mobile, waste, water. Considerations applicable to each of these categories are addressed briefly in the following discussions.

Construction-Source GHG Emissions

Project construction activities would generate the GHG emissions of CO_2 and CH_4. Construction-source GHG emissions are quantified and amortized over the life of the Project. To this end, and consistent with SCAQMD-recommended methodology, greenhouse gas emissions generated by Project construction activities were totaled and then amortized over the estimated 30-year Project life.

Operational-Source GHG Emissions

As described below, Project operational GHG emissions sources would include: area sources, on-site equipment operations; building energy use; water supply, treatment and distribution (water use); solid waste management; and mobile-sources (vehicular) energy consumption.

Area Sources

Area Sources (generalized activities associated with landscape and building maintenance) would generate GHG emissions over the life of the Project.

Building Energy Use

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. Unless otherwise noted, CalEEMod default parameters were employed in estimating GHG emissions generated by building energy use.

Water Supply, Treatment and Distribution (Water Use)

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water is determined by the volume of water used, as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were employed in estimating GHG emissions generated by water supply, treatment and distribution activities and processes.

Solid Waste Management

Commercial land uses will result in the generation and disposal of solid waste. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. Unless otherwise noted, CalEEMod default parameters were employed in estimating GHG emissions generated by solid waste management activities and processes.

Mobile-Source Emissions

GHG emissions would also be generated by Project-related mobile sources. These mobile-source emissions would result from daily operation of motor vehicles by patrons and employees accessing the Project site. Project mobile-source emissions are dependent on overall daily vehicle trip generation. Trip characteristics available from the Project Traffic Impact Analysis (EIR Appendix B) were utilized in this analysis.

SCAQMD Threshold Significance

As summarized at Table 4.4-3, Project GHG emissions total an estimated 1,641.29 MTCO2e/year and would therefore not exceed the SCAQMD 3,000 MTCO2e/year screening-level threshold and would be less-than-significant.

Table 4.4-3
Project GHG Emissions Summary

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related emissions amortized over 30 years	25.08	4.15E-03	--	25.17
Area	35.98	3.01E-03	6.20E-04	36.23
Energy	208.62	8.52E-03	3.01E-03	209.73
Mobile Sources	1,285.76	0.04	0	1,286.64
Waste	13.07	0.77	--	29.30
Water Usage	45.60	0.30	0.01	54.22
Total CO_2E (All Sources)	**1,641.29**			
SCAQMD Screening Level Threshold	**3,000**			
Screening Level Threshold Exceeded?	**NO**			

Source: *Wildomar Residential Greenhouse Gas Analysis,* City of Wildomar (Urban Crossroads, Inc.) November 30, 2015.

Level of Significance: Less-Than-Significant.

CEQA Guidelines Significance

The following discussions support the conclusion that the Project's GHG emissions impacts are less-than-significant based on *CEQA Guidelines* § 15064.4(b) GHG/GCC Significance Factors.

FACTOR NO. 1: *The extent to which the Project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.*

No substantive GHG emissions are generated at the currently undeveloped Project site. Project GHG emissions would total approximately 1,641.29 MTCO2e/year. This is substantially less than the 3,000 MTCO2e/year screening level threshold established by the SCAQMD. Projects generating less than 3,000 MTCO2e/year are not considered substantive sources of GHG emissions. On this basis, the Project would not substantially increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

FACTOR NO. 2: *Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.*

Project GHG emissions would not exceed a threshold of significance that the lead agency determines applies to the Project. In this respect, Project GHG emissions would not exceed SCAQMD's 3,000 MTCO2e screening level threshold. Below this screening level threshold, GHG emissions would not be individually or cumulatively significant. Furthermore, Project GHG emissions levels are consistent with, and would not obstruct attainment of GHG emissions reductions targets established by WRCOG and the City of Wildomar. The Project would also be consistent with numerous regulations that are being adopted pursuant to AB 32 and others. The Project therefore supports and would not conflict with AB 32. On this basis, Project GHG emissions would not exceed a threshold of significance established by the City of Wildomar, the Lead Agency.

FACTOR NO. 3: *The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.*

The City of Wildomar has not yet adopted a Climate Action Plan regulating the emission of greenhouse gases. Notwithstanding, as discussed herein, the Project is consistent and complies with the GHG emissions reductions targets established under the WRCOG Subregional Climate Action Plan, to which the City is participatory. Project consistency with the WRCOG Subregional Climate Action Plan also demonstrates consistency with, and support of, applicable state AB 32 GHG emissions reductions targets. On this basis, the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions.

Level of Significance: Less-Than-Significant.

Summary

As supported by the preceding discussions, Project GHG emissions (1,641.29 $MTCO_2E$) would not exceed the SCAQMD screening level threshold of 3,000 $MTCO_2E$ and would be less-than-significant. Project GHG emissions would also be less-than-significant as evaluated under *CEQA Guidelines* § 15064.4(b) GHG/GCC Significance Factors. On this basis, the potential for the Project to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment is less than significant.

Potential Impact: ***Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.***

Overview

GHG emissions reduction plans, policies, and regulations applicable to the Project include the WRCOG Subregional Climate Action Plan (WRCOG CAP), and AB 32. Project consistency with the WRCOG CAP and AB 32 are summarized below.

WRCOG CAP Consistency

A development project would demonstrate consistency with the WRCOG CAP if it is consistent with the CAP assumptions regarding the amount and type of future development, and is consistent with the GHG reduction measures identified in the CAP. Projects consistent with the CAP, including conformance with any performance measures applicable to the project, would not require additional GHG emissions analysis and mitigation under *CEQA Guidelines* Sections 15064(h) and 1513.5(b)(2). However, a project applicant can always choose to demonstrate compliance with the AB 32 target by preparing an individual project analysis that calculates GHG emissions as part of their CEQA documentation (WRCOG CAP p. 4-17).

As discussed at EIR Section 4.1, the Project is consistent with land uses and development anticipated under the City General Plan and reflected in the CAP. The

WRCOG CAP identifies an emissions reduction target of 15% below 2010 levels by 2020 for the City of Wildomar and other cities within the subregion (WRCOG CAP, p. 2-7, et al.).

Comparative GHG Project emissions under 2010 and 2020 scenarios are summarized at Table 4.4-4; detailed 2010/2020 GHG emissions modeling information is provided at Appendix 3.2 of the Project GHG Analysis. As indicated at Table 4.4-4, Project 2020 emissions would be reduced by approximately 18.76 percent when compared to Project GHG emissions generated under the 2010 scenario. The Project would therefore be consistent with the 15 percent GHG emissions reduction target established under the WRCOG CAP for participant agencies, including the City of Wildomar. In the context of WRCOG/City GHG Emissions Reduction Targets, Project GHG emissions would therefore be less-than-significant.

Table 4.4-4
GHG Emissions
2010/2020 Scenarios

Emission Source	CO2e Emissions (Metric Tons Per Year)	
	2010	**2020**
Annual Construction-related emissions amortized over 30 years	25.17	25.17
Area	36.24	36.23
Energy Use	230.38	198.25
Mobile Sources	1,475.20	1,170.07
Waste	29.30	29.30
Water Usage	61.45	50.20
Total	1,857.74	1,509.22
Reduction over 2010 levels	**18.76%**	
CAP Minimum Improvement	**15%**	
Consistent with CAP	**YES**	

Source: *Wildomar Residential Greenhouse Gas Analysis*, City of Wildomar (Urban Crossroads, Inc.) November 30, 2015.

Level of Significance: Less-Than-Significant.

AB 32/CARB Scoping Plan Consistency

Project GHG emissions would conform to emissions reductions targets established under the WRCOG CAP (as summarized above). Further, "[t]he WRCOG Subregional CAP establishes a community-wide emissions reduction target of 15% below 2010, following guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the statewide AB 32 goal of reducing emissions to 1990 levels (WRCOG CAP, p. 2-7). Project conformance with the WRCOG CAP substantiates consistency with AB 32.

Level of Significance: Less-Than-Significant.

Summary

As substantiated in the preceding discussion, the Project would comply with the Year 2020 15% GHG emissions reduction target established under AB 32, and reflected in the WRCOG Subregional Climate Action Plan to which the City is participatory.

Based on the preceding, the Project would be consistent with and would support applicable plans, policies and regulations adopted for the purpose of reducing the emissions of greenhouse gases. The potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.5 NOISE

4.5 NOISE

Abstract

This Section assesses whether the Project would substantially increase ambient noise levels, or expose land uses to noise, groundborne noise, or groundborne vibration levels exceeding established standards. Potential impacts considered within this Section include:

- *Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;*

- *Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels;*

- *A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; or*

- *A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

As substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to be less-than-significant, and are not further discussed here:

- *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 expose people residing or working in the project area to excessive noise levels; and*

- *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.*

As presented in the following analyses, even with the incorporation of mitigation, the Project will generate construction source noise and vibration levels in excess of City standards. All other potential noise impacts of the Project are determined to be less-than-significant, or can be mitigated to levels that are less-than-significant.

4.5.1 INTRODUCTION

This Section presents the noise setting, methodology, standards of significance, and potential noise impacts associated with the Project. Where impacts are determined to be potentially significant, mitigation measures are proposed to avoid or reduce the severity of impacts. The information presented here has been summarized from the *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016 (Noise Impact Analysis, Noise Study). The Noise Impact Analysis in its entirety is presented at EIR Appendix E.

4.5.2 SETTING

Following are discussions of noise fundamentals applicable to the Project, together with assessments of existing ambient noise levels and noise sources in the Project vicinity.

4.5.2.1 Fundamentals of Noise

Noise levels are measured on a logarithmic scale in decibels which are then weighted and added over a 24-hour period to reflect not only the magnitude of the sound, but also its duration, frequency, and time of occurrence. In this manner, various acoustical scales and units of measurement have been developed, including: equivalent sound levels (Leq), day-night average sound levels (Ldn) and community noise equivalent levels (CNEL).

"A-weighted" decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against the very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. The decibel scale has a value of 0.0 dBA at the threshold of hearing and 120 dBA at the threshold of pain. Each interval of 10 decibels

indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. Thus, a 1.0 decibel increase is just audible, whereas a 10 decibel increase means the sound is perceived as being twice as loud as before. Examples of the decibel level of various noise sources are provided at Figure 4.5-1.

Noise Rating Schemes

Equivalent sound levels are not measured directly but rather, are calculated from sound pressure levels typically measured in dBA. The equivalent sound level (Leq) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the Ldn and CNEL scales.

Day-night average sound levels (Ldn) are a measure of the cumulative noise exposure of the community. The Ldn value results from a summation of hourly Leqs over a 24-hour time period with an increased weighting factor applied to the nighttime period between 10:00 p.m. and 7:00 a.m. This noise rating scheme takes into account those subjectively more annoying noise events which occur during normal sleep hours.

Community noise equivalent levels (CNEL) also carry a weighting penalty for noise that occurs during nighttime hours. In addition, CNEL levels include a penalty for noise events that occur during the evening hours between 10:00 p.m. and 7:00 a.m. Because of the weighting factors applied, CNEL values at a given location will always be larger than Ldn values, which in turn will exceed Leq values. However, CNEL values are typically within one decibel of the Ldn value.

Sound Propagation

For a "line source" of noise such as a heavily traveled roadway, the noise level drops off by a nominal value of 3.0 decibels for each doubling of distance between the noise source and the noise receptor. The nominal value of 3.0 dBA with doubling applies to sound propagation from a line source: (1) over the top of a barrier greater than 3 meters in height; or (2) where there is a clear unobstructed view of the highway, the ground is hard, no intervening structures exist and the line-of-sight between the noise source and receptor averages more than three meters above the ground.

TYPICAL NOISE LEVELS AND THEIR SUBJECTIVE LOUDNESS AND EFFECTS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

SOURCE: NOISE TECHNICAL SUPPLEMENT BY CALTRANS

Source: Urban Crossroads, Inc.

Environmental factors such as wind conditions, temperature gradients, characteristics of the ground (hard or soft), air (relative humidity), and the presence of vegetation combine to increase the attenuation achieved outside laboratory conditions, approximating 4.5 decibels per doubling of distance. The increase in noise attenuation in exterior environments is particularly true: (1) for freeways with an elevated or depressed profile or exhibiting expanses of intervening buildings or topography; (2) where the view of a roadway is interrupted by isolated buildings, clumps of bushes, scattered trees; (3) when the intervening ground is soft or covered with vegetation; or (4) where the source or receptor is located more than three meters above the ground.

In an area which is relatively flat and free of barriers, the sound level resulting from a single "point source" of noise drops by six decibels for each doubling of distance or 20 decibels for each factor of ten in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary, such as an idling truck or other heavy duty equipment operating within a confined area (such as industrial processes or construction).

Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by 10 to 15 dBA. Noise barriers are most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of the noise source.

4.5.2.2 Factors Affecting Motor Vehicle Noise

According to the Highway Traffic Noise Analysis and Abatement Policy and Guidance, provided by the Federal Highway Administration (FHWA), the level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the vehicle mix within the flow of traffic. Generally, traffic noise levels are increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, assuming that the speed and vehicle mix do not change, results in a noise level increase of 3 dBA. The vehicle mix on a given roadway may also have an effect on community noise levels. As medium and heavy trucks comprise a greater proportion of the vehicle mix, adjacent noise levels will increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires.

To account for the ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models - soft site and hard site conditions. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. An attenuation rate of 4.5 dBA per doubling of distance is typically observed over soft ground with landscaping, as compared with a 3.0 dBA attenuation rate over hard ground such as asphalt, concrete, stone and packed earth. The Project Noise Study indicates that generally, soft site conditions are representative of the noise environment within the Study Area. Related, California Department of Transportation (Caltrans) research has shown that the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model as employed in this analysis.

4.5.2.3 Community Responses to Noise

Approximately 10 percent of the population exhibits a low tolerance for noise. Consequently, even in the quietest environment, some complaints will occur. Another 25 percent of the population will not complain even in severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment.

Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels. An increase or decrease of 1.0 dBA cannot be perceived except in carefully controlled laboratory experiments. A 3.0 dBA increase may be perceptible outside of the laboratory. An increase of 5.0 dBA is often necessary before any noticeable change in community response (i.e., complaints) would be expected.

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon each individual's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise-producing activities;
- Noise receptor's perception that they are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;

- Receptor's belief that the noise source can be controlled.

Recent studies have shown that changes in long-term noise levels are noticeable, and are responded to by people. For example, about ten percent of the people exposed to traffic noise of 60 Ldn will report being highly annoyed with the noise, and each increase of one Ldn is associated with approximately two percent more people being highly annoyed. When traffic noise exceeds 60 Ldn or aircraft noise exceeds 55 Ldn, people begin complaining. Group or legal actions to stop the noise should be expected to begin at traffic noise levels near 70 Ldn and aircraft noise levels near 65 Ldn.

4.5.2.4 Land Use Compatibility With Noise

Some land uses are less tolerant of noise than are others. For example, schools, hospitals, churches and residences are more sensitive to noise intrusion than are commercial or industrial activities. As ambient noise levels affect the perceived amenity or liveability 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.

4.5.2.5 Sensitive Receptors

Land uses classified as noise-sensitive by the State of California include: schools, hospitals, rest homes, long-term care centers, and mental care facilities. Some jurisdictions also consider day care centers, single-family dwellings, mobile home parks, churches, libraries, and recreation areas to be noise-sensitive. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, outpatient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs.

Land uses considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

Proximate sensitive receivers within the Study include the single-family residential homes located westerly, northwesterly, northeasterly, and southerly of the Project site. Additionally, Bundy Canyon Christian School is located easterly of the Project site.

4.5.2.6 Current Noise Exposure

To assess existing noise levels in the Project vicinity, 24-hour measurements were taken at locations throughout the Study Area. These locations are illustrated at Figure 4.5-2, and are representative of sites that may be affected by Project-generated noise. Measurements were taken at the nearest noise sensitive uses, to assess the existing ambient hourly noise levels surrounding the Project site. Noise measurement locations included the following:

- Location L1 represents the noise levels north of the Project site near Bundy Canyon Road and existing residential homes on Valley Vista Circle.

- Location L2 represents the noise levels adjacent to Bundy Canyon Road, south of existing residential homes.

- Location L3 represents the noise levels adjacent to existing residential homes on Windwood Lane at the western Project site boundary.

The results of the ambient noise level measurements are presented at Table 4.5-1, below.

Table 4.5-1
24 Hour Ambient Noise Level Measurements

Location	Distance To Project Boundary	Energy Average Hourly Noise Level (dBA Leq)		CNEL
		Daytime	Nighttime	
L1	180'	71.9	69.1	76.4
L2	450'	73.3	69.9	77.4
L3	10'	53.7	43.4	54.1

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.
Daytime = 7:00 a.m. to 10:00 p.m.; Nighttime = 10:00 p.m. to 7:00 a.m.

LEGEND:

▲ Noise Measurement Locations

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.5-2
Ambient Noise Measurement Locations

4.5.3 EXISTING POLICIES AND REGULATIONS

To limit population exposure to physically and/or psychologically damaging, as well as intrusive noise levels, the federal government, the State of California, 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 generally produces an average sound level that remains fairly constant. 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 local agencies regulate stationary noise sources.

4.5.3.1 State of California Noise Requirements

California 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 that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to 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. In addition, CEQA requires that all known environmental effects of a project be analyzed, including potential environmental noise impacts.

4.5.3.2 State of California Building Code

California'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, acting to control interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures 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 new construction is 45 dBA CNEL.

4.5.3.3 City of Wildomar Noise Element

The City of Wildomar Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. In addition, the Noise Element identifies several polices to minimize the impacts of excessive noise levels throughout the community, and establishes noise level requirements for all land uses. To protect City of Wildomar residents from excessive noise, the Noise Element contains the following policies:

N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

N 1.3 Consider residential use as noise-sensitive and discourage this use in areas in excess of 65 CNEL.

N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on residents, employees, visitors, and noise-sensitive uses.

N 1.7 Require proposed land uses, affected by unacceptable high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.

N 12.1 Minimize the impacts of construction noise on adjacent uses within acceptable standards.

N 12.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse impacts on surrounding areas.

N 12.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:

i. Temporary noise attenuation fences;

ii. Preferential location and equipment; and

iii. Use of current noise suppression technology and equipment.

N 15.3 Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

To ensure noise-sensitive land uses are protected from high levels of noise (Policy N 1.1), Table N-1 of the Noise Element identifies guidelines to evaluate proposed developments based on exterior and interior noise level limits for land uses and requires a noise analysis to determine needed mitigation measures if necessary. The Noise Element identifies residential use as a noise-sensitive land use (Policy N 1.3) which, when located in an area of 60 CNEL or greater, may require an acoustical analysis. To prevent and mitigate noise impacts for its residents (Policy N 1.5), the City of Wildomar requires noise attenuation measures for any land use exposed to noise levels greater than 65 CNEL. The intent of Policy N 1.7 is to require a noise analysis for land uses affected by unacceptably high noise levels and include design solutions that would achieve acceptable noise levels at affected receptors. To reduce potentially adverse effects of construction-source noise, Policies N 12.1 through 12.3 identify requirements for new development located near existing noise-sensitive land uses.

The noise criteria identified in the City of Wildomar Noise Element (Table N-1) are guidelines to evaluate the land use compatibility of transportation related noise. The compatibility criteria provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. The Land Use Compatibility for Community Noise Exposure matrix describes categories of compatibility and not specific noise standards. The Project proposes multi-family residential uses and supporting facilities/amenities. Multi-family residential land use is considered normally acceptable with unmitigated exterior levels of less than 65 dBA CNEL. For conditionally acceptable exterior noise levels, approaching 70 dBA CNEL for multi-family land use, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

The City of Wildomar General Plan Noise Element specifies the maximum noise levels allowable for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. The transportation noise standards (mobile noise source criteria) are derived from standards contained in the General Plan Guidelines, a publication of the California Office of Planning and Research. For noise-sensitive residential uses, Policy N 1.3 of the Noise Element states that the exterior noise levels shall not exceed 65 dBA CNEL. In addition, the City requires that residential developments achieve an indoor noise standard of 45 dBA CNEL with windows closed, based on the California Building Code requirements.

Within the context of the preceding discussions, it is noted that the General Plan establishes standards and policies addressing environmental noise impacts that could affect the Project. CEQA however only requires an analysis of and mitigation of Project noise impacts on the environment, and of Project effects that could exacerbate existing conditions, thereby resulting in potentially significant environmental impacts.

4.5.3.4 City of Wildomar Municipal Code

To analyze noise impacts originating from a designated fixed location or private property such as the Project site, noise impacts such as those from stationary/area-source (operational) and construction activities are typically evaluated against standards established under the City's Municipal Code.

The City of Wildomar Noise Ordinance included in the Municipal Code (Chapter 9.48) establishes the maximum permissible noise level that may intrude into a neighbor's property. The Noise Ordinance (Section 9.48.040) establishes the exterior noise level criteria for residential properties affected by stationary noise sources. For residential properties, the exterior noise level shall not exceed 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) and shall not exceed 45 dBA during the nighttime hours (10:00 p.m. to 7:00 a.m.). However, it is important to recognize that the City of Wildomar Municipal Code noise level standards incorrectly identify maximum noise level (Lmax) standards that should instead reflect the average (Leq) noise levels. This inaccuracy was originally adopted in the Municipal Code by the County of Riverside and subsequently adopted by the City of Wildomar at the time of incorporation. Based on several discussions with the County of

Riverside Office of Industrial Hygiene, the Municipal Code stationary source noise level standards should reflect the average Leq noise levels. Therefore, exterior noise levels for residential land uses located in the City of Wildomar near the Project site, may not exceed 55 dBA Leq during the daytime hours (7:00 a.m. to 10:00 p.m.), and may not exceed 45 dBA Leq during the nighttime hours (10:00 p.m. to 7:00 a.m.).

To control noise impacts associated with the construction of the proposed Project, the City of Wildomar has established limits to the hours of operation. Section 9.48.020 (I) of the Noise Regulation ordinance indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. (9) The City of Wildomar has not identified or adopted any specific construction noise standards to assess the direct Project construction noise level impacts. For the purposes of this analysis, the permitted daytime operational noise level standard (Section 9.48.040 of the Municipal Code) for residential properties affected by stationary/area noise sources is used to establish an exterior construction noise level threshold. In the City of Wildomar an exterior noise level of 55 dBA Leq is used as the acceptable threshold for determining the impacts due to Project construction for noise-sensitive receivers.

To analyze the vibration impacts originating from the construction of the Project, vibration from construction activities are typically evaluated against standards established under the Municipal Code. The City of Wildomar General Plan Policy N 15.3 identifies a motion velocity perception threshold for vibration due to passing trains of 0.01 inches per second (in/sec) RMS over the range of one to 100 Hz. While not strictly applicable to the Project (the Project site and vicinity are not affected by passing trains) the 0.01 in/sec RMS standard is considered useful and illustrative in the evaluation of potential Project-source vibration impacts. For the purposes of this analysis, the General Plan Policy N 15.3 0.01 in/sec RMS standard is used to assess the perception of nearby sensitive receiver locations during Project construction. Typical effects of vibration are summarized at Table 4.5-2.

Table 4.5-2
Effects of Continuous or Frequent
Intermittent Vibration Levels

Velocity Level, PPV/RMS (in/sec)	Human Reaction	Effect on Buildings
0.01/0.0072	Barely perceptible	No effect
0.04/0.029	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08/0.0576	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.1/0.072	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3/0.216	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5/0.360	Severe - Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures

Source: *Transportation and Construction-Induced Vibration Guidance Manual* (California Department of Transportation) June 2004.

4.5.4 STANDARDS OF SIGNIFICANCE

Based on the noise criteria presented above, and direction provided within the *CEQA Guidelines* as implemented by the City of Wildomar, Project noise impacts would be considered potentially significant if the Project is determined to result in or cause the following conditions:

- Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;

- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project;

- Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels;

- 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, expose people residing or working in the Project area to excessive noise levels; or

- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

In evaluating the above CEQA concerns, the discussion of potential noise impacts (subsequent Section 4.5.5) is organized to reflect categories or types of noise sources, including construction-source noise; vehicular-source noise; operational/area-source noise; and vibration.

Summarizing the information presented at Section 4.2 of the Noise Study, Table 4.5-3 presents applicable City of Wildomar thresholds used is analyzing the above standards of significance. Project-related noise/vibration impacts would be considered excessive and/or substantial if any of the thresholds presented below are exceeded.

Table 4.5-3
Summary of Significance Thresholds[1]

Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
Offsite	Noise-Sensitive	All	if ambient is < 65 dBA	Project plus ambient is > 65 dBA; and a ≥ 3 dBA Project increase	
			if ambient is > 65 dBA	≥ 1.5 dBA Project increase	
Onsite	Noise-Sensitive	City of Wildomar	Exterior Noise Level	65 dBA CNEL	
			Interior Noise Level	45 dBA CNEL	
Construction	Noise-Sensitive	Permitted hours of 6:00 am to 6:00 pm June through September, and 7:00 am to 6:00 pm October through May.			
		All	Noise Level Threshold	55 dBA Leq	n/a
Operational/ Area-Source	Noise-Sensitive	City of Wildomar	Exterior Noise Level	55 dBA Leq	45 dBA Leq
		All	if ambient is < 55 dBA (Daytime) or 45 dBA (Nighttime)	Project plus ambient is > 65 dBA; and a ≥ 3 dBA Project increase	
			if ambient is > 55 dBA (Daytime) or 45 dBA	≥ 1.5 dBA Project increase	

Table 4.5-3
Summary of Significance Thresholds[1]

Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
			(Nighttime)		
Vibration	Noise-Sensitive	All	Operational & Construction	0.01 in/sec (RMS)	n/a

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.
[1] Please refer to Noise Impact Analysis Section 4.2 for further detail regarding applicable thresholds.

4.5.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.5.5.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant noise/vibration impacts, based on the analysis presented within this Section and included within the EIR Initial Study.

Of the CEQA threshold considerations identified above at Section 4.5.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to have no impact and are not further substantively discussed here:

- 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, expose people residing or working in the Project area to excessive noise levels; or

- For a project within the vicinity of a private airstrip, expose people residing or working in the Project area to excessive noise levels.

All other CEQA topics concerning the Project's potential impacts to noise are discussed below. Please refer also to Draft EIR Appendix A, Initial Study Checklist Item XIII., *Noise*.

4.5.5.2 Impact Statements

Following is an analysis of potential noise impacts that are expected to occur as a result of the Project. Noise levels will change both on-site and off-site if the Project is approved and

implemented. The discussion of potential noise impacts is organized to reflect categories or types of noise sources, including:

- Construction-Source Noise;
- Vehicular-Source Noise;
- Operational/Area-Source Noise; and
- Vibration.

For each topical discussion, potential impacts are evaluated under applicable criteria established previously at Table 4.5-3.

CONSTRUCTION-SOURCE NOISE

As previously presented, the following thresholds were used in analyzing potential construction-source noise impacts of the Project.

Table 4.5-4
Construction-Source Noise Thresholds

Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
Construction	Noise-Sensitive	Permitted hours of 6:00 am to 6:00 pm June through September, and 7:00 am to 6:00 pm October through May.			
		All	Noise Level Threshold	55 dBA Leq	n/a

Potential Impact: ***Construction activities and associated noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.***

Impact Analysis: Construction-source noise levels are not regulated by the City. The Project would comply with day/hour construction limitations specified under the City Noise Ordinance. The potential for Project construction-source noise to result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Construction activities and associated noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: Construction-source noise is not considered a source of permanent noise increases, and associated threshold questions are not germane.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Construction activities and associated noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis:

Construction-source noise impacts were evaluated at five receptor locations considered representative of land uses/locations that could be affected by Project construction-source noise. These locations are listed and described below and are mapped at Figure 4.5-3.

R1: Located approximately 276 feet northwest of the Project site, R1 represents an existing residential home south of Bundy Canyon Road.

R2: Location R2 represents existing residential home located approximately 102 feet northeast of the Project site on Bundy Canyon Road.

R3: Location R3 represents the Bundy Canyon Christian School located roughly 1,146 feet east of the Project Site south of Bundy Canyon Road.

R4: Location R4 represents the existing single-family residential dwellings located approximately 19 feet west of the Project site.

R5: Location R5 represents existing single-family residential homes which are situated approximately 57 feet south of the Project site boundary.

Source: Urban Crossroads, Inc.

Figure 4.5-3
Noise Receiver Locations

The construction noise analysis was prepared using reference noise level measurements taken to describe the typical construction activity noise levels for each stage of Project construction. The construction reference noise level measurements, provided at Table 11-1 of the Noise Impact Analysis, represent a list of typical construction activity noise levels.

Construction activities within the Project site are anticipated to occur within five stages: site preparation, grading, building construction, paving/site finishes, and architectural coating. Based construction equipment reference noise levels and distance to the Project site, representative noise levels at the receptor locations have been developed, and are presented below.

Table 4.5-5
Construction Noise Levels (Unmitigated)

Receiver Location	Construction Noise Levels (dBA Leq)					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Peak
R1	54.2	54.2	42.8	46.3	36.9	54.2
R2	73.4	73.4	62.0	65.4	56.1	73.4
R3	52.4	52.4	41.0	44.4	35.1	52.4
R4	88.0	88.0	76.6	80.0	70.7	88.0
R5	78.4	78.4	67.0	70.5	61.1	78.4

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

As shown above, the potential short-term unmitigated construction noise level impacts are expected to exceed the acceptable construction noise level threshold of 55 dBA Leq at nearby sensitive receiver locations during the permitted hours of construction activity.

Level of Significance: Potentially Significant.

Mitigation Measure:

4.5.1 Install minimum 6-foot high temporary construction noise barriers at the Project site boundaries (as shown on Exhibit 11-A of the Noise Impact Analysis) for the duration of construction activities at the Project site. The temporary noise barrier shall have the following lengths: 130 feet at

receiver location R2, 540 feet at receiver location R4, and 680 feet at receiver location R5. The noise control barriers must present a solid face from top to bottom.

- *The barriers shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the noise source. The noise barrier shall be constructed using one of the following materials:*
    - *An acoustical blanket (e.g., vinyl acoustic curtains or quilted blankets) attached to the construction site perimeter fence or equivalent temporary fence posts;*
    - *Masonry block;*
    - *Stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot;*
    - *Glass (1/4 inch thick), or other transparent material with sufficient weight per square foot;*
    - *Earthen berm;*
    - *Any combination of these construction materials satisfying a weight of at least 4 pounds per square foot of face area.*
- *The noise barriers must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired.*
- *The noise control barriers and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity.*

Level of Significance After Mitigation: Significant and Unavoidable.

Table 4.5-6 presents the noise levels that can be expected at the five receiver locations with the installation of the noise attenuation barriers required by Mitigation Measure 4.5.1.

Table 4.5-6
Construction Noise Levels (Mitigated)

Receiver Location	Construction Noise Levels (dBA Leq)					
	Peak Activity	Threshold	Threshold Exceeded?	Attenuation	Construction Noise Levels	Threshold Exceeded?
R1	54.2	55	No	-	-	No
R2	73.4	55	Yes	-2.5	70.9	Yes
R3	52.4	55	No	-	-	No
R4	88.0	55	Yes	-4.8	83.2	Yes
R5	78.4	55	Yes	-3.1	75.3	Yes

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

As shown above, peak construction noise levels are expected to range from 52.4 to 83.2 dBA Leq with the attenuation provided by the temporary construction noise barriers. As such, even with the implementation of Mitigation Measure 4.5.1, construction noise levels will still exceed the 55 dBA Leq construction noise level threshold at the sensitive receiver locations. This is a significant and unavoidable impact.

Based on the ambient noise levels presented at Table 4.5-1 and the construction noise levels presented at Table 4.5-6, nearby sensitive receiver locations will experience temporary, short-term construction noise level increases above the existing ambient noise levels due their proximity to the Project site. Even with the implementation of Mitigation Measure 4.5.1, this is a significant and unavoidable impact.

Level of Significance: Significant and Unavoidable.

VEHICULAR-SOURCE NOISE

As previously presented, the following thresholds were used in analyzing potential vehicle-source noise impacts of the Project.

Table 4.5-7
Vehicular-Source Noise Thresholds

Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
Offsite	Noise-Sensitive	All	if ambient is < 65 dBA	Project plus ambient is > 65 dBA; and a ≥ 3 dBA Project increase	
			if ambient is > 65 dBA	≥ 1.5 dBA Project increase	
Onsite	Noise-Sensitive	City of Wildomar	Exterior Noise Level	65 dBA CNEL	
			Interior Noise Level	45 dBA CNEL	

Potential Impact: ***Vehicular source noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies.***

Impact Analysis:

Off-Site Vehicular-Source Noise Impacts

To assess impacts resulting from offsite Project-related vehicular-source noise, the Noise Impact Analysis developed noise contours based on roadway average daily trip (ADT) estimates, and trip generation and distribution as presented in *Wildomar Residential Traffic Impact Analysis* (Project TIA, Draft EIR Appendix B). The Project TIA reflects and analyzes traffic generated under assumed maximum buildout conditions for the Project. Noise contours were developed for the following traffic scenarios:

- Existing (2015) Without / With Project: This scenario refers to the existing present-day noise conditions, without and with the proposed Project.

- Opening Year 2017 Without / With Project: This scenario refers to the background noise conditions at future Year 2017 without and with the proposed Project. This scenario corresponds to 2017 conditions, and includes all cumulative projects identified in the Traffic Impact Analysis.

- Horizon Year 2040 Without / With Project: This scenario refers to the background noise conditions at Horizon Year 2040 without and with the proposed Project. This scenario corresponds to 2040 conditions, and includes all cumulative projects identified in the Traffic Impact Analysis.

Noise Impact Analysis Tables 7-1 through 7-6 present the noise contours developed for the above scenarios for all Study Area roadways. Please refer to EIR Appendix E.

Based on the noise contours, Tables 4.5-8 through 4.5-10 present a comparison of noise conditions along Study Area roadways without and with the Project under the above-described scenarios.

Table 4.5-8
Existing Conditions
Traffic Noise Impacts Without and With Project

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA)			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	Bundy Cyn. Rd.	w/o Orange St.	Commercial	65.2	65.2	0.0	No
2	Bundy Cyn. Rd.	e/o Orange St.	Commercial	67.7	67.7	0.0	No
3	Bundy Cyn. Rd.	e/o I-15 SB Ramps	Commercial	67.7	67.8	0.1	No
4	Bundy Cyn. Rd.	w/o Sellers Rd.	Commercial	67.3	67.4	0.2	No
5	Bundy Cyn. Rd.	e/o Sellers Rd.	Commercial	67.0	67.2	0.2	No
6	Bundy Cyn. Rd.	w/o Canyon Ranch Rd.	Residential	67.3	67.5	0.2	No
7	Bundy Cyn. Rd.	e/o Canyon Ranch Rd.	Residential	67.2	67.3	0.2	No
8	Bundy Cyn. Rd.	w/o Oak Canyon Dr.	Residential	67.0	67.2	0.2	No
9	Bundy Cyn. Rd.	e/o Oak Canyon Dr.	Residential	66.9	67.2	0.2	No
10	Bundy Cyn. Rd.	w/o Road "A"	Residential	67.0	67.2	0.2	No
11	Bundy Cyn. Rd.	e/o Road "A"	Residential	67.0	67.0	0.0	No

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.
Note: Sums may not total due to model rounding of estimated noise levels. Conclusions are not affected.

As shown above, under Existing Conditions, Project traffic would not cause or result in increased noise levels that would exceed the 65 dBA CNEL threshold condition; nor would Project traffic cause or result in increased noise levels of greater than 1.5 dBA CNEL when the without-Project condition already exceeds 65 dBA CNEL.

Table 4.5-9
Year 2017 Conditions
Traffic Noise Impacts Without and With Project

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA)			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	Bundy Cyn. Rd.	w/o Orange St.	Commercial	68.1	68.1	0.0	No
2	Bundy Cyn. Rd.	e/o Orange St.	Commercial	67.7	67.7	0.0	No
3	Bundy Cyn. Rd.	e/o I-15 SB Ramps	Commercial	67.7	67.8	0.1	No
4	Bundy Cyn. Rd.	w/o Sellers Rd.	Commercial	67.3	67.4	0.2	No
5	Bundy Cyn. Rd.	e/o Sellers Rd.	Commercial	67.0	67.2	0.2	No
6	Bundy Cyn. Rd.	w/o Canyon Ranch Rd.	Residential	67.3	67.5	0.2	No
7	Bundy Cyn. Rd.	e/o Canyon Ranch Rd.	Residential	67.2	67.3	0.2	No
8	Bundy Cyn. Rd.	w/o Oak Canyon Dr.	Residential	67.0	67.2	0.2	No
9	Bundy Cyn. Rd.	e/o Oak Canyon Dr.	Residential	66.9	67.2	0.2	No
10	Bundy Cyn. Rd.	w/o Road "A"	Residential	67.0	67.2	0.2	No
11	Bundy Cyn. Rd.	e/o Road "A"	Residential	67.0	67.0	0.0	No

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

As shown at Table 4.5-9, under Year 2017 Conditions, Project traffic would not cause or result in increased noise levels that would exceed the 65 dBA CNEL threshold condition; nor would Project traffic cause or result in increased noise levels of greater than 1.5 dBA CNEL when the without-Project condition already exceeds 65 dBA CNEL.

As shown at Table 4.5-10, under Year 2040 Conditions, Project traffic would not cause or result in increased noise levels that would exceed the 65 dBA CNEL threshold condition; nor would Project traffic cause or result in increased noise levels of greater than 1.5 dBA CNEL when the without-Project condition already exceeds 65 dBA CNEL.

Table 4.5-10
Year 2040 Conditions
Traffic Noise Impacts Without and With Project

ID	Road	Segment	Adjacent Planned Land Use	CNEL at Adjacent Land Use (dBA)			Threshold Exceeded?
				No Project	With Project	Project Addition	
1	Bundy Cyn. Rd.	w/o Orange St.	Commercial	70.7	70.8	0.0	No
2	Bundy Cyn. Rd.	e/o Orange St.	Commercial	73.1	73.1	0.0	No
3	Bundy Cyn. Rd.	e/o I-15 SB Ramps	Commercial	73.0	73.0	0.0	No
4	Bundy Cyn. Rd.	w/o Sellers Rd.	Commercial	72.7	72.7	0.0	No
5	Bundy Cyn. Rd.	e/o Sellers Rd.	Commercial	72.5	72.5	0.1	No
6	Bundy Cyn. Rd.	w/o Canyon Ranch Rd.	Residential	72.8	72.8	0.1	No
7	Bundy Cyn. Rd.	e/o Canyon Ranch Rd.	Residential	72.5	72.6	0.1	No
8	Bundy Cyn. Rd.	w/o Oak Canyon Dr.	Residential	72.5	72.6	0.1	No
9	Bundy Cyn. Rd.	e/o Oak Canyon Dr.	Residential	72.3	72.4	0.1	No
10	Bundy Cyn. Rd.	w/o Road "A"	Residential	72.3	72.4	0.1	No
11	Bundy Cyn. Rd.	e/o Road "A"	Residential	72.3	72.3	0.0	No

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

On-Site Vehicular-Source Noise Impacts

The City General Plan establishes standards and policies addressing vehicular-source noise impacts that could affect the Project. In the context of establishing General Plan consistency of the Project, the discussions presented below evaluate the effect of vehicular-source noise on the Project land uses. CEQA however only requires an analysis of and mitigation of Project vehicular-source noise impacts on the environment.

To determine traffic noise exposure and identify potential necessary noise abatement measures for the proposed on-site residential uses, an on-site vehicular-source noise impact analysis has been conducted. The following discussions present an analysis of exterior and interior noise levels.

Exterior Analysis

Ambient noise conditions in the Study Area are dominated by vehicular sources (traffic). Using the FHWA traffic noise prediction model and the parameters outlined in noise Impact Analysis Tables 6-1 through 6-5, the expected future exterior noise levels for

individual buildings were calculated. Table 4.5-11 presents a summary of future exterior noise level impacts in the outdoor living areas facing Bundy Canyon Road.

Table 4.5-11
Exterior Noise Levels

Building	Roadway	Noise Level (dBA CNEL)
Pool Area	Bundy Canyon Road	55.9
Northeast Townhomes	Bundy Canyon Road	58.4

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

As shown above, the on-site traffic noise levels indicate that the units facing Bundy Canyon Road will experience unmitigated exterior noise levels ranging from 55.9 to 58.4 dBA CNEL. As such, the Project will satisfy the City of Wildomar 65 dBA CNEL exterior noise level standards.

Interior Analysis

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

To ensure that the interior noise levels comply with the City of Wildomar 45 dBA CNEL interior noise standards, future noise levels were calculated at the first and second floor building facades.

Tables 4.5-12 and 4.5-13 indicate that units facing Bundy Canyon Road will require a windows closed condition and a means of mechanical ventilation (e.g., air conditioning).

Table 4.5-12

First Floor Interior Noise Impacts (CNEL)

Building	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
Pool Area[6]	-	-	-	-	-
Northeast Townhouses	58.4	13.4	25.0	No	33.4

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning).

[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

[3] A minimum of 25 dBA noise reduction is assumed with standard building construction.

[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?

[5] Estimated interior noise level with minimum STC rating for all windows.

[6] No interior area requiring noise mitigation.

Table 4.5-13

Second Floor Interior Noise Impacts (CNEL)

Building	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
Pool Area[6]	-	-	-	-	-
Northeast Townhouses	58.4	13.4	25.0	No	33.4

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning).

[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.

[3] A minimum of 25 dBA noise reduction is assumed with standard building construction.

[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?

[5] Estimated interior noise level with minimum STC rating for all windows.

[6] No interior area requiring noise mitigation.

Summary

Based on the preceding discussion, the Project will satisfy the City of Wildomar General Plan Standard of 65 dBA CNEL exterior noise level standards for residential development. However, to satisfy the City of Wildomar General Plan Standard of interior noise level criteria, buildings adjacent to Bundy Canyon Road will require a Noise Reduction (NR) of up to 13.4 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning). CEQA does not require mitigation addressing these effects. Notwithstanding, to ensure Project consistency with City General Plan noise policies and standards, the following Conditions of Approval are recommended:

In order to meet the City of Wildomar interior noise standards the Project shall provide the following or equivalent noise abatement measures:

- *Windows: All windows and sliding glass doors shall be well fitted, well weather-stripped assemblies and shall have a minimum sound transmission class (STC) rating of 27.*
- *Doors: All exterior doors shall be well weather-stripped solid core assemblies at least one and three-fourths-inch thick.*
- *Walls: At any penetrations of exterior walls by pipes, ducts, or conduits, the space between the wall and pipes, ducts, or conduits shall be caulked or filled with mortar to form an airtight seal.*
- *Roof: Roof sheathing of wood construction shall be well fitted or caulked plywood of at least one-half inch thick. Ceilings shall be well fitted, well sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.*
- *Attic: Attic vents should be oriented away from Bundy Canyon Road. If such an orientation cannot be avoided, then an acoustical baffle shall be placed in the attic space behind the vents.*
- *Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use and still receive circulated air. A forced air circulation system (e.g., air conditioning) or active ventilation system (e.g., fresh air supply) shall be provided which satisfies the requirements of the Uniform Building Code.*
- *Furnishings: All bedrooms, shall be carpeted, or shall provide equivalent sound absorption design features.*

Potential Impact: ***Vehicular-source noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: As discussed previously, Project traffic would not cause or result in increased noise levels that would exceed the City's exterior 65 dBA CNEL threshold condition; nor would Project traffic cause or result in increased noise levels of greater than 1.5 dBA CNEL when the without-Project condition already exceeds 65 dBA CNEL. To

satisfy the City of Wildomar General Plan interior noise level criteria, buildings adjacent to Bundy Canyon Road will require a Noise Reduction (NR) of up to 13.1 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning). Conditions of Approval listed above would ensure Project consistency with City of Wildomar General Plan interior noise level criteria.

Potential Impact: ***Vehicular-source noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: Vehicular-source noise is addressed as a permanent source of noise, rather than a temporary or periodic source of noise increases. As such, associated threshold questions are not germane.

Level of Significance: Less-Than-Significant.

OPERATIONAL/AREA-SOURCE NOISE

As previously presented, the following thresholds were used in analyzing potential operational/area-source noise impacts of the Project.

Table 4.5-14
Operational/Area-Source Noise Thresholds

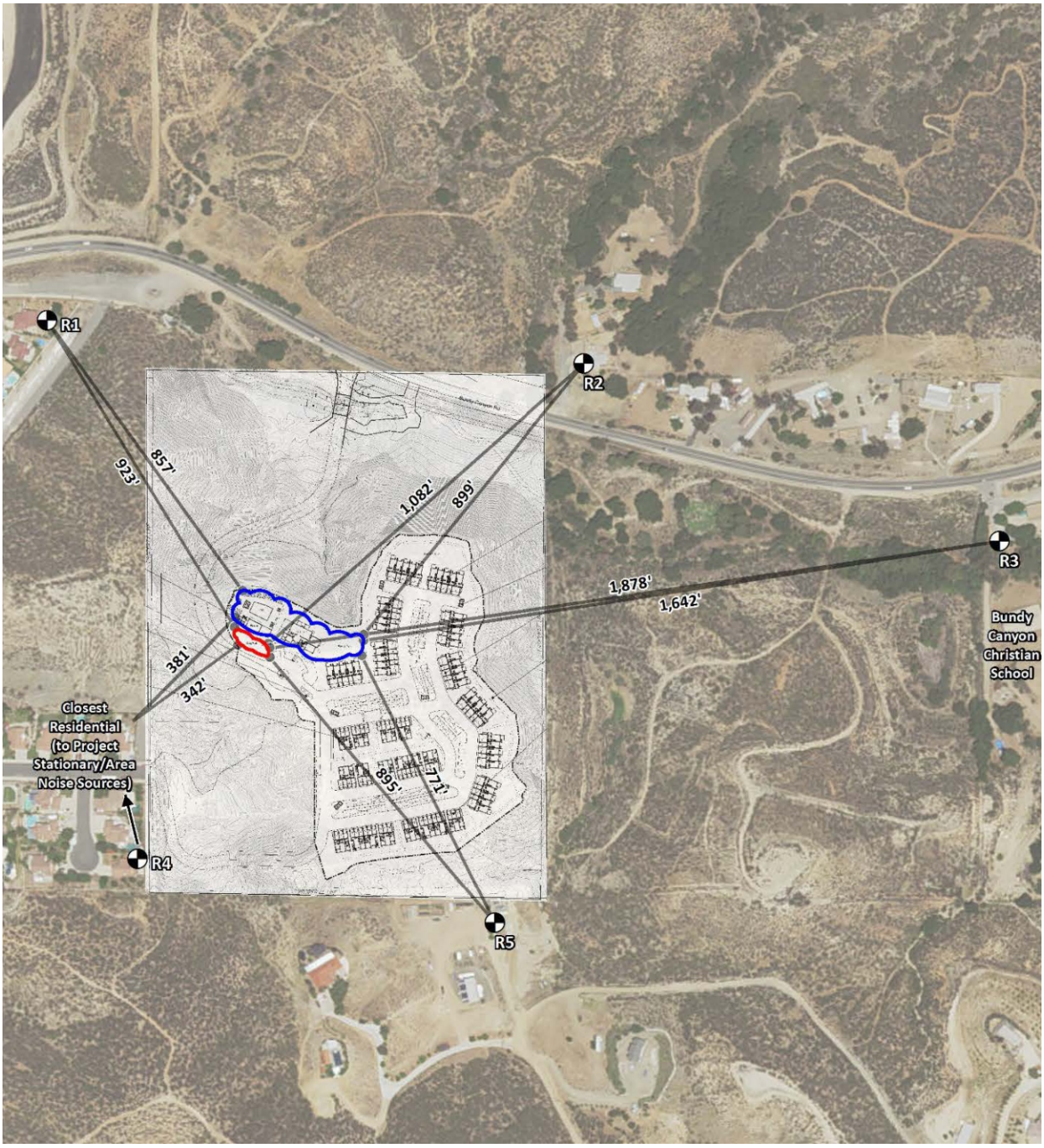
Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
Operational/ Area-Source	Noise-Sensitive	City of Wildomar	Exterior Noise Level	55 dBA Leq	45 dBA Leq
		All	if ambient is < 55 dBA (Daytime) or 45 dBA (Nighttime)	Project plus ambient is > 65 dBA; and a ≥ 3 dBA Project increase	
			if ambient is > 55 dBA (Daytime) or 45 dBA (Nighttime)	≥ 1.5 dBA Project increase	

Potential Impact: ***Project operational noise would result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance.***

Impact Analysis: On-site Project-related stationary/area (operational) noise sources are expected to include swimming pool, park, and dog park activities.

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the Project. Please refer to Section 10.3 of the Project Noise Impact Analysis, presented as Appendix E to this EIR, for a detailed description of the reference noise level sources and locations.

Using the reference noise levels, it is possible to estimate the operational source noise levels generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receptor locations. Proposed noise sources, and their relationship to vicinity sensitive receptors, are illustrated at Figure 4.5-4.



Source: Urban Crossroads, Inc.

Figure 4.5-4
Operational-Source Noise Locations

Operational noise levels that can be expected to be generated by the Project are presented at Table 4.5-15.

Table 4.5-15
Operational Noise Levels Projections

Receiver Location	Noise Source	Noise Level (dBA Leq)
R1	Poolside/Park	18.7
	Dog Park	17.5
	Combined Noise Level	21.1
R2	Poolside/Park	18.3
	Dog Park	16.1
	Combined Noise Level	20.3
R3	Poolside/Park	13.1
	Dog Park	11.3
	Combined Noise Level	15.3
R4	Poolside/Park	25.8
	Dog Park	26.1
	Combined Noise Level	29.0
R5	Poolside/Park	19.6
	Dog Park	17.7
	Combined Noise Level	21.8

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

Table 4.5-15 indicates that the hourly noise levels associated with the Project at the five sensitive receiver locations are expected to range from 15.3 to 29.0 dBA Leq. As such, the Project-related operational noise levels will satisfy the City of Wildomar 55 dBA Leq daytime and 45 dBA Leq nighttime exterior noise level standards at the nearby sensitive receiver locations.

The Project-related noise level contribution is evaluated at each receiver location based on the magnitude of the Project-related increase on the ambient noise levels. To describe the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise level measurements at the sensitive receiver locations. The difference between the combined Project and ambient noise levels describe

the Project noise level contributions. Noise levels that would be experienced at receiver locations when Project-source noise is added to ambient daytime and nighttime conditions are presented at Tables 4.5-16 and 4.5-17, respectively.

Table 4.5-16
Project Daytime Noise Level Contributions

Receiver Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Contribution	Threshold Exceeded?
R1	21.2	L1	71.9	71.9	0.0	No
R2	20.3	L2	73.3	73.3	0.0	No
R3	15.3	L2	73.3	73.3	0.0	No
R4	29.0	L3	53.7	53.7	0.0	No
R5	21.8	L3	53.7	53.7	0.0	No

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

Table 4.5-17
Project Nighttime Noise Level Contributions

Receiver Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Contribution	Threshold Exceeded?
R1	21.2	L1	69.1	69.1	0.0	No
R2	20.3	L2	69.9	69.9	0.0	No
R3	15.3	L2	69.9	69.9	0.0	No
R4	29.0	L3	43.4	43.4	0.0	No
R5	21.8	L3	43.4	43.4	0.0	No

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.

As indicated at the preceding tables, the Project is not expected to generate a significant daytime or nighttime operational noise level contribution at the nearby receiver locations. Therefore, the Project-related operational noise level contributions to the daytime or nighttime ambient noise levels at nearby sensitive receiver locations will not exceed the previously presented significance thresholds.

Based on the preceding discussions, Project operational noise would not result in exposure of persons to, or generation of, noise levels in excess of standards established in the City's General Plan or Noise Ordinance.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Project operational noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: As discussed above, noise levels attributable to ongoing operational activities within the Project site would not exceed City Noise Ordinance Standards. Similarly, operational activity within the Project site would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Level of Significance: Less-Than-Significant.

Potential Impact: ***Project operational noise would result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.***

Impact Analysis: As discussed above, noise levels attributable to ongoing operational activities within the Project site would not exceed City Noise Ordinance Standards. Similarly, temporary and periodic peak noise events generated by operational activity within the Project site would not result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Level of Significance: Less-Than-Significant.

VIBRATION

As previously presented, the following thresholds were used in analyzing potential vibration impacts of the Project.

Table 4.5-18
Vibration Thresholds

Analysis Scenario	Receptor Land Use	Jurisdiction	Ambient Condition/ Exposure Scenario	Significance Criteria	
				Daytime	Nighttime
Vibration	Noise-Sensitive	All	Operational & Construction	0.01 in/sec (RMS)	n/a

Potential Impact: ***Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise.***

Impact Analysis: The following discussion addresses the potential groundborne vibration/groundborne noise impacts that may be generated by Project site construction activities and/or operational activities within the Project site.

Construction Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures, and soil type. It is expected that groundborne vibration from Project construction activities would cause only intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are:

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage. It is not expected that heavy equipment such as large bulldozers would operate close enough to any residences or buildings to cause a vibration impact.
- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Groundborne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the FTA. Using the vibration source level of construction equipment provided on Table 6-6 of the Noise Impact Analysis and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 4.5-19 presents the expected Project-related vibration levels at the receptor locations.

Table 4.5-19
Construction Equipment Vibration Levels

Receiver Location	Distance To Construction Activity	Receiver Vibration Levels (VdB)					RMS* Velocity (in/sec)	0.01RMS Threshold Exceeded?
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration (PPV)		
R1	276′	0.000	0.001	0.002	0.002	0.002	0.002	No
R2	102′	0.000	0.004	0.009	0.011	0.011	0.008	No
R3	1,146′	0.000	0.000	0.000	0.000	0.000	0.000	No
R4	19′	0.005	0.053	0.115	0.134	0.134	0.095	Yes
R5	57′	0.001	0.010	0.022	0.026	0.026	0.018	Yes

Source: *Wildomar Residential Noise Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) September 6, 2016.
Note: *Calculations may not total due to rounding

As shown above, at distances ranging from 19 to 1,146 feet from the Project site, construction vibration velocity levels are expected to range from 0.002 to 0.134 in/sec PPV. In order to assess the human perception of vibration levels in PPV, the PPV values are converted to RMS vibration levels based on the Caltrans Transportation and Construction Vibration Guidance Manual conversion factor of 0.71. Project-generated construction vibration levels in RMS are expected to approach 0.095 in/sec RMS at location R4 and 0.018 in/sec RMS at location R5. As such, construction activities will exceed the General Plan Policy N 15.3 vibration standard of 0.01 in/sec RMS at receiver locations R4 and R5. The maximum potential received vibration levels would likely be strongly perceptible, but would not pose a risk to normal buildings. This is a potentially significant impact.

Operational Vibration

Residential uses, such as those proposed by the Project, are not considered sources of substantial vibration. Vehicular traffic could be a potential source of groundborne

vibration, however due to the rapid drop-off rate of groundborne vibration and the short duration of the associated events, vehicular traffic-induced groundborne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity or exposure of persons to, or generation of, excessive groundborne vibration.

Level of Significance: Potentially Significant (construction-source vibration).

Mitigation Measure: There are no feasible mitigation measures to reduce this impact. Construction vibration is temporary and intermittent, and will cease completely upon completion of construction. Additionally, though construction-related vibration would be perceptible (primarily when heavy equipment is operating near the Project boundaries proximate to sensitive receptors) no building damage would occur. Regardless, this is considered a significant and unavoidable impact of the Project.

Level of Significance After Mitigation: Significant and Unavoidable.

4.6 HYDROLOGY/WATER QUALITY

4.6 HYDROLOGY/WATER QUALITY

Abstract

This Section of the EIR addresses potential impacts of the Project related to hydrology and water quality. The analysis presented herein focuses on the potential for the Project to:

- *Violate any water quality standards or waste discharge requirements;*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site;*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;*

- *Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

- *Otherwise substantially degrade water quality.*

As supported by the analysis presented in this Section, the above-noted potential hydrology/water quality impacts are determined to be less-than-significant as mitigated.

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to be less-than-significant and are not further discussed here:

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);*

- *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;*

- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows;*

- *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or*

- *Inundation by seiche, tsunami, or mudflow.*

4.6.1 INTRODUCTION

This Section evaluates potential impacts of the Project on hydrology and water quality. Information contained in this Section has been summarized or excerpted from *Preliminary Hydrology and Hydraulic Study for Bundy Canyon Resort Apartments* (Grant Becklund, RCE) October 24, 2016 (Project Hydrology Study); and *Project-Specific Water Quality Management Plan for Bundy Canyon Resort Apartments* (Grant Becklund, RCE) October 24, 2016 (Project WQMP). The Project Hydrology Study and Project WQMP are provided in their entirety at EIR Appendix F. Additional source and background information was obtained from the Bundy Canyon Resort Apartments Site Plan Concept; the City of Wildomar General Plan; the City's Jurisdictional Runoff Management Program (JRMP); the San Diego Regional Water Quality Control Board (SDRWQCB); and the California State Water Resources Control Board (SWRCB).

4.6.2 SETTING

The hydrologic setting described below establishes the baseline against which the Project's potential hydrology/water quality impacts were evaluated. Please refer to EIR Section 3.0, *Project Description*, for a general discussion of the Project's regional and vicinity setting.

4.6.2.1 Regional Hydrology

A watershed is an area that, because of topographic slope, contributes water to a specified surface water drainage system, such as a stream or river. Stormwater runoff from the City of Wildomar enters two different watersheds: the Santa Ana River watershed, and the Santa Margarita River watershed.

The Santa Margarita River watershed encompasses approximately 750 square miles in southwestern Riverside and northern San Diego counties. This watershed is governed by the San Diego Regional Water Quality Control Board (SDRWQCB). Tributaries include Temecula and Murrieta Creeks. Bundy Canyon Wash, which originates in the Sedco Hills and passes within 500 feet of the southern boundary of the Project site, is tributary to Murrieta Creek. Runoff from this watershed enters the Pacific Ocean just north of Carlsbad.

The Santa Ana River Watershed, which is governed by the Santa Ana Regional Water Quality Control Board, is southern California's largest watershed, covering nearly 3,000 square miles within Los Angeles, Riverside, San Bernardino and Orange counties. Within this drainage area, the Santa Ana River flows southwesterly from the San Bernardino Mountains toward the San Bernardino and Chino valleys, through the Santa Ana Mountains, to the Orange County coastal plain/Huntington Beach and the River's mouth at the Pacific Ocean. The San Jacinto watershed is part of the southernmost portion of the Santa Ana River watershed. Lake Elsinore and Canyon Lake are located at the terminus of the San Jacinto River watershed in southwestern Riverside County.

Citywide stormwater discharges are governed by the Municipal Separate Storm Sewer System (MS4) Permit issued by the San Diego Regional Water Quality Control Board (SDRWQCB) to Riverside County co-permittees within the Santa Margarita Region. The Santa Margarita 'Region' comprises that portion of the Santa Margarita Watershed located within Riverside County. The Riverside County Flood Control and Water Conservation District is the "Principal Permittee" for the Santa Margarita Region. This agency also serves as the regional flood management authority for the western part of Riverside County, including the City of Wildomar and the Project site.

4.6.2.2 Climate

Average annual precipitation ranges from ten to thirteen inches per year in the region's inland alluvial valleys, reaching 36 inches or more in the San Bernardino and San Jacinto Mountains. Most of the area's precipitation occurs between November and March in the form of rain with variable amounts of snow in the higher elevations. The climatological cycle of the Region results in high surface water flows in the spring and early summer followed by low flows during the dry season. Winter and spring floods generated by storms are not uncommon in wet years.

4.6.2.3 Existing Drainage Conditions

Stormwater runoff from the Project site currently discharges generally to the south, east and north, with drainage patterns largely determined by defining ridges and ravines within the Project site. Stormwater discharges from the southerly portions of the Project site (and north-trending off-site surface flows from areas located southerly of the Project site) are currently collected at a headwall structure located in the southwesterly portion of the Project site, approximately 50 feet beyond the terminus of Windwood Lane. Stormwaters are then conveyed east/northeasterly by the existing 30 – 36 inch reinforced concrete pipe (RCP) located beneath Windwood Lane, discharging to the existing concrete channel paralleling Valley Vista Circle northeasterly of the Project site. Existing drainage conditions are graphically represented in the Project Hydrology Study, *Bundy Canyon Apartments - Map A - Before Drainage Map*.

Stormwater discharges from the easterly and northerly portions of the Project site are currently collected in an unimproved channel located along the Project site easterly and northerly boundaries, discharging to a headwall structure located at the northerly terminus of the aforementioned concrete channel paralleling Valley Vista Circle. Project stormwaters discharge ultimately to Murrieta Creek, the Santa Margarita River, and the Pacific Ocean.

The City's JRMP identifies two water bodies that may receive discharges from the City's municipal stormwater facilities, along with their impairments, identified pursuant to the Clean Water Act (CWA) Section 303(d), and thus referred to as "303(d) Listings." Table 4.6-1, below, has been excerpted from the City's JRMP.

Table 4.6-1
Receiving Waters Within and Downstream of Wildomar Jurisdiction

Receiving Water	303(d) Listings (Impairments)
Murrieta Creek	Pesticides, Metals, Nutrients, Toxicity
Lake Elsinore	Nutrients, Other Organics, Toxicity

Source: *City of Wildomar JRMP*, 2012.

As indicated at Table 4.6-1, primary water quality concerns for Murrieta Creek relate to pesticides, metal, nutrients and toxicity, typical byproducts of urban runoff and unknown non-point source runoff. The JRMP notes that "the City is not alone responsible for potential or actual water quality problems or 303(d) listings within any of the identified Receiving Water; however the programs identified within this JRMP are designed to reduce the discharge of stormwater pollutants … effectively prohibit non-stormwater discharges, and prevent runoff discharges from the City's MS4 [municipal separate storm sewer system] from causing or contribution to a violation of water quality standards."

4.6.2.4 Groundwater

The Project site and the City of Wildomar are underlain by the Elsinore Groundwater Basin (Basin). The Basin has a surface area of approximately 42 square miles, and is a major source of water supply for the Elsinore Valley Municipal Water District (EVMWD), Elsinore Water District (EWD) and other local groundwater producers. The Basin is managed by EVMWD. The principal source of inflow to the Basin is infiltration of local precipitation and runoff from the surrounding watershed (an average of nearly 40 percent of the total inflows). Groundwater generally flows from the northwest to the southeast across the Basin. The Basin boundaries are illustrated at Figure 4.6-1.

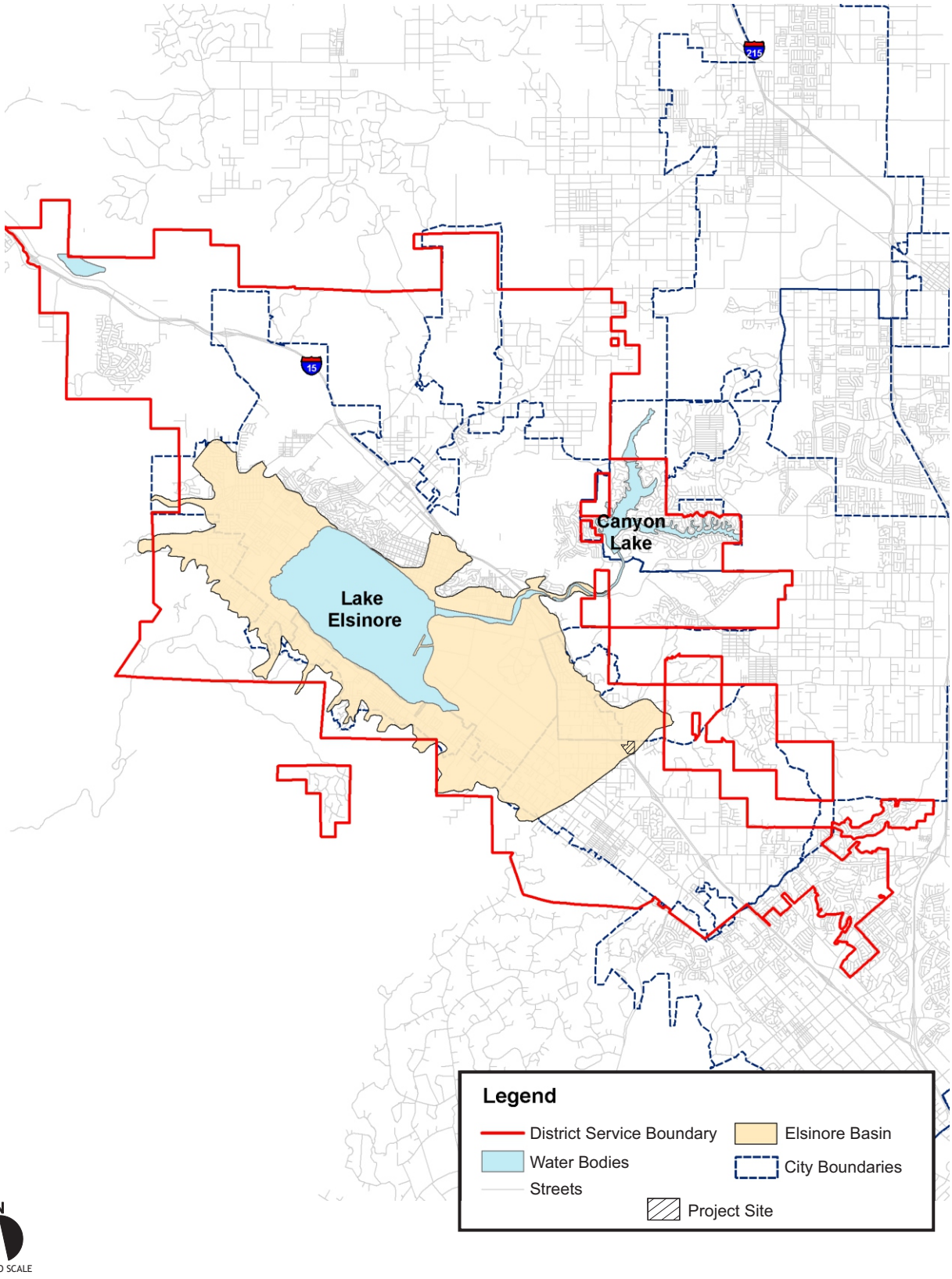
The Project does not propose or require facilities or operations that would directly affect groundwater. Potable water supply and wastewater collection services are currently provided to the Project site and surrounding areas by the EVMWD. It is anticipated that the Project would connect to the existing EVMWD water mains located in either Bundy Canyon Road or Monte Vista Drive. The Project would pay all requisite EVMWD connection and service fees and would design, implement, and maintain water service improvements consistent with EVMWD and City requirements.

4.6.3 HYDROLOGY/WATER QUALITY POLICIES AND REGULATIONS

Applicable federal, state, and local policies and regulations which act to reduce potential hydrologic impacts and/or act to protect and preserve water quality are summarized below.

4.6.3.1 Federal Water Pollution Control Act, Federal Clean Water Act (CWA)

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act (CWA), which was substantially revised by amendments in 1972 that created the bulk of the current statutory scheme. The CWA requires states to adopt water quality standards. To achieve its objectives, the CWA is based on the concept that all discharges into the nation's waters are unlawful, unless specifically authorized by a permit. Moreover, the CWA states that discharge of pollutants into waters of the United States from any point source is unlawful unless the discharge complies with the National Pollution Discharge Elimination System (NPDES) permit.



Source: Elsinore Valley Municipal Water District; Applied Planning, Inc.

Figure 4.6-1
Elsinore Groundwater Basin Map

The NPDES is a national program implemented under Section 402 of the CWA. The CWA establishes the framework for regulating municipal and industrial (point sources) stormwater discharges under the NPDES program. In California, the NPDES program is administered through the nine Regional Water Quality Control Boards, including the San Diego Regional Water Quality Control Board (SDRWQCB). Locally, the SDRWQCB is responsible for determining the City of Wildomar's compliance with the water quality requirements of the CWA. To this end, the City has prepared its Jurisdictional Runoff Management Plan (JRMP), which is discussed in greater detail subsequently within this Section.

Non-point pollution sources are also regulated by the SDRWQCB through the General Construction Activity NPDES permits, which are issued for stormwater discharges. Construction activities that are subject to this general permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation that result in soil disturbances. Stormwater pollution prevention plans (SWPPPs) are required for the issuance of a construction NPDES permit and typically include both structural and non-structural Best Management Practices (BMPs) to reduce water quality impacts. The Project will implement and comply with applicable provisions of the Federal Water Pollution Control Act, and Federal Clean Water Act.

4.6.3.2 State of California and Riverside County

At the federal level, the Clean Water Act allows the Environmental Protection Agency (EPA) to delegate its NPDES system permitting authority to states with an approved regulatory program. The Clean Water Act authorizes discharge of pollutants into waters of the State by issuance of NPDES permits. An NPDES permit has been issued to the Riverside County Flood Control and Water Conservation District (RCFC&WCD) by the California Regional Water Quality Control Board, San Diego Region (SDRWQCB). The RCFC&WCD is the "Principal Permittee," while the City is considered a "Co-Permittee" to the SDRWQCB NPDES permit.

Regulated entities acting as co-permittees must obtain coverage under an NPDES SDRWQCB permit and implement construction stormwater pollution prevention plans (SWPPPs), and operational Water Quality Management Plans (WQMPs) employing BMPs that effectively reduce or prevent the discharge of pollutants into receiving waters. The NPDES permit imposes various requirements of the discharger. In general, provided the discharger complies with such requirements, the discharger is deemed to be in compliance with the CWA and the Permit. Most of the requirements imposed by the Permit consist of BMPs, which are construction and operational discharge control practices and mechanisms that have been deemed to achieve compliance with the CWA requirements. Additional details regarding the required SWPPP and WQMP studies are provided below.

Stormwater Pollution Prevention Plan (SWPPP)

In December 1999, the State Water Resources Control Board (SWRCB) issued an NPDES General Permit for the discharge of stormwater associated with construction activities. Federal regulations promulgated by USEPA (40 CFR Parts, 9, 122, 123, and 124) expanded the NPDES stormwater program to include stormwater discharges from MS4s and construction sites that were smaller than those previously included in the program. Accordingly, SWRCB issued a NPDES Construction General Permit for the discharge of stormwater associated with construction activities. The Permit is periodically updated to reflect evolving water quality standards, regulatory actions, and pollution control strategies. The current Permit addresses stormwater discharges associated with construction activities, and is applicable to all of California. The Permit includes a mandate that all dischargers shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP). SWPPP requirements are detailed in the Permit.

BMP stormwater pollutant source controls are articulated in the NPDES Permit, and include such measures as first flush diversion, detention/retention basins, infiltration trenches/basins, porous pavement, oil/grease separators, grass swales, education programs, and maintenance practices. The NPDES permitting program also includes measures to reduce the release of pollutants such as sediment, construction materials, or accidental spillage of polluting materials during construction. Consistent with

provisions of the NPDES Permit, the City of Wildomar requires implementation of development-specific SWPPPs and incorporation of BMPs that reduce, to the extent practicable, stormwater and urban runoff pollutant discharges to the waters of Southern California.

Water Quality Management Plan (WQMP)

Pursuant to City requirements, the Project would also develop and implement a Project-Specific Water Quality Management Plan (WQMP), addressing potential operational stormwater pollutant discharges over the life of the Project. As with the Project SWPPP, the Project's mandated WQMP would act to control potential discharge of pollutants, prevent sewage spills, and avoid discharge of sediments into streets, stormwater channels, or waterways.

SWPPP/WQMP Components

Typical SWPPP and WQMP elements include:

- Introduction and Purpose
- Compliance Requirements and Certifications
- Facility Information/Pollution Prevention Team Members
- Site Map
- List of Significant Materials
- Potential Stormwater Pollutants and Sources
- Best Management Practices
- Summary of Pollutants, Sources, and BMPs
- Annual Comprehensive Site Evaluation
- Definitions
- State Notice of Intent Form and Instructions

Jurisdictional Runoff Master Plan

As noted previously within this Section, the City is also governed by the MS4 Permit issued to co-permittees in the Santa Margarita region (for areas within Riverside County) by the SDRWQCB. This MS4 Permit places pollution prevention requirements on planned developments, construction sites, commercial and industrial businesses, municipal facilities and activities, and residential activities. The City's JRMP is based on

a template implemented throughout the Santa Margarita Region that was developed jointly by co-permittees to promote consistency in their compliance programs.

4.6.3.3 Porter-Cologne Water Quality Act

Section 303 of the federal Clean Water Act and the State's Porter-Cologne Water Quality Act establish applicable water quality objectives for ground and surface waters in the State. In general, protection and maintenance of surface water quality is the combined responsibility of the applicable Regional Water Quality Control Board (SDRWQCB), water supply and wastewater management agencies (EVMWD), and City (City of Wildomar) and County (Riverside County) governments.

The RWQCB has purview over point and non-point sources of pollution. Point source water pollutants consist of controlled wastewater releases that are commonly generated by activities that use water to collect pollutants and transport them from the processing facility. When such wastewater discharges are proposed, the applicant must obtain a set of Waste Discharge Requirements from the RWQCB which serve to control water pollution to a non-significant level from such point sources.

Non-point sources of water pollution consist of surface runoff from a site or area during or following a storm where the source of pollution cannot be traced to a specific location. Typical non-point water pollution sources consist of agricultural fields with sediment and fertilizers, construction sites with sediment and debris, and roads with oil, tire particles, and debris common to roads. The Project will implement and comply with applicable Porter-Cologne water quality protection policies and mandates.

4.6.3.4 Wildomar Municipal Code

All required Project storm drain facilities will be funded, designed, implemented, and maintained consistent with City of Wildomar policies and requirements as outlined in the City Municipal Code. General requirements are outlined below. Please refer also to the City of Wildomar Municipal Code: http://qcode.us/codes/wildomar/.

More specifically, Municipal Code Title 13, "Public Services," Chapter 13.12, "Stormwater Drainage System Protection," identifies the following requirements for new development.

> 13.12.060 Reduction of pollutants in stormwater. New Development and Redevelopment. New development or redevelopment projects shall control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water. The Director of TLMA [presumed to be the City's Director of Public Works or his/her designee] shall identify the BMPs [Best Management Practices] that may be implemented to prevent such deterioration and shall identify the manner of implementation. The BMPs may, among other things, require new developments or redevelopments to do any of the following:
>
> 1. Increase permeable areas by leaving highly porous soil and low lying areas undisturbed, by incorporating landscaping and open space into the project design, by using porous materials for or near driveways and walkways, and by incorporating detention ponds and infiltration pits into the project design;
>
> 2. Direct runoff to permeable areas, by orienting it away from impermeable areas to swales, berms, green strip filters, gravel beds, and French drains; by installing rain-gutters oriented towards permeable areas; by modifying the grade of the property to divert flow to permeable areas and minimize the amount of stormwater runoff leaving the property; and by designing curbs, berms or other structures such that they do not isolate permeable or landscaped areas;
>
> 3. Maximize stormwater for reuse, by using retention structures, subsurface areas, cisterns, or other structures to store stormwater runoff for reuse or slow release.

Municipal Code Title 15, "Buildings and Construction," broadly address design and development standards that provide for control and conveyance of commercial stormwater discharges. Pursuant to the provisions of Municipal Code Chapters 15.12 and 15.20, the Project would be subject to all applicable measures of the California Building Code (CBC), and California Green Building Standards Code, respectively.

4.6.5 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, hydrology/water quality impacts would be considered potentially significant if the Project would:

- Violate any water quality standards or waste discharge requirements;

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

- Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

- Otherwise substantially degrade water quality;

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

- Cause or result in inundation by seiche, tsunami, or mudflow.

4.6.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.6.6.1 Introduction

The following discussions focus on topical areas and issues where it has been determined pursuant to the EIR Initial Study/NOP processes, that the Project may result in or cause potentially significant hydrology/water quality impacts. Of the CEQA threshold considerations identified above at Section 4.6.5, and as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further substantively discussed here:

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

- Inundation by seiche, tsunami, or mudflow.

All other CEQA topics concerning the Project's potential impacts to hydrology/water quality are discussed below. Please also refer to Initial Study Checklist Item X., *Hydrology and Water Quality*.

4.6.6.2 Impact Statements

Potential Impacts: *Violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding or substantial erosion or siltation on- or off-site; or create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or otherwise substantially degrade water quality.*

Impact Analysis:

Project Stormwater Management System Concept

The Project incorporates all necessary stormwater management system improvements, and would comply with all system design, construction, and operational requirements mandated under the City Municipal Code and within regulations established by other

agencies such as the Riverside County Flood Control and Water Conservation District (RCFC&WCD), SDRWQCB and California Department of Water Resources. In combination, the Project's stormwater management system components, and compliance with regulatory requirements act to preclude potentially adverse stormwater runoff impacts.

Stormwater runoff from the Project site currently discharges generally to the south, east and north, with drainage patterns largely determined by defining ridges and ravines within the Project site. Stormwater discharges from the southerly portions of the Project site (and north-trending off-site surface flows from areas located southerly of the Project site) are currently collected at a headwall structure located in the southwesterly portion of the Project site, approximately 50 feet beyond the terminus of Windwood Lane. Stormwaters are then conveyed east/northeasterly by the existing 30 – 36-inch reinforced concrete pipe (RCP) located beneath Windwood Lane, discharging to the existing concrete channel paralleling Valley Vista Circle northeasterly of the project site.

Stormwater discharges from the easterly and northerly portions of the Project site are currently collected in an unimproved channel located along the Project site easterly and northerly boundaries, discharging to a headwall structure located at the northerly terminus of the aforementioned concrete channel paralleling Valley Vista Circle. Project stormwaters discharge ultimately to Murrieta Creek, the Santa Margarita River, and the Pacific Ocean.

Although a significant increase in downstream runoff could be presumed due to the fact that the site is being transformed from undeveloped land to a developed residential site, the Project Hydrology Study (EIR Appendix F) substantiates that the Project stormwater management systems would act to reduce post-development downstream stormwater discharges to pre-development conditions. This would be accomplished through collection and capture of stormwater runoff within LID BMP treatment areas located throughout the Project site and detention of developed stormwaters within the detention basin proposed in the southwesterly portion of the Project site. Notable components of the Project stormwater management system would include:

- Surface inlets and internal drain lines that would collect and direct stormwaters to various BMP treatment areas;

- BMP treatment areas that would include LID bioretention and other treatment protocols within impervious surfaces including parking areas; self-treating areas along slopes adjacent to buildings and roads; and natural areas that would be retained along the Project site perimeter;

- A storm water quality and detention basin located in the southwesterly portion of the Project site. The basin would adequately accept and detain increased stormwater runoff resulting from impervious areas created by the Project. The Santa Margarita Region Hydrology Model (SMRHM) has been employed in evaluation of this basin, and the basin is identified as "passed" under the SMRHM (Project WQMP, pp. 22-23).

- The above-noted basin would connect to the existing 30 – 36 inch storm drain located in Windwood Lane. The existing storm drain in Windwood Lane currently has the capacity to convey design flows from the developed Project site (Project Hydrology Study, p. 5).

- Under pre-development conditions, the Project site conveys approximately 1900 cubic feet per second (cfs) from 1650 acres of easterly offsite areas through the existing Bundy Canyon Wash to the existing inlet located westerly of the Project site. Under post-development conditions, these offsite flows would remain separate from developed onsite flows and would transit the Project site unaltered (Project Hydrology Study, p. 5).

The post-development condition onsite rational method hydrology analysis was performed the Project watershed areas, all of which are tributary to the Santa Margarita Watershed. Under post-development conditions, stormwater discharges would not be diverted to a different watershed (Project Hydrology Study, p. 5).

The Santa Margarita Region Hydrology Model (SMRHM) developed by Clear Creek Solutions was employed to analyze the effect of the Project on increased runoff to the Santa Margarita River Watershed. Modeling pursuant to SMRHM demonstrates that hydromodification resulting from the Project would not adversely affect stormwater runoff volumes, rates, or water quality. The detailed hydromodification analysis is provided in the Project Water Quality Management Plan (please refer to WQMP, Appendix 7).

The Project stormwater management system would be developed and operated in compliance with City/SDRWQCB regulations and water quality standards. The Project would provide connection to existing and proposed drainage systems in the least invasive manner possible. Design, configuration, and locations of proposed stormwater management system improvements would be reviewed and approved by the City prior to, or concurrent with, application for grading permits and encroachment permits for improvements.

Implementation of the Project stormwater management system concept as summarized herein would maintain existing drainage patterns and would not increase the rate or amount of surface runoff or contribute runoff water that would exceed the capacity of the existing or planned drainage systems. It is also noted that the Project Applicant would pay all requisite RCFC&WCD Area Drainage Plan (ADP) fees, and City DIF. These revenues sources contribute to funding of downstream master drainage facilities and maintenance of on-site facilities, thereby acting to ensure that stormwater management facilities are improved and maintained commensurate with development demands.

Project SWPPP and Compliance with Regulatory Requirements Address Construction-Source Water Quality Impacts

During site preparation activities prior to construction, existing groundcover would be removed from portions of the Project site; exposed areas would be subject to increased wind and water erosion potentials. Further, construction site runoff may carry increased loads of sediment, heavy metals and petroleum hydrocarbons (from

machinery) which could degrade water quality. In accordance with NPDES requirements, the Project Applicant would be required to prepare a construction activities erosion control plan to alleviate potential sedimentation and stormwater discharge contamination impacts of the Project.

The Applicant would also be responsible for compliance with the City's General Construction NPDES Permit by filing a Notice of Intent to Commence Construction Activities. Under the General Construction Permit, discharge of materials other than stormwater is prohibited. The Applicant shall prepare, retain at the construction site, and implement a SWPPP identifying the sources of sediments and other pollutants that affect the quality of stormwater discharges, and implement practices to reduce sediment and other pollutants to stormwater discharges. SWPPPs for construction activities within the Project area would typically include BMPs that act to:

- Control and prevent potential contaminant spills;
- Prevent runoff from off-site areas from flow across the construction site(s);
- Slow runoff rates across the site;
- Provide soils stabilization; and
- Remove sediment from on-site runoff before it leaves the site.

BMPs accomplishing the above would include, but not be limited to, the following:

- Silt Fences;
- Check Dams;
- Gravel Bag Berms;

- Street Sweeping and Vacuuming;
- Sand Bag Barriers;
- Storm Drain Inlet Protection;
- Wind Erosion Control;
- Stabilized Construction Entrance/Exit; and
- Entrance/Outlet Tire Wash.

SWPPP(s) are required prior to the issuance of development permits. Implementation of the Project SWPPP and compliance with applicable NPDES and SDRWQCB requirements would ensure that potential construction-source water quality impacts of the Project are less-than-significant.

Project WQMP and Compliance with Regulatory Requirements Address Operational-Source Water Quality Impacts

Over the life of the Project, contaminants such as oil, fuel and grease that are spilled or left behind by vehicular traffic, collect and concentrate on paved surfaces. During storm events, these contaminants are discharged to the storm drain system and may potentially degrade receiving water quality. Stormwater runoff from impervious surfaces within the developed Project area could carry a variety of urban wastes, including greases and oils and small amounts of metals. In addition, stormwater runoff would likely contain residual amounts of fertilizers and pesticides discharged from landscaped areas within the Project site.

Recognizing the potential hazards of such urban runoff, the EPA has issued regulations which required municipalities to participate in the NPDES. As part of this program, the SDRWQCB has issued an NPDES permit for urban runoff to the RCFC&WCD, and the City of Wildomar has been established as a co-permittee. Compliance with the

provisions specified in the NPDES permit ensures proper management and disposal of urban runoff from the Project.

In support of the above requirements, the Project Applicant would also be required to develop and implement a Project-specific WQMP addressing all post-construction pollutant discharges. A Preliminary Project-specific WQMP is included at EIR Appendix F. The Project Applicant would be required to submit a final WQMP prior to the issuance of grading and/or encroachment permits.

Based on compliance with applicable NPDES requirements, and implementation of the Project WQMP to include any additional requirements stipulated by the City and/or SDRWQCB, the potential for the Project to result in a potential for discharge of stormwater pollutants from post-construction activities; otherwise result in any other potential impacts to stormwater runoff from post-construction activities; violate any water quality standards or waste discharge requirements; or otherwise substantially degrade water quality would be less-than-significant.

Conclusion

The Project stormwater management system concept incorporates those improvements necessary to adequately and appropriately collect, treat, and convey stormwater discharges from the developed Project site, avoiding potentially substantive adverse impacts to water quality, drainage patterns, amount or rate of surface runoff; or drainage system capacities/capabilities. On this basis, the potential for the Project to: violate any water quality standards or waste discharge requirements; substantially alter the existing drainage pattern of the site or area; substantially increase the rate or amount of surface runoff in a manner which would result in flooding or substantial erosion or siltation on- or off-site; create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems; provide substantial additional sources of polluted runoff; or otherwise substantially degrade water quality is determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

4.7 GEOLOGY AND SOILS

4.7 GEOLOGY AND SOILS

Abstract

This Section addresses the potential for the Project to result in substantial geotechnical hazards or soils-related impacts. More specifically, this analysis presented here focuses on whether the Project would result in, or be subjected to any of the following:

- *Expose people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction;*

- *Location 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; or*

- *Location on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), creating substantial risks to life or property.*

Other potential CEQA geologic, seismic, and soils considerations at the subject site and/or affecting the Project are determined to be less-than-significant as discussed within the EIR Initial Study (EIR Appendix A, Checklist Item VII., Geology and Soils.)

Geologic, soils, and geotechnical conditions affecting the subject site and Project are described and evaluated within: Geotechnical Investigation, Multi-Family Development, Bundy Canyon Road Near Tulip Lane, APN 367-250-008, Wildomar, California *(Geocon West, Inc.), February 25, 2016 (Project Geotechnical Investigation). The Project Geotechnical Investigation (EIR Appendix G) concludes that the subject site is suitable for development of the Project, provided that recommendations of the Investigation are implemented during Project design and construction. The Project Geotechnical Investigation conclusions and*

recommendations in total are incorporated by reference, and the recommendations in total are restated as EIR Mitigation Measures to ensure their monitored implementation. As supported by the analysis presented in this Section, potential geology and soils impacts of the Project are determined to be less-than-significant with incorporation of proposed mitigation.

4.7.1 INTRODUCTION

This Section examines underlying soil conditions and geologic characteristics of the Project site, and evaluates potential related impacts affecting design, construction, and operation of the Project. The subsequent discussions provide an assessment of potential seismologic hazards, notably faults and primary and secondary earthquake hazards which may affect the proposal. Influences such as topography and soil types are also discussed as these factors substantively influence potential erosion and landslide hazard characteristics of the subject property.

The discussion in this Section is summarized from the Wildomar General Plan, and *Geotechnical Investigation, Multi-Family Development, Bundy Canyon Road Near Tulip Lane, APN 367-250-008, Wildomar, California* (Geocon West, Inc.), February 25, 2016 (Project Geotechnical Investigation). The Project Geotechnical Investigation is included in its entirety at EIR Appendix G.

4.7.2 SETTING

Following are discussions of the Project site geology and geologic/soils hazards. Please refer also to detailed discussions presented in the Project Geotechnical Investigation.

4.7.2.1 Geology

The City of Wildomar is located in the Temescal/Temecula Valley within the Peninsular Ranges Geomorphic Province. The Peninsular Range, which extends southward from the Los Angeles Basin through Baja California, is characterized by large Mesozoic age intrusive rock masses flanked by volcanic, meta-sedimentary and sedimentary rocks. The Peninsular Range has a general northwest trending structural grain that includes numerous faults. The Santa Ana Mountains and the Santa Rosa Plateau are located to the west, the Santa Margarita and Aqua Tibia Ranges are to the south, and the San Jacinto ranges are to the east.

The Project site is located within the Perris Block of the Peninsular Ranges Geomorphic Province. The Perris Block is characterized by granitic highlands displaying multiple elevated erosional surfaces surrounded by alluviated valleys. The Peninsular Ranges are bound by the Transverse Ranges (San Gabrielle and San Bernardino Mountains) to the north and by the Colorado Desert Geomorphic Province to the east (Geotechnical Investigation, p. 2).

The Peninsular Ranges Province extends westerly into the Pacific Ocean and southerly to Baja California. Overall the Province is characterized by Cretaceous-age granitic rock and a lesser amount of Mesozoic-age metamorphic rock overlain by terrestrial and marine sediments. Faulting within the Province is typically northwest trending and includes the San Andreas, San Jacinto, Elsinore, and Newport-Inglewood faults. Locally, the Project site is just east of the southern portion of Elsinore Valley, east of the Glen Ivy segment of the Elsinore fault zone. Cretaceous-age granitic rocks associated with the Paloma Valley Ring Complex compose the majority of the site, with lesser amounts of alluvium on the fringes (Geotechnical Investigation, p. 2).

Geologic materials encountered within the Project site include previously placed artificial fill, alluvium, and granitic bedrock. Previously placed artificial fill exists along the westerly Project boundary, and is a byproduct of development of westerly adjacent residential uses. Alluvium is evident within the ephemeral stream along the northerly Project boundary. Alluvium is also encountered within the southwesterly and southeasterly portions of the Project site. Cretaceous-age granitic bedrock (granodiorite) comprises the remainder of the Project site surface geology, and underlies the site at depth (Geotechnical Investigation, p. 3).

4.7.2.2 Geologic/Soils Hazards

Faulting

The principal source of seismic activity affecting the Project site and the City in total is movement along the northwest-trending regional faults such as the San Andreas, San Jacinto and Elsinore fault zones. The Project site is not located within a State of California "Alquist-Priolo Earthquake Fault Zone" for fault rupture hazard (CGS 2015),

nor is the site located within a Riverside County Fault Zone (Riverside GIS, 2016). In relationship to the Project site, the nearest known active fault is the Glen Ivy section of Elsinore fault zone, located approximately 2,300 feet westerly of the Project site. The Elsinore fault zone is capable of producing an earthquake with an estimated maximum moment magnitude of MW 7.5, and has an associated slip-rate of 1.0 mm/year (Geotechnical Investigation, pp. 4, 5).

Liquefaction/Seismically Induced Settlement

Liquefaction typically occurs when a site is subject to, or is affected by, the following conditions:

- Location within a zone with seismic activity;
- Presence of soils that are cohesionless/silt or clay with low plasticity;
- Presence of static groundwater encountered within 50 feet of the surface; and
- Soil relative densities less than 70 percent.

If the four previous criteria are met, a seismic event could result in a rapid pore-water pressure increase from the earthquake-generated ground accelerations. Seismically induced settlement may occur whether the potential for liquefaction exists or not.

Based on the dense to very dense nature of the granitic bedrock underlying the Project site; the dense nature of any fill to be placed at the Project site (fill density requirements per the Geotechnical Investigation, or as otherwise required by the City); and the lack of groundwater at the Project site, liquefaction and seismically induced settlement hazards are not substantive design considerations for the Project (Geotechnical Investigation, p. 6).

Expansive Soils

Geologic units evidenced within the Project site comprise silty sands to gravelly sands. These soil types typically have a low expansion potential. Laboratory testing results indicate a sample of the Project site's fine-grained soil units exhibit an expansion index of 25, considered as a "low" potential for expansion in accordance with ASTM

International (ASTM) D4829, *Standard Test Method for Expansion Index of Soils* (Geotechnical Investigation, p. 6). If medium to highly expansive soils (expansion index > 50) are encountered during Project grading activities, such soils shall be a minimum of four feet below proposed structural, flatwork, or paving improvements.

Collapsible Soils

Alluvial soils present within the Project site may exhibit some degree of collapse potential when loaded to the anticipated post-grading pressures. Remedial grading (removal of alluvium) should be performed to mitigate the effects of the collapsible soils.

Landslides

No mapped landslides were identified on reference materials reviewed in preparation of the Geotechnical Investigation; nor were landslides observed during field investigations (Geotechnical Investigation, p. 7). In combination, granitic bedrock comprising slopes within the Project site, and design standards incorporated in the Project grading plan as approved by the City would act to preclude or minimize the likelihood of landsliding.

Rock Falls

Hills on and adjacent to the Project site consist of granitic bedrock. Natural slopes below the Project area are relatively free of boulders, though a few boulders were observed during field investigations. Naturally occurring groundcover and topsoil on slopes below the Project site act to impede and arrest rock falls. Moreover, design standards incorporated in the Project grading plan as approved by the City would act to preclude or minimize the likelihood of rock falls.

Slope Stability

Grading at the Project site would include fill slopes with maximum heights of approximately 75 feet, and maximum slopes of 2:1 (horizontal run : vertical rise, h:v), with horizontal benches or roadways at approximate mid-slope heights. The Project

grading concept also reflects cut slopes into granitic bedrock with maximum heights of approximately 15 feet and maximum slopes of 2:1 (h:v).

Cut slopes in granitic bedrock and fill slopes constructed with on-site soils as described above would evidence Factors of Safety of 1.5 or greater under static conditions and 1.1 or greater under seismic conditions (Geotechnical Investigation, p.7).

Detailed site-specific slope stability analyses should be developed as the Project grading plan is further defined. Cut slopes should be geologically mapped during grading. Fill keys should be constructed in accordance with the standard grading specifications provided at Geotechnical Investigation. Grading and design of cut and fill slopes shall conform to City of Wildomar building code requirements and incumbent California Building Code (CBC) requirements.

Tsunamis and Seiches

A tsunami is a series of long period waves generated in the ocean by a sudden displacement of large volumes of water. Causes of tsunamis include underwater earthquakes, volcanic eruptions, or offshore slope failures. The first order driving force for locally generated tsunamis offshore southern California is expected to be tectonic deformation from large earthquakes. The Project site is located approximately 24 miles inland at an elevation > 1,450 feet above mean sea level (MSL), and is therefore not subject to tsunamis.

A seiche is a standing wave within a lake or embayment. The key requirement for formation of a seiche is that the body of water be at least partially bounded, allowing the formation of the standing wave. Seiches are triggered by fault- or landslide-induced ground displacement. The nearest bodies of water that could generate substantive seiche hazards are Canyon Lake, approximately 3.5 miles northerly of the Project site; and Lake Elsinore, approximately 4.5 miles northwesterly of the Project site. The 3.5 – 4.5 mile physical separation of the Project site from these lakes; and negative elevation differentials between the Project site and these lakes (the lakes are 100 - 300 feet lower than the Project site) act to preclude seiche hazards.

4.7.3 REGULATORY SETTING

Following are summary descriptions of geology/soils/seismic policies and regulations applicable to the Project. In many instances, compliance with existing policies and regulations eliminates, or substantially reduces, potential environmental effects.

4.7.3.1 City of Wildomar Development Review Processes

The City of Wildomar, through its Planning Department, Building and Safety Department, and Engineering Department, implements General Plan Goals and Policies addressing geology, soils, and seismic conditions through established development permit review processes. To these ends, City staff ensures that site and development-specific geotechnical investigations are completed where appropriate, and that requirements and recommendations of these investigations are incorporated in construction plans, are followed through during construction processes, and are functionally complete before buildings are occupied and/or infrastructure systems or other improvements are accepted. In the case of the Project considered here, to the satisfaction of the City, recommendations and requirements of *Geotechnical Investigation, Multi-Family Development, Bundy Canyon Road Near Tulip Lane, APN 367-250-008, Wildomar, California* (Geocon West, Inc.), February 25, 2016, will be incorporated in the final Project design and construction. In all instances, the City ensures that, at a minimum, applicable provisions of the California Building Code are incorporated throughout development design and implementation.

4.7.4 STANDARDS OF SIGNIFICANCE

Appendix G of the *CEQA Guidelines* indicates a Project will have a potentially significant geology and soils impact if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction or landslides;

- Result in substantial soil erosion or the loss of topsoil;

- 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;

- Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), creating substantial risks to life or property; or

- 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.

4.7.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.7.5.1 Introduction

As substantiated previously within this Section and supported by analysis in the Initial Study, the Project's potential to: expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, strong seismic shaking, or landslides; result in substantial soil erosion or the loss of topsoil; or have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available, are determined to be less-than-significant. Please refer also to EIR Appendix A, Initial Study Checklist Item VII., *Geology and Soils*.

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant impacts. Topical areas addressed include:

- Potential to expose people or structures to substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction;

- Potential location of the Project on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or

- Potential location of the Project on expansive soil, as defined in Table 18-1-B of the California Building Code (2013), thereby creating substantial risks to life or property.

4.7.5.2 Impact Statements

Potential Impact: *Would the Project expose people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction; or 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?*

Impact Analysis: The Project Geotechnical Investigation concludes that the Project site is acceptable for the proposed development, contingent on compliance with recommendations and performance standards identified in the Investigation.

As discussed herein, the Project site is not adversely affected by known earthquake faults or other seismic hazards. Further, appropriate measures which reduce the effects of seismic events and potentially adverse geology and soils conditions at the Project site are broadly identified in the CBC as implemented by the City of Wildomar. Short of a catastrophic event, design of structures in accordance with the Project Geotechnical Investigation, the CBC, and current seismic engineering practices is sufficient to ensure potential effects of ground shaking, including potential liquefaction hazards, are less than significant.

The Geotechnical Investigation recommendations and performance standards address topics that include:

- General Considerations (Investigation, pp. 9 - 10);
- Soils Characteristics (Investigation, pp. 10 - 12);
- Grading (Investigation, pp. 12 - 14);
- Graded Slopes (Investigation, pp. 14 - 15);
- Earthwork Grading Factors (Investigation, p. 15);
- Fill Settlement (Investigation, p. 16);
- Foundation and Concrete Slabs-on-Grade (Investigation, pp. 16 - 21);
- Exterior Concrete Flatwork (Investigation, p. 22);
- Conventional Retaining walls (Investigation, pp. 23 - 24);
- Lateral Loading (Investigation, p. 24);
- Swimming Pools/Spas (Investigation, pp. 24 - 25);
- Pavement Design (Investigation, pp. 25 - 28);
- Site Drainage and Moisture Protection (Investigation, pp. 28 - 29); and
- Plan Review (Investigation, p. 29).

Through established Site Plan, Building Permit, and Certificate of Occupancy requirements, the City will verify that required design and construction measures are incorporated throughout Project development and are functionally implemented in the completed structures and facilities.

As supported by the preceding discussions, the potential for the Project to result in exposure of people or structures to potentially substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction; or to result in development 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, is considered less-than-significant.

Level of Significance: Less-Than-Significant. Incorporation of recommendations of the Project Geotechnical Investigation, and compliance with existing City/CBC seismic design regulations, standards, and policies reduces potential seismic-related ground failure, soils stability, landslide, lateral spreading, subsidence, liquefaction and subsurface collapse impacts to levels that are less-than-significant, and no additional

mitigation is required. Notwithstanding, to ensure their timely monitored implementation, recommendations presented in the Project Geotechnical Investigation will be incorporated in the EIR Mitigation Monitoring Program and are listed at the conclusion of this Section as Mitigation Measure 4.7.1.

Potential Impact: *Would the Project be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2013)*[1]*, thereby creating substantial risks to life or property?*

Impact Analysis: The California Building Code establishes methodologies and guidelines for identification of expansive soils, and establishes responsive design standards which act to avoid potentially adverse effects of expansive soils on facilities. Section 1802.3 of the 2013 California Building Code directs expansive soil tendency be graded by its Expansion Index. A soil's Expansion Index is defined by its potential to swell when wet or saturated.

Unmitigated effects of expansive or otherwise unstable soils may adversely affect roadway subgrades, concrete slabs-on-grade, and building foundations. In the event of a severe earthquake in the vicinity of the Project, structural foundations and floors may be damaged if constructed in, or over, expansive or unstable soils.

As discussed in the Project Geotechnical Investigation, Project site soil samples evidence an Expansion Index of 25, a low expansion potential. Accordingly, the Project site is not considered to be substantively and/or adversely affected by expansive soils. Notwithstanding, should soils with moderate to high expansive indices (EI > 50) be encountered, recommendations incorporated in the Geotechnical Investigation require that such soils be placed a minimum of four feet below proposed structural, flatwork, or paving improvements.

[1] The 2013 *CEQA Guidelines* Appendix G maintains a reference to the 1994 UBC. Currently applicable expansive soils criteria are included in the 2013 CBC.

As supported by the preceding discussion, the potential for the Project to be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2013) is considered less-than-significant.

Level of Significance: Less-Than-Significant. Incorporation of recommendations of the Project Geotechnical Investigation, and compliance with existing City/CBC seismic design regulations, standards, and policies reduces potential expansive soils impacts to levels that are less-than-significant, and no additional mitigation is required. Notwithstanding, to ensure their timely monitored implementation, recommendations presented in the Project Geotechnical Investigation will be incorporated in the EIR Mitigation Monitoring Program and are listed below.

Mitigation Measure: Recommendations presented in the Project Geotechnical Investigation will be incorporated in the EIR Mitigation Monitoring Program, and listed here as Mitigation Measure 4.7.1.

4.7.1 Design and development of the Project shall comply with recommendations and performance standards identified in the Geotechnical Investigation at pages 9 through 29, Sections 9.1 through 9.14. Where the Project Geotechnical Investigation is silent, requirements of the California Building Code as adopted and implemented by the City of Wildomar shall prevail. The Project Geotechnical Investigation provides recommendations and performance standards for the following design and development components/attributes:

- *General Considerations (Investigation, pp. 9 - 10);*
- *Soils Characteristics (Investigation, pp. 10 - 12);*
- *Grading (Investigation, pp. 12 - 14);*
- *Graded Slopes (Investigation, pp. 14 - 15);*
- *Earthwork Grading Factors (Investigation, p. 15);*
- *Fill Settlement (Investigation, p. 16);*
- *Foundation and Concrete Slabs-on-Grade (Investigation, pp. 16 - 21);*
- *Exterior Concrete Flatwork (Investigation, p. 22);*

- *Conventional Retaining walls (Investigation, pp. 23 - 24);*
- *Lateral Loading (Investigation, p. 24);*
- *Swimming Pools/Spas (Investigation, pp. 24 - 25);*
- *Pavement Design (Investigation, pp. 25 - 28);*
- *Site Drainage and Moisture Protection (Investigation, pp. 28 - 29); and*
- *Plan Review (Investigation, p. 29).*

4.8 PUBLIC SERVICES & UTILITIES

4.8 PUBLIC SERVICES and UTILITIES

Abstract

This Section of the EIR addresses the Project's potential impacts to public services. Specifically, the public services and utilities analysis examines whether the Project would:

- *Result in or cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or result in the 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 fire protection, police protection, or school services.*

- *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

- *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*

- *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.*

- *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.*

- *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.*

- *Comply with federal, state, and local statutes and regulations related to solid waste.*

As supported by the discussion presented in this Section, the potential for the Project to adversely affect public services and utilities; or to result in potentially adverse environmental impacts due to the construction or expansion of service facilities or systems is less-than-significant.

4.8.1 INTRODUCTION

For each of the public services and utility systems discussed, existing service conditions are described, any improvements required to accommodate the proposed development are identified, and any resulting or associated impacts and required mitigation are discussed. The analysis is based on physical and operational attributes presented in the Project Description (EIR Section 3.0); information presented in the City of Wildomar General Plan; and information provided by or available through the City of Wildomar, County of Riverside and serving utility purveyors.

4.8.2 EXISTING CONDITIONS

4.8.2.1 Fire Protection and Emergency Services

Fire suppression and emergency response services are provided to the City of Wildomar, including the Project site, by the Riverside County Fire Department, in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE).

Within a 7,004-square-mile service area, the Department provides fire protection services and responds to varied emergencies and service requests including, but not limited to firefighting, emergency medical services and support, and hazardous materials emergencies. The Fire Department employs approximately 952 career firefighters, as well as about 1,000 volunteers.

The Department's service area is organized into eight divisions and staffed by 17 battalions. The City of Wildomar is located within the Southwest Division and is serviced by Battalions 2, 13, and 15. Fire protection services would be provided to the Project site via the most expedient and efficient manner possible within the context of fire protection service demands and resource availability. The Wildomar Fire Station (Station 61, 32637 Gruwell Street, Wildomar, CA 92595) is the Department facility nearest the Project site, located approximately 2 miles southwesterly. Location of Station 61 relative to the Project site is indicated at Figure 4.8-1.

4.8.2.2 Police Protection Services

The Riverside County Sheriff's Department currently provides police protection services to the Project site. The Department is the second-largest sheriff's office in California, operating 10 stations, managing 5 correctional facilities, performing coroner-public administrator duties, and providing court services.

The Lake Elsinore Station, located at 333 Limited Avenue, Lake Elsinore, CA 92530, serves the City of Wildomar, including the Project site. The Lake Elsinore Station is located approximately 5 miles northwesterly of the Project site. Location of the Lake Elsinore Station is indicated at Figure 4.8-1.

Source: Google Earth; Applied Planning, Inc.

Figure 4.8-1
Fire and Police Facility Locations

4.8.2.3 Public School Services

The Project site is located within the enrollment boundaries of the Lake Elsinore Unified School District (LEUSD, District). The District encompasses more than 144 square miles and serves students from the cities of Lake Elsinore, Canyon Lake and Wildomar, and several unincorporated Riverside County communities.

The District currently operates 23 schools comprising 12 schools serving grades K - 6; 2 schools serving grades K – 8; 4 middle schools; 3 comprehensive high schools; and 2 alternative schools. In total, approximately 22,000 students are served by LEUSD.

The Project would be served by the following schools:

- Ronald Reagan Elementary School (grades K - 5), located approximately 1.5 miles southeasterly of the Project. The designed capacity of the school is 1,300 students[1] with recent enrollment (2015-2016 school year) of 741 students[2];

- David A. Brown Middle School (grades 6 - 8, located approximately 2.0 miles southwesterly of the Project. The designed capacity of the school is 1,300 students with recent enrollment (2015-2016 school year) of 1,109 students; and

- Elsinore High School (grades 9 – 12), located approximately 1.0 mile westerly of the Project. The designed capacity of the school is 3,425 students with recent enrollment (2015-2016 school year) of 2,041 students.

4.8.2.4 Water Service, Supplies, and Treatment

Water is supplied to the City by the Elsinore Valley Municipal Water District (EVMWD), through the Metropolitan Water District of Southern California (MWD). EVMWD obtains its potable water from the following sources:

[1] Capacity of nearest schools obtained through School Accountability Report Cards: http://www.leusd.k12.ca.us/apps/pages/index.jsp?uREC_ID=324467&type=d&pREC_ID=732463.
[2] Enrollment data of nearest schools obtained through http://dq.cde.ca.gov/dataquest/dataquest.asp.

- **Groundwater.** EVMWD pumps groundwater from wells in its Elsinore and Temescal divisions. Overall, the Elsinore Basin groundwater quality is considered good. EVMWD has a treatment facility to remove the naturally occurring arsenic from groundwater. In addition, a blending pipeline is proposed to blend production from Cereal 1 and Corydon wells with the production from Summerly and Diamond wells to reduce arsenic concentrations. EVMWD does not anticipate any groundwater quality to have adverse impacts on supply reliability (UWMP, p. 5-4).

- **Surface Water.** Surface waters from Canyon Lake provide another source of water for EVMWD. The Canyon Lake Water Treatment Plant treats surface waters obtained from Canyon Lake (UWMP, p. 5-3, et al.).

- **Imported Water.** EVMWD purchases imported water from the Western Municipal Water District of Riverside County, a member agency of MWD. Primary sources of imported water include the Colorado River Aqueduct and State Water Project. Other sources include treated water from Lake Skinner, Lake Matthews, and the Lee Lake Water District. Imported water accounts for approximately half of EVMWD's water supply.

  Imported Metropolitan water is treated at the Skinner Filtration Plant prior to delivery to EVMWD. Further treatment is accomplished by blending source waters to reduce Total Dissolved Solids (TDS) concentrations. Currently there are no restrictions on water supply due to imported water quality (UWMP, p. 5-4).

4.8.2.5 Wastewater Treatment

EVMWD provides wastewater services to the City. EVMWD operates 310 miles of sewer pipeline, which collects and conveys wastewater generated within its service area to one of three tertiary level treatment facilities. Wastewater generated by the Project would be conveyed to, and treated at, EVMWD's Regional Water Reclamation Facility (Regional WRF) located in the City of Lake Elsinore. The Regional WRF ultraviolet disinfection system is designed to treat 8.0 million gallons per day (mgd) average flow,

and 16.0 mgd peak flow.[3] EVMWD data indicates that the annual average flow at the Regional WRF in 2010 was 6.0 mgd.[4] The EVMWD Wastewater Treatment Master Plan (Kennedy/Jenks, 2003), includes planned expansion of the Regional WRF to 20 mgd by the year 2020.[5]

4.8.2.6 Solid Waste Facilities

Three (3) landfills serve most of western Riverside County: El Sobrante, Badlands, and Lamb Canyon. Landfill statistical information is summarized at Table 4.8-1.

Table 4.8-1
Proximate County Landfill Information

Landfill	Disposal Acreage	Permitted Daily Throughput (tons)	Remaining Capacity	Projected Closure Date
El Sobrante	485	16,054	145.53 million tons (as of April 2009)	2045
Badlands	150	4,800	15.75 million cubic yards (as of January 2015)	2022
Lamb Canyon	144.6	5,500	19.24 million cubic yards (as of January 2015)	2029

Source: CalRecycle Solid waste Information System (SWIS). < http://www.calrecycle.ca.gov/swfacilities/directory/Search.aspx>

4.8.3 STANDARDS OF SIGNIFICANCE

CEQA Guidelines topical issues and standards of significance addressing potential public services and utilities impacts are listed below.

- Substantial adverse physical effects from the construction of new or altered government facilities needed to maintain acceptable service ratios, response times, or other performance objectives for fire or police protection services, schools, parks, or other public facilities.

[3] *Elsinore Valley Municipal Water District Sewer System Management Plan* (EVMWD) October 2013; Section 5.3.1 *Regional Collection System*.

[4] Ibid. p. 4-19.

[5] *Elsinore Valley Municipal Water District Urban Water Management Plan* (Montgomery Watson Harza [MWH] for EVMWD) July 2011, p. 5-9.

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

- Result in a determination by the wastewater treatment provider that 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.

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.

- Comply with federal, state, and local statutes and regulations related to solid waste.

4.8.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.8.4.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant public services and utilities impacts, based on the analysis presented within this Section and included within the Initial Study (EIR Appendix A).

As substantiated in the Initial Study, the Project would not result in potentially significant impacts related to:

- Provision of new or physically altered parks, or other public facilities; or

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

Potential Project impacts affecting other public services and utilities concerns are discussed below. Please refer also to Initial Study Checklist Items XV., *Public Services* and XVIII., *Utilities and Service Systems*.

4.8.4.2 Impact Statements

Potential Impact: *Would the Project result in or cause substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; or result in the 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 fire protection, police protection, or school services?*

Impact Analysis:

Fire Protection Services

Fire protection/suppression and emergency medical response services for the Project would be provided by the Riverside County Fire Department (RCFD), in cooperation with CAL FIRE. The Riverside County Fire Department Strategic Planning Bureau[6] provides the following information regarding RCFD fire protection services for the Project site:

[6] Riverside County Fire Department Strategic Planning Bureau NOP Response May 10, 2016.

The three nearest Fire Stations that would respond to an incident at the Project site are:

1. Station #61 (Wildomar), 32637 Gruwell Street, Wildomar, CA 92595
2. Station #68 (Menifee), 26020 Wickard Road, Menifee, CA 92584
3. Station #94 (Canyon Hills), 22770 Railroad Canyon Road, Lake Elsinore, CA 92532

From the above listed fire stations, the approximate response time for the first engine is 5 minutes after dispatch, the second within 6 minutes and the third within 8 minutes to the proposed development located in the area of Bundy Canyon Road cross of Tulip Lane in the City of Wildomar.

All the above-mentioned Fire Stations are staffed full-time, 24 hours/7 days a week, with a minimum 3 person crew, including Paramedics service, operating a "Type-1" structural firefighting apparatus.

Wildomar Fire Station 61, located approximately 2.0 miles southwesterly of the site, would likely provide initial response to the Project site based on its proximity.

The Project would be served by existing fire protection services. The *Riverside County Fire Department 2015 Annual Report* indicates 2,958 Fire Department incident responses within the City of Wildomar (Annual Report, p. 11). Current (2016) California Department of Finance (DOF) estimated population of the City of Wildomar is 35,168 persons. While not strictly population driven, this would indicate an incident response to population ratio of 0.084, or approximately one incident per 11.9 persons. In this context, the Project at 140 dwelling units and an estimated 3.33 persons[7] per household, the Project service population (466 persons) would account for approximately 39 incident responses annually, or approximately 1.3 percent of the 2,958 Department responses recorded in the Annual Report. Because the Project site is currently served by RCFD, and the additional 1.3 percent increase in incident responses generated by the

[7] Ibid.

Project would not substantively increase service demands, there is no indication that the Project would require new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts.

Nonetheless, implementation of the Project would incrementally increase demands for fire protection services and would contribute cumulatively to demands for fire protection services within the City and region. As means of offsetting these increased demands for services, the Project would be designed, constructed, and operated consistent with applicable General Plan Goals and Policies. Moreover, the Project would also comply with agency-specific criteria outlined in the Project Conditions of Approval. To this end, the Riverside County Fire Department would establish Project Conditions of Approval through the City's final site plan and plan check/building permit review processes. The Project would comply with these Conditions of Approval and any subsequent requirements of the Fire Department, should they be identified. Compliance with these requirements acts to diminish potential demands for fire department and emergency medical services.

Development impact fees and CFD 2013-1 Services tax assessed for the Project, as well as tax revenues generated by the proposal, would provide supplemental funding available to expand or enhance fire protection services available to the Project and vicinity. Development impact fees assessed of the Project would include $43,680 toward the provision and enhancement of fire protection services.[8] The City of Wildomar and the Riverside County Fire Department would ultimately determine the most effective use and allocation of Project revenues employed for the provision and enhancement of fire protection services.

Police Protection Services

Police protection services for the Project site and vicinity properties are currently provided by the Riverside County Sheriff's Department. The demand for police services

[8] *City of Wildomar Impact Fee Study Update Report* (Colgan Consulting Corporation) April 23, 2015. Please refer to Table ES-2: Impact Fees per Unit of Development – Fire Protection.

generated by the Project could lead to the diversion of police officers from other areas of the City and to an incremental increase in response times for police services.

For residential facilities such as those proposed by the Project, provision and maintenance of adequate police protection services is realized through a combination of:

- Project site and facility designs that incorporate appropriate safety and security elements; and

- Adequate law enforcement funding.

The Riverside County Sheriff's Department proposes a baseline county-wide service ratio goal of 1.2 sworn law enforcement personnel for every 1,000 residents.[9] The Project would result in an estimated service population of 466 persons, requiring approximately 0.56 additional sworn law enforcement personnel in order to maintain/achieve the Department's 1.2 service ratio of 1.2 sworn law enforcement/1000 residents. The Project site is currently served by the Riverside County Sheriff's Department and the additional 0.56 sworn personnel required to serve the Project would not warrant construction of new facilities. The Project would therefore not require new or physically altered police protection facilities, the construction of which could cause significant environmental impacts.

The introduction of new buildings, vehicles, and residents to the Project site would nonetheless incrementally increase demands for police protection services. To reduce demands on police protection services, the Project site plan and proposed facilities designs would be subject to review and approval by the City Planning Department, City Building Department, and the Riverside County Sheriff's Department. City and Sherriff's Department review protocols and criteria would ensure incorporation of appropriate safety and security elements throughout the Project including but not

[9] City of Wildomar, proposed Biennial Operating Budget Fiscal Years 2015-16 & 2016-17 (city of Wildomar) p. 158.

limited to: appropriate building and parking lot security and alarm systems, adequate outdoor lighting, and provision of defensible spaces.

Law enforcement funding is provided through City development impact fees, CFD 2013-1 Services tax, and sales tax revenues generated by the Project. Development impact fees assessed of the Project would include $22,540 directed to provision and enhancement of police protection services.[10] The City of Wildomar and the Riverside County Sheriff's Department would ultimately determine the most effective use of and allocation of Project revenues employed for the provision and enhancement of police protection services.

Public School Services

Grades K-12 public schools in the Project vicinity are administered by the Lake Elsinore Unified School District (LEUSD). The Project would be served by the following schools:

- Ronald Reagan Elementary School (grades K - 5), located approximately 1.5 miles southeasterly of the Project. The designed capacity of the school is 1,300 students[11] with recent enrollment (2015-2016 school year) of 741 students[12];

- David A. Brown Middle School (grades 6 - 8, located approximately 2.0 miles southwesterly of the Project. The designed capacity of the school is 1,300 students with recent enrollment (2015-2016 school year) of 1,109 students; and

- Elsinore High School (grades 9 – 12), located approximately 1.0 mile westerly of the Project. The designed capacity of the school is 3,425 students with recent enrollment (2015-2016 school year) of 2,041 students.

[10] *City of Wildomar Impact Fee Study Update Report* (Colgan Consulting Corporation) April 23, 2015. Table ES-2: Impact Fees per Unit of Development – Police Facilities.

[11] Capacity of nearest schools obtained through School Accountability Report Cards: http://www.leusd.k12.ca.us/apps/pages/index.jsp?uREC_ID=324467&type=d&pREC_ID=732463.

[12] Enrollment data of nearest schools obtained through http://dq.cde.ca.gov/dataquest/dataquest.asp.

Development of the Project's 140 multi-family residential units would increase the student population within the District, increasing demands on District facilities. Student generation rates for multi-family dwelling presented in the 2013 LEUSD School Facilities Needs Analysis are presented below.

- Elementary School (grades K – 5): 0.1196 students per unit
- Middle School (grades 6 – 8): 0.0498 students per unit
- High School (grades 9 – 12): 0.0649 students per unit

The 140 residential units proposed by the Project would add approximately 17 new elementary students; 7 middle school students; and 9 high school students. The additional student populations generated by the Project could be accommodated by existing facilities and the Project would therefore not require new or physically altered school facilities, the construction of which could cause significant environmental impacts.

Incremental demands on school facilities attributable to development projects are mitigated through mandated payment of school impact fees. The Project would pay requisite school impact fees, reducing Project impacts to schools services to levels that would be less-than-significant.

Summary

Development of the Project would result in incremental demands for fire protection services, police protection services, and school services. Incremental impacts of the Project are offset through payment of development impact fees, services fees and taxes directed toward the provision, expansion, and enhancement of police protection services, fire protection services and school services.

The City of Wildomar, in coordination and consultation with the Riverside County Sheriff's Department, Riverside County Fire Department, and the Lake Elsinore Unified School District would ultimately determine the most effective use of and allocation of Project revenues employed for the provision and enhancement of services.

Based on the preceding, the potential for the Project to result in the need or requirement for new physical facilities for police protection, fire protection, or schools, the construction of which would result in potentially significant environmental impacts, is less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or 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.*

Impact Analysis:

Water Service, Supplies and Treatment

Overview

Water service, supply, and treatment issues germane to the Project are globally addressed within *Elsinore Valley Municipal Water District 2011 Urban Water Management Plan* (UWMP). [13]

Water Service

The Project site would be annexed into the Elsinore Valley Municipal Water District (EVMWD) Service Area, and water would be provided to the Project by EVMWD. Annexations to Western Municipal Water District, Elsinore Valley Municipal Water District and the Metropolitan Water District of Southern California will be necessary

[13] http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Elsinore%20Valley%20Municipal%20Water%20District/EVMWD%20UWMP%202010_Final.pdf. Note: The EVMWD Board of Directors, at the Board's 6/23/16 Regular Meeting, approved a draft 2015 UWMP. The draft 2015 UWMP has been forwarded to the California Department of Water Resources (DWR). DWR staff will review the UWMP to ensure it is complete and complies with requirements identified at Water Code, Sections §10608– 10656. DWR staff will then submit a report to the Legislature summarizing the UWMP status. As of this writing, DWR has not yet completed its review of the EVMWD 2015 UWMP.

before water service is established for the subject reorganization. A condition of these annexations is the imposition of the standby charges. Overall, these annexations are administrative and fiscal actions, which do not result in a tangible change in the physical environment. Therefore, annexation impacts to the utility and service systems would be less than significant.

The Project would connect to existing water lines located in road rights-of-way adjacent to the Project site. In this regard, a 20-inch EVMWD water line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD water line is located in Windwood Lane at the southwesterly limits of the Project site. The Project would extend and connect to available water lines. Extensions of and connections to EVMWD water lines would comply with EVMWD requirements. A Will Serve letter for water service from EVMWD has been obtained (EVMWD Preliminary Service Planning Letter #2749-0, December 21, 2015 - available through the Lead Agency), indicating the District's ability and capacity to meet the Project's water demands.

The Project would connect to the above-referenced water system lines, and does not propose or require construction or alteration of water service systems that would affect other facilities in the Service Area or delivery of water to the Service Area in total. An internal system of recycled water lines (purple pipe) would be constructed as part of the Project, and the Project would connect to the EVMWD recycled water distribution system when available to the site. Recycled water, when available, would be used for non-potable purposes such as landscape irrigation and site maintenance thereby reducing potable water demands. Recycled water availability timing is uncertain. Availability of recycled water is not assumed in the analysis of Project water demands.

Water Supply Availability

Water Supplies

The Elsinore Valley Municipal Water District (District) is the principal water purveyor to the City and would be the water purveyor for the Project. As a matter of law, the

District must coordinate its water supply planning with multiple agencies as it relies on a combination of local and non-local water supply sources.

EVMWD obtains its potable water supplies from imported water from the MWD, local surface water from Canyon Lake, and local groundwater resources. In this latter regard, EVMWD has access to groundwater from Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto-Colton and Riverside-North Basin. Almost all of the groundwater production that is used for potable use occurs in the Elsinore Basin. Imported water supply is purchased from the MWD via Eastern Municipal Water District and Western Municipal Water District (UWMP, p. 5).

Since EVMWD's Service Area population is expected to increase in the next 25 years, additional water supply sources are necessary to meet future growth. Availability of future supplies would be enhanced by the construction of a pump station that would increase the Temescal Valley Pipeline (TVP) capacity, as well as implementation of the Back Basin Groundwater Storage Project as part of the Elsinore Basin Groundwater Management Plan (GWMP). EVMWD also plans to complete three near-term groundwater projects: Terra Cotta well; Cereal 1 and Corydon well blending pipeline; and Palomar well replacement. Anticipated additional supplies available from the above-noted planned water projects would range from approximately 12,900 acre-feet per year under normal conditions (assumes groundwater production and recharge are equal); up to 21,500 acre-feet per year under a single-dry-year scenario reflecting maximum groundwater production from the planned projects (UWMP, pp. 5-6).

Water Treatment

Water quality of all potable water deliveries within the Service Area comply with federal and state standards,[14] and water treatment is not considered a substantive constraint on water supplies. Overall, the Elsinore Basin groundwater quality is considered good. EVMWD has a treatment facility to remove the naturally occurring arsenic from groundwater. In addition, a blending pipeline is proposed to blend

[14] 2015 *Elsinore Valley Municipal Water District Water Quality Report* (EVMWD), pp. 7-8.

production from Cereal 1 and Corydon wells with the production from Summerly and Diamond wells to reduce arsenic concentrations. EVMWD does not anticipate any groundwater quality to have adverse impacts on supply reliability (UWMP, p. 5-4). The Canyon Lake Water Treatment Plant treats surface waters obtained from Canyon Lake (UWMP, p. 5-3, et al.). Imported Metropolitan water is treated at the Skinner Filtration Plant prior to delivery to EVMWD. Further treatment is accomplished by blending source waters to reduce Total Dissolved Solids (TDS) concentrations. Currently there are no restrictions on water supply due to imported water quality (UWMP, p. 5-4).

Water Demands

Potable water demands of the Service Area are calculated based on population projections and the EVMWD water use target of 240 gallons per capita per day (gpcd)[15]. EVMWD estimates that potable demands within the Service Area will double by 2035. The future average recycled water demand is projected to be approximately 2,430 acre-feet per year in the Wildomar area. The entire recycled water demand would constitute potable to recycled water conversions (UWMP, p. 4). The total potable and recycled water demands for the Service Area, inclusive of water demand of the Project, are summarized at Table 4.8-2.

Table 4.8-2
EVMWD Service Area Water Demand (acre-feet/year)

Water Use	2005	2010	2015	2020	2025	2030	2035
Total water deliveries	26,564	25,057	36,791	39,796	43,189	46,363	49,158
Sales to other water agencies	1,020	780	501	542	588	631	669
Additional water uses and losses	0	13,450	14,015	14,906	15,431	15,431	15,431
Total	**27,584**	**39,287**	**51,306**	**55,244**	**59,208**	**62,426**	**65,258**

Source: *Elsinore Valley Municipal Water District 2011 Urban Water Management Plan,* p. 5, Table ES-2.

The calculated likely maximum water demand of the Project (please refer to Table 4.8-3), is estimated at 111,888 gallons per day (gpd), or approximately 125.33 acre feet acre-feet per year (AFY). The Project water demand estimates are conservative and do not

[15] Does not reflect emergency water conservation measures in effect.

take credit for mandated water conservation effected under California's Drought Emergency Water Conservation Regulations, or that would be imposed by California SB7X-7.[16] Consistent with SB7X-7 mandates, per capita Project water demands would be reduced by 20 percent by the year 2020.

Table 4.8-3
Projected Water Demand

Rate	Calculation	Average Daily Demand	Average Annual Demand
240 gpcd	140 du x 3.33 persons/hshld.* x 240 gpcd	111,888 gpd	40.84 million gallons (125.33 acre feet)

* Household size from: California Department of Finance (DOF). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark*. Web. July 5, 2016. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/

In context, the Project's annual water demand (125.33 AFY) is approximately 0.24 percent (0.0024) of the District's total 2015 water demands, estimated at 51,306 acre-feet; and approximately 0.19 percent (0.0019) of the District's projected year 2035 water demands, estimated to total 65,258 acre feet. Water demands of the Project would be met by available District potable water supply resources, delivered by the Municipal water system. The Project does not require or propose direct withdrawal of groundwater. Nor does the Project require additional or enhanced water treatment beyond that already provided by the District.

Water Supply/Demand Comparison

The UWMP provides a comparison of projected water supplies and water demands within the Service Area under varying hydrologic scenarios (normal year, single dry-year, multiple dry-year) as required under the California Urban Water Management Plan Act (Division 6 Part 2.6 of the Water Code §§ 10610 - 10656). In summary, the UWMP concludes that water supplies available to the Service Area would be adequate under all anticipated hydrologic conditions. Supply/demand comparisons under normal year, single dry-year, and multiple dry-year hydrologic scenarios for the timeframe 2015–2035 are summarized at Table 4.8-4.

[16] Please refer also to: http://www.water.ca.gov/wateruseefficiency/sb7/

Table 4.8-4
EVMWD Service Area Water Supply/Demand Comparison

Normal Year					
	2015	**2020**	**2025**	**2030**	**2035**
Supply totals	69,165	70,056	70,581	70,581	70,581
Demand totals	51,306	55,244	59,208	62,426	65,258
Difference	17,858	14,812	11,373	8,155	5,323
Difference as % of Supply	25.8%	21.1%	16.1%	11.6%	7.5%
Difference as % of Demand	34.8%	26.8%	19.2%	13.1%	8.2%
Single Dry-Year					
	2015	**2020**	**2025**	**2030**	**2035**
Supply totals	77,765	78,656	79,181	79,181	79,181
Demand totals	56,027	60,326	64,655	68,169	71,262
Difference	21,738	18,329	14,526	11,012	7,919
Difference as % of Supply	28.0%	23.3%	18.3%	13.9%	10.0%
Difference as % of Demand	38.8%	30.4%	22.5%	16.2%	11.1%
Multiple Dry-Year					
	2015	**2020**	**2025**	**2030**	**2035**
Supply totals	76,765	77,656	78,181	78,181	78,181
Demand totals	56,027	60,326	64,655	68,169	71,262
Difference	20,738	17,329	13,526	10,012	6,919
Difference as % of Supply	27.0%	22.3%	17.3%	12.8%	8.9%
Difference as % of Demand	37.0%	28.7%	20.9%	14.7%	9.7%

Source: *Elsinore Valley Municipal Water District 2011 Urban Water Management Plan,* p. 10, Tables ES-9, ES-10, ES-11.

As indicated at Table 4.8-5, under all projected hydrologic scenarios, available water supplies would exceed projected water demands during the planning period 2015–2035.

Water supply/demand planning reflected in the UWMP accounts for anticipated development of the City of Wildomar pursuant to the City's General Plan, including water demands of the residential uses proposed by the Project.

Groundwater Considerations

The Project does not propose elements or aspects that would substantially interfere with, or detract from known or anticipated groundwater recharge plans or policies. In this regard, the Project site is not a designated groundwater recharge area, and development of the site with residential uses proposed by the Project is consistent with development anticipated under the General Plan. Moreover, Project site development and proposed stormwater management systems would employ and reflect appropriate structural and operational best management practices (BMPs) providing for treatment of stormwater discharges; and would incorporate permeable materials to the extent feasible. Use of permeable materials acts to reduce total runoff from the site, and facilitates runoff percolation to groundwater. Additionally, the Project stormwater management system would be implemented and operated in a manner that would act to detain/retain stormwater discharges within the Project site providing time for percolation of stormwater runoff and related groundwater recharge.

Wastewater Treatment

EVMWD provides wastewater collection and treatment services to the City of Wildomar, inclusive of the Project site. The Project would connect to existing sanitary sewer lines located in road rights-of-ways adjacent to the Project site. A 12-inch EVMWD sanitary sewer line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD sanitary sewer line is located in Windwood Lane at the southwesterly limits of the Project site.

Extensions of and connections to EVMWD sanitary sewer lines would comply with EVMWD requirements. A Will Serve letter for sanitary sewer service from EVMWD would be required, indicating the District's capacity and ability to meet the Project wastewater treatment demands. The Project does not propose or require construction or alteration of sewer service systems that would affect other facilities in the Service Area or the Service Area in total.

Project wastewater generation estimates assume that wastewater produced by the Project would approximate 43 percent of the Project's water consumption.[17] On this basis, Project wastewater generation is estimated at 48,112 gallons per day, as indicated at Table 4.8-5.

Table 4.8-5
Wastewater Generation

Generation Rate	Calculation	Average Daily Wastewater Generation	Average Annual Wastewater Generation
0.43 x water demand	0.43 x 111,888 gpd	48,112 gpd	17.56 million gallons

Source: Wastewater demand factor from: *Elsinore Valley Municipal Water District Wastewater Management Plan,* p. 3-29.

Wastewater generated by the Project would be conveyed to and treated at EVMWD's Regional Water Reclamation Facility (Regional WRF) located in the City of Lake Elsinore. The Regional WRF ultraviolet disinfection system is designed to treat 8.0 million gallons per day (mgd) average flow, and 16.0 mgd peak flow.[18] EVMWD data indicates that the annual average flow at the Regional WRF in 2010 was 6.0 mgd.[19] The EVMWD Wastewater Treatment Master Plan (Kennedy/Jenks, 2003), includes planned expansion of the Regional WRF to 20 mgd by the year 2020.[20]

In context, wastewater generated by the Project (48,112 gallons/day) would represent approximately 0.6 percent (0.006) of the Regional WRF's average daily design treatment capacity (8.0 mgd). Assuming that, since 2010, the Regional WRF treatment demands have increased proportionally with the assumed 2 percent annual population growth rate for the Service Area reflected in the UWMP,[21] the estimated Regional WRF

[17] *Elsinore Valley Municipal Wastewater Management Plan* (Carollo Engineers for EVMWD) November 2008; Section 3.4, *Average Wastewater Generation to Water Demand Ratio*.

[18] *Elsinore Valley Municipal Water District Sewer System Management Plan* (EVMWD) October 2013; Section 5.3.1 *Regional Collection System*.

[19] Ibid. p. 4-19.

[20] *Elsinore Valley Municipal Water District Urban Water Management Plan* (Montgomery Watson Harza [MWH] for EVMWD) July 2011, p. 5-9.

[21] Ibid. p. 2.

treatment demands as of 2016 would be approximately 6.76 mgd.[22] In this context, wastewater treatment demands of the Project (48,112 gpd) would represent approximately 3.8 percent of the Regional WRF's estimated 2016 residual capacity (1.24 mgd). Wastewater generated by the Project would be typical of domestic generators, and wastewater resulting from the Project uses would not require treatment beyond that provided by existing EVMWD facilities.

Based on the preceding, there is sufficient available capacity at the Regional WRF to serve the Project in the near-term; and planned Regional WRF treatment capacity expansion would adequately accommodate demands of the Project as well as future anticipated long-term demands of the Service Area. Connection and service fees paid by the Project and other customers within the Service Area provide funds available to EVMWD to provide for expansion, enhancement, and maintenance of wastewater collection and treatment facilities commensurate with anticipated Service Area demands.

Summary

As supported by the preceding discussion, Project demands for water supply, water service, water treatment, and wastewater treatment are adequately provided for through existing facilities and jurisdictional management plans and programs. Based on the preceding, the potential for the Project to: require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or 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 is less-than-significant.

Level of Significance: Less-Than-Significant.

[22] Estimated 2016 Regional WRF treatment demands conservatively do not reflect contemporary water efficiency/conservation measures implemented under CalGreen or the California Building Code; nor do treatment demand estimates assume any reductions in water consumption achieved under current emergency conservation measures and/or California SB7X-7.

Potential Impact: *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

Impact Analysis: Stormwater runoff from the Project site currently discharges generally to the south, east and north, with drainage patterns largely determined by defining ridges and ravines within the Project site. Stormwater discharges from the southerly portions of the Project site (and north-trending off-site surface flows from areas located southerly of the Project site) are currently collected at a headwall structure located in the southwesterly portion of the Project site, approximately 50 feet beyond the terminus of Windwood Lane. Stormwaters are then conveyed east/northeasterly by the existing 30 – 36-inch reinforced concrete pipe (RCP) located beneath Windwood Lane, discharging to the existing concrete channel paralleling Valley Vista Circle northeasterly of the project site.

Stormwater discharges from the easterly and northerly portions of the Project site are currently collected in an unimproved channel located along the Project site easterly and northerly boundaries, discharging to a headwall structure located at the northerly terminus of the aforementioned concrete channel paralleling Valley Vista Circle. Project stormwaters discharge ultimately to Murrieta Creek, the Santa Margarita River, and the Pacific Ocean.

Implementation of the Project stormwater management system would maintain existing drainage patterns; would not increase the rate or amount of surface runoff; or contribute runoff water which would exceed the capacity of the existing or planned drainage systems (please refer to EIR Section 4.6, *Hydrology/Water Quality*). The Project Applicant would pay all requisite RCFC&WCD Area Drainage Plan (ADP) fees, and City DIF. These revenues sources contribute to funding of downstream master drainage facilities and maintenance of on-site facilities, thereby acting to ensure that stormwater management facilities are improved and maintained commensurate with development demands.

The Project incorporates all necessary stormwater management system improvements, and would comply with all system design, construction, and operational requirements mandated under the City Municipal Code and within regulations established by other agencies such as the Riverside County Flood Control and Water Conservation District (RCFC&WCD), SDRWQCB and California Department of Water Resources. In combination, the Project's stormwater management system and compliance with regulatory requirements act to preclude potentially adverse stormwater runoff impacts. The Project Hydrology Study (EIR Appendix F) substantiates that the Project stormwater management system would act to reduce post-development downstream stormwater discharges to pre-development conditions.

The Project stormwater management system would be developed and operated in compliance with City/SDRWQCB regulations and water quality standards. The Project would provide connection to existing and proposed drainage systems in the least invasive manner possible. Design, configuration, and locations of proposed stormwater management system improvements would be reviewed and approved by the City prior to, or concurrent with, application for grading permits and encroachment permits for improvements.

Based on the preceding discussion, the Project incorporates all necessary drainage and storm water management systems and the Project's potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, is determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Impact Analysis: Water would be provided to the Project by EVMWD. The Project would connect to one or more of the water service lines located in road rights-of-ways

adjacent to the Project site. In this regard, a 20-inch EVMWD water line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD water line is located in Windwood Lane at the southwesterly limits of the Project site.

The Project would install recycled water distribution system for landscaping and connect to the EVMWD recycled water system when available to the Project site, reducing Project potable water demand with recycled, non-potable water.

The calculated likely maximum water demand of the Project is estimated at 111,888 gallons per day (gpd), or approximately 125.33 acre feet acre-feet per year (AFY). The Project water demand estimates are conservative and do not take into account mandated water conservation effected under California's Drought Emergency Water Conservation Regulations, or that would be imposed by California SB7X-7.[23] In this regard, consistent with SB7X-7 mandates, per capita Project water demands would be reduced by 20 percent by the year 2020.

In context, the Project's annual water demand (125.33 AFY) is approximately 0.24 percent (0.0024) of the District's total 2015 water demands, estimated at 51,306 acre-feet; and approximately 0.19 percent (0.0019) of the District's projected year 2035 water demands, estimated to total 65,258 acre feet.

Project water demands are accounted for in the UWMP. The UWMP substantiates that water demands of the Service Area, including Project water demands can be met through existing and planned water supplies and water resources. Water demands of the Project would be met by available District potable water supply resources, delivered by the Municipal water system. The Project Applicant is also required to obtain a Will-Serve letter from EVMWD indicating purveyor capacity and commitment to provide water to the Project. This documentation would be provided to the City prior to the issuance of building permits.

[23] Please refer also to: http://www.water.ca.gov/wateruseefficiency/sb7/

Based on the preceding discussion, sufficient water supplies are available to serve the Project from existing entitlements and resources. The potential for the Project to result in the need for new or additional entitlements or resources is therefore determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.*

Impact Analysis: Riverside County Waste Management Department (RCWMD) facilitates waste management services for Riverside County as a whole, and manages the landfills serving the City of Wildomar. RCWMD landfills include: Badlands, Blythe, Desert Center, Lamb Canyon, Mecca II, Oasis, and the privately owned and operated El Sobrante Landfill.[24] Solid waste disposal and landfill services are available to all residents and public/private enterprises on a countywide basis. Typically, proximity to a given landfill is the determining factor in its selection for waste disposal.

Solid waste transport and recycling services for Wildomar residential and commercial properties are currently provided by Waste Management of the Inland Empire (serving City areas east of I-15); and CR&R (serving City areas west of I-15). Household Hazardous Waste Disposal (HHWD) services are provided through the County of Riverside Regional Household Hazardous Waste Collection Program. Landfills nearest the City and those that would likely serve the Project are El Sobrante, Badlands, and Lamb Canyon, all of which are Class III municipal solid waste landfills. Class III landfills accept only non-hazardous municipal solid waste for disposal; no hazardous or liquid wastes are accepted.

The El Sobrante Landfill is located east of I-15 and Temescal Canyon Road, south of the City of Corona at 10910 Dawson Canyon Road, approximately 16 miles northwesterly of

[24] The El Sobrante Landfill provides waste disposal services under contract to the County.

the Project site. The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue, approximately 24 miles northeasterly of the Project site. The Lamb Canyon Landfill is situated between the City of Beaumont and the City of San Jacinto, also located approximately 24 miles northeasterly of the Project site. Acreage, permitted throughput, remaining capacity, and projected closure date for the El Sobrante, Badlands, and Lamb Canyon Landfills are summarized at Table 4.8-6. Estimated Project operational solid waste generation is summarized at Table 4.8-7.

Table 4.8-6
Proximate County Landfill Information

Landfill	Disposal Acreage	Permitted Daily Throughput (tons)	Remaining Capacity	Projected Closure Date
El Sobrante	485	16,054	145.53 million tons (as of April 2009)	2045
Badlands	150	4,800	15.75 million cubic yards (as of January 2015)	2022
Lamb Canyon	144.6	5,500	19.24 million cubic yards (as of January 2015)	2029

Source: CalRecycle Solid waste Information System (SWIS). < http://www.calrecycle.ca.gov/swfacilities/directory/Search.aspx>

Table 4.8-7
Estimated Project Solid Waste Generation

Generation Rate	Calculation	Annual Waste Generation
3.3 pounds per day (ppd) per capita	(140 dwelling units x 3.33 persons per Hshld. x 3.3 ppd per capita = 1,539 ppd or 0.77 tons per day	280.77 tons/year

Sources: Waste generation rate from: CalRecycle Jurisdiction Diversion/Disposal Rate Summary, City of Wildomar, 2014. <http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx>
Household size from: California Department of Finance (DOF). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark*. Web. July 5, 2016. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>

As indicated in Table 4.8-7, the Project would generate an estimated 280.77 tons of solid waste annually, or approximately 0.77 tons of solid waste on a daily basis. Project-generated solid waste (0.77 tons/day) would represent a nominal increment of the receiving landfills' permitted daily throughputs (0.005 percent of El Sobrante's permitted daily throughput of 16,054 tons/day; 0.02 percent of Badlands' permitted

daily throughput of 4,800 tons/day; and 0.01 percent of Lamb Canyon's permitted daily throughput of 5,500 tons/day).

Additionally, consistent with Section 5.408 "Construction Waste Reduction, Disposal, and Recycling" of the California Green Building Standards Code (CALGreen Code), as adopted by the City of Wildomar, a minimum of 50 percent of the Project's nonhazardous construction and demolition waste would be recycled or salvaged for reuse. To these ends, a Project Construction Waste Management Plan would be prepared consistent with Section 5.408.1.1 of the CALGreen Code. These measures would collectively reduce Project construction waste and would act to reduce demands on solid waste management resources.

Based on the preceding, Project-generated solid waste can be accommodated at any of the three likely receiving landfills; and there is available throughput capacity to serve the Project and other customers. Solid waste diversion achieved pursuant to the City SRRE would further reduce potential Project impacts affecting area landfills. The Project would implement a Construction and Demolition (C&D) program further reducing potential Project solid waste management impacts. On this basis, the Project solid waste management impacts are determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Comply with federal, state, and local statutes and regulations related to solid waste.*

Impact Analysis: The Project would be implemented and operated in compliance with applicable City General Plan Goals and Policies, and would comport with City Zoning regulations—specifically, the Project would comply with local, state and federal initiatives and directives acting to reduce and divert solid waste from landfill waste streams.

In these regards, the California Integrated Waste Management Act under the Public Resources Code requires that local jurisdictions divert at least 50% of all solid waste generated by January 1, 2000. The City remains committed to continuing its existing waste reduction and minimization efforts with the programs that are available through the City. The Project would comply with the California Integrated Waste Management Act and AB 341 as implemented by the City.

Residential uses proposed by the Project, and solid waste generated by those uses would not otherwise conflict with federal, state, and local statutes and regulations related to solid waste.

Based on the preceding, the potential for the Project to conflict with or obstruct federal, state, and local statutes and regulations related to solid waste is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.9 POPULATION AND HOUSING

4.9 POPULATION AND HOUSING

Abstract

This Section identifies and addresses potential population and housing impacts that may result from approval and implementation of the Project. More specifically, this Section considers and evaluates the following suggested CEQA Guidelines *topical issue:*

- *Potential to induce substantial population growth in the area, either directly or indirectly.*

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to be less-than-significant and are not further discussed here:

- *Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or*

- *Potential to displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.*

As supported by the analysis presented in this Section, potential population and housing impacts of the Project are less-than-significant.

4.9.1 INTRODUCTION

The Population and Housing Section of the EIR focuses on the potential for the proposed Bundy Canyon Resort Apartment Project (Project) to induce substantial population growth beyond that anticipated under the City of Wildomar General Plan (General Plan).

4.9.2 SETTING

4.9.2.1 Location

The Project site is located within the central portion of the City of Wildomar, within Riverside County. Specifically, the Project site is located along Bundy Canyon Road, approximately one mile easterly of Interstate 15. Please refer also to Figure 3.2-1, *Project Location*.

4.9.2.2 Background/Setting

Population

Current (2016) California Department of Finance (DOF) estimated population of the City of Wildomar is 35,168 persons.[1] DOF also indicates that the City's 2016 resident population represents an increase of approximately 2,625 persons from the 2011 DOF population estimate for the City (32,543 persons); or an approximate 8.0 percent increase in population over the considered 5-year (01/01/2011—01/01/2016) time frame.

Housing/Households

Current (2016) DOF estimated number of housing units (all types) within the City totals 11,193 units. The 2016 vacancy rate is estimated at 5.8 percent, and the average household is estimated at 3.33 persons.[2] DOF 2016 housing estimates represent an increase of approximately 353 housing units from the 2011 DOF housing estimate for the City (10,840 units); or an approximate 3.2 percent increase in housing units over the considered 5-year

[1] California Department of Finance (DOF). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark*. Web. July 5, 2016. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/.
[2] Ibid.

(01/01/2011—01/01/2016) time frame. The 2011 vacancy rate was approximately 7.4 percent; and the average household size in 2011 was 3.24 persons.

In broad and general terms then, population growth within the City over the past five years has outpaced growth in housing. This is indicated by comparing the relative growth in population (8.0 percent) to the relative growth in housing (3.2 percent) and is secondarily indicated by the declining vacancy rate within the City (7.4 percent vacancy in 2011 vs. 5.8 percent vacancy in 2016).

The Southern California Association of Governments (SCAG) *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (SCAG 2016-2040 RTP/SCS) projects the City population will increase to 56,200 by 2040; and the number of households (roughly equating to occupied housing units) will increase to 18,100.[3]

Employment

Current (May 2016) California Department of Finance (DOF) estimated employment in the City of Wildomar is 15,800 persons, with a total workforce of 16,700 persons.[4] The May 2016 number of unemployed totaled 900 persons; translating to an unemployment rate of 5.4 percent.

4.9.2.3 Projected City and Regional Population, Employment, and Housing Trends

Population, housing, employment, and economic information are presented here to determine the effects, if any, of the Project on adopted policies and plans either based on, or forming the basis of, growth forecasts employed in local, regional and/or State plans. These forecasts also provide an indication of the employment/housing balance within the City and surrounding areas.

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[3] *2016—2040 Regional Transportation Plan/Sustainable Communities Strategy, Demographics & Growth Forecast Appendix*; Table 11, *City Forecast 2040*, p. 28.

[4] California Department of Finance (DOF). *Monthly Labor Force Data for Cities and Census Designated Places (CDP) May 2016-Preliminary, Data Not Seasonally Adjusted.* Web. July 20, 2016. http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html

Population, employment, and households estimates provided for the City of Wildomar and Riverside County are presented at Table 4.9-1.

Table 4.9-1
Population, Housing and Employment Projections

Riverside County			
	2012	**2040**	**2012 – 2040 (Δ %)**
Population	2,245,100	3,168,000	41.1
Employment	616,700	1,174,300	90.4
Households*	694,400	1,048,500	51.0
Housing Units**	807,970	1,194,242	47.8
Employment/Household	0.89	1.12	25.8
City of Wildomar			
Population	33,000	56,200	70.3
Employment	5,000	13,500	170.0
Households*	10,100	18,100	79.2
Housing Units**	10,857	19,150	76.4
Employment/Household	0.50	0.75	50.0

Sources: Year 2012 and 2040 population, employment, and household information from: *2016—2040 Regional Transportation Plan/Sustainable Communities Strategy, Demographics & Growth Forecast Appendix*, pp. 27 - 28.
Notes:
* Households are defined as occupied housing units.
** Year 2012 housing unit estimates from California Department of Finance (DOF). *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark.* DOF Year 2040 housing unit estimates not available; estimates provided assume current (2016) DOF City and County vacancy rates of 5.8 percent and 13.9 percent, respectively.

As indicated at Table 4.9-1, between the years 2012 and 2040, the following City of Wildomar demographic/housing trends are projected:

- An approximate 70.3 percent increase in the number of City population;
- An approximate 79.2 percent increase in households; and
- Employment within the City is projected to increase by approximately 170 percent.

Year 2012 to Year 2040 projections for Riverside County as a whole anticipate an approximately 41.1 percent increase in population; a 51.0 percent increase in the number of households, and employment growth of approximately 90.4 percent.

Recent City of Wildomar Population, Housing and Employment Trends

Population

Year 2012–2016 population trends within the City are presented at Table 4.9-2. As indicated, the City's population has increased by approximately 6.4 percent since 2012. The increase in the City's population since 2012 is due to both the increase in the number of households and larger average household size.

Table 4.9-2
City of Wildomar Population Trends 2012 - 2016

Year	Population	Incremental Increase Population/Percent	Cumulative Increase Population/Percent	Households (Occupied Housing Units)	Persons/ Household
2012	33,050	---	---	10,102	3.27
2013	33,685	1.9	1.9	10,251	3.28
2014	34,271	1.7	3.7	10,381	3.30
2015	34,758	1.4	5.2	10,482	3.31
2016	35,168	1.2	6.4	10,545	3.33

Source: California Department of Finance (DOF): *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark*.

Housing/Households

Table 4.9-3 presents 2012-2016 household and housing unit estimates for the City. As indicated, an estimated 336 new housing units have been constructed between 2012 and 2016, approximately 73.5 percent of which were single-family detached units; approximately 19.6 percent of which were multi-family (five plus) units; and mobile homes comprising the remaining 6.9 percent. Over the 2012 – 2016 timeframe, the vacancy rate within the City has decreased; and the relative household size has increased.

Table 4.9-3
Household/Housing/Housing Composition Trends 2012 - 2016

Year	Households	Housing Units	SF Detached	SF Attached	Two to Four	Five Plus	Mobile Homes	Occupied	Vacancy Rate	Household Size
2102	33,050	10,857	7,448	44	27	486	2,852	10,102	7.0%	3.27
2013	33,685	10,927	7,512	44	27	486	2,858	10,251	6.2%	3.28
2014	34,271	11,047	7,629	44	27	486	2,861	10,381	6.0%	3.30
2015	34,758	11,136	7,645	44	27	552	2,868	10,482	5.9%	3.31
2016	35,168	11,193	7,695	44	27	552	2,875	10,545	5.8%	3.33

Source: California Department of Finance (DOF): *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2016 with 2010 Census Benchmark*.

Housing Needs

Consistent with California Housing Element requirements, the City of Wildomar Housing Element (2013 – 2021) identifies the number and types of local housing required to satisfy the City's "fair share" of regional housing needs, as determined by the SCAG Regional Housing Needs Assessment (RHNA). The fair share allocation ensures that each jurisdiction accepts equitable housing responsibilities for all current and future residents. A jurisdiction's fair share of the regional housing need is the projected total number of additional dwelling units that will be required to accommodate the anticipated growth in households, replace expected demolitions or conversions to other uses, and allow a reasonable vacancy rate providing for healthy functioning of the housing market.

The City of Wildomar RHNA responsibility assigned by/through SCAG for the 2014–2021 planning period is 2,535 units. Within this total allocation, the City is required to plan for and otherwise accommodate housing products at five income levels: extremely low, very low, low, moderate, and above moderate. City of Wildomar current RHNA Responsibility, expressed in terms of housing units by income level, is presented at Table 4.9-4.

Table 4.9-4
RHNA Responsibility-Housing Units by Income Level
City of Wildomar 2014–2021

Income Category	Income Range*	2014–2021 RHNA
Extremely Low	$0–$20,100	310
Very Low	$20,101–$33,500	311
Low	$33,501–$53,600	415
Moderate	$53,601–$78,000	461
Above Moderate	$78,001 or more	1,038
Total	**---**	**2,535**

Source: City of Wildomar Housing Element (2013 – 2021).
* Based on four person household.

Employment

Occupations by type within the City as of 2010 are presented at Table 4.9-5. Preliminary May 2016 information published by the State of California Employment Development Department (EDD) estimate the total City labor force at 16,700 persons; employment within the City at 15,800 jobs; and the number of unemployed at 900.[5] Correlating May 2016 EDD employment by occupational category information was not available at the time this EIR was prepared. However, it is anticipated that 2016 proportional employment by category within the City would approximate the 2010 data summarized at Table 4.9-5.

Table 4.9-5
City of Wildomar Employment by Occupational Category - 2010

Industry	Employees	Percent of Total Employment
Agriculture, forestry, fishing and hunting, and mining	76	0.5%
Construction	1,516	10.8%
Manufacturing	1,522	10.8%
Wholesale trade	446	3.2%
Retail trade	1,418	10.1%
Transportation and warehousing, and utilities	675	4.8%

[5] State of California Employment Development Department, August 15, 2014, Labor Market Information Division. Web. October 5, 2014. < http://www.labormarketinfo.edd.ca.gov>

Table 4.9-5
City of Wildomar Employment by Occupational Category - 2010

Industry	Employees	Percent of Total Employment
Information	147	1.0%
Finance and insurance, real estate and rental and leasing	557	4.0%
Professional, scientific, management, administrative and waste management services	1,937	13.8%
Educational services, and health care and social assistance	2,499	17.8%
Arts, entertainment, recreation, accommodation, and food services	1,657	11.8%
Other services, except public administration	802	5.7%
Public administration	823	5.8%
Total civilian employed population 16 years and over	**14,075**	**100.0%**

Source: City of Wildomar Housing Element (2013 – 2021).

Employment/Housing Balance

The concept of employment/housing balance has been widely discussed by SCAG and the South Coast Air Quality Management District (SCAQMD) over the past decade as a means of achieving regional air quality improvement goals. The basic concept is directed at minimizing commute distances, reducing infrastructure needs and costs, mitigating traffic congestion, conserving energy, and improving air quality. Underlying the employment/housing balance concept is the premise that, if an area is balanced, it includes the correct number (or balance) of housing and employment opportunities, so that the majority of the people living within a given subregion can also work within that same subregion. Job-rich subregions evidence employment/housing ratios greater than the regional average, and housing-rich subregions evidence employment/housing ratios lower than the regional average.

Determining an appropriate employment/housing balance for any given geographic area is to some degree problematic, in that each locale presents differing demographic characteristics. Employment/housing ratios are also dynamic, and fluctuate over time. For example, in 1997, the mean or "balanced" employment/housing ratio for the SCAG region

was 1.25 jobs/household. Based on regional housing and employment trends, SCAG at that time projected the year 2025 regional employment/housing balance at 1.31 jobs/household.[6]

Previous Table 4.9-1 identifies current and projected employment/household ratios for the City of Wildomar and encompassing Riverside County. By either of the measures noted above, the City's near-term (2012) and long-range (2040) jobs/household ratios (ranging from 0.50 jobs/household to 0.75 jobs/household) would be considered housing-rich. Jobs/household ratio for the County was estimated at 0.89 jobs/household in 2012; and is projected to increase to 1.12 jobs/household by 2040. By the measures noted previously, the County, like the City, would be considered housing-rich.

4.9.3 REGULATORY SETTING

4.9.3.1 California Government Code-Housing Element Requirements

California Government Code (Section 65580-65589.8) requires the preparation of a Housing Element as part of each General Plan. The City has adopted a Housing Element covering the period 2013 - 2021. The City is required to update its Housing Element every eight years. The 2013 - 2021 Housing Element fulfills the City's current obligation in this regard.

Consistent with State requirements, and for all potentially affected economic levels, the City of Wildomar Housing Element identifies available and projected housing assets, provides an assessment of current and anticipated housing needs, and establishes programs to meet those needs.

California Government Code Section 65588 requires that housing elements be updated not less frequently than every eight years, and further that each subsequent housing element identify progress achieved since adoption of the preceding housing element. The 2013–2021 Housing Element reflects these requirements, and identify progress in terms of achieving numerical targets for the total number of housing units required, and continuing

[6] *The New Economy and Employment/housing Balance in Southern California* (Southern California Association of Governments) April 2001.

development and implementation of programs and plans providing for successful realization of housing needs.

Please refer also to the 2013 - 2021 Housing Element accessible at: http://www.cityofwildomar.org/uploads/files/planning/Adopted%20Housing%20Element%2012-11-13.pdf

Regional Housing Needs Assessment

Pursuant to Government Code (GC) 65584 applicable to the Regional Housing Need Allocation (RHNA) process, the California Department of Housing and Community Development (HCD) is required to determine the RHNA, by income category, for Council of Governments (COGs). The RHNA is based on Department of Finance population projections and regional population forecasts used in preparing regional transportation plans. COGs are required to allocate to each locality a share of housing need totaling the RHNA for each income category. Pursuant to GC 65583, localities are required to update their housing element to plan to accommodate its entire RHNA share by income category.[7]

Consistent with the requirements outlined above, the City of Wildomar 2013-2021 Housing Element identifies quantities and types of local housing required to satisfy the City's fair share of regional housing needs, pursuant to the SCAG RHNA. The intent of the SCAG RHNA fair share allocation is that each jurisdiction accept its equitable housing responsibilities for all current and future residents. A jurisdiction's fair share of the regional housing need is the projected total number of additional dwelling units that will be required to accommodate the anticipated growth in households, replace expected demolitions or conversions to other uses, and allow a reasonable vacancy rate providing for healthy functioning of the housing market. The City's 2013-2021 Housing Element RHNA Requirements, by income level, are presented at previous Table 4.9-4.

[7] *Housing Elements and Regional Housing Need Allocation*. California Department of Housing and Community Development. Web. July 8, 2016.< http://www.hcd.ca.gov/hpd/hrc/plan/he/>

RHNA Residential Density Reduction Restrictions

Government Code Section 65863 furthers establishment of affordable housing by ensuring that residential development satisfying a jurisdiction's identified housing element RHNA are not unduly "down-zoned" or redirected for other purposes.

4.9.3.2 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) Goals

As the Metropolitan Planning Organization (MPO) for Riverside County, SCAG prepares a Regional Transportation Plan (RTP) pursuant to federal and state requirements. In 2016, SCAG adopted the currently effective RTP: *2016—2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS). SCAG emphasizes sustainability and integrated planning as core elements of the RTP/SCS. The RTP/SCS vision encompasses three principles intended collectively to shape the region's future: mobility, economy, and sustainability. Reflected in these principles is the underlying goal of a balanced employment/housing condition within the region. Project consistency with the applicable RTP/SCS goals is summarized at EIR Section 4.1, *Land Use and Planning*, Table 4.1-1.

4.9.4 STANDARDS OF SIGNIFICANCE

Appendix G of the California Environmental Quality Act Guidelines (*CEQA Guidelines*) indicates a Project will normally have a potentially significant effect related to population and housing if it would:

- Induce substantial population growth in the area, either directly or indirectly;
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.9.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.9.5.1 Introduction

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant land use and planning impacts, based on the previous discussions included within this Section and analysis presented within the EIR Initial Study (EIR Appendix A). As discussed within the Initial Study, the Project would not result in potentially significant impacts under the following considerations:

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

These potential impacts are therefore not substantively discussed further within this Section. Please refer also to Initial Study Checklist Item XIV., *Population and Housing*.

4.9.5.2 Impact Statements

Potential Impact: *Induce substantial population growth in the area, either directly or indirectly.*

Impact Analysis: Residential development, ancillary uses and supporting infrastructure improvements proposed by the Project would accommodate anticipated population growth within the City and region. In this regard, the Project is not considered growth-inducing, but rather is a response to current and anticipated demands for residential products that would act to further, and would not conflict with, development of the subject site consistent with the City General Plan.

Direct Population Growth Inducement

Direct population growth inducement would result from implementation of new residential uses within the subject site. As discussed at EIR Section 4.1, *Land Use and Planning*, the Project proposes residential uses and supporting amenities that are consistent

with residential development allowed under the site's current MDR Land Use designation. Further, the Project Site Plan Concept (EIR Section 3.0, *Project Description*, Figure 3.4-1) indicates the Project would be developed at a residential density of approximately 5 du/ac. This is consistent with the 2 – 5 du/ac development intensity anticipated for the MDR Land Use.

Indirect Growth Inducement

Indirect population growth inducement could result from creation of additional jobs and resulting attraction of new residents. Indirect growth inducement could also result from extension of infrastructure and services to areas not currently served, or substantial capacity/capability upgrades to existing systems and services.

Development of the Project site would generate temporary construction jobs. However, the Project does not propose business or commercial uses that would result in substantive permanent new employment opportunities or substantive population growth related to the creation of new jobs.

The subject site is currently served by all necessary utilities and services, and creation of entirely new infrastructure systems or creation of services is not required. Localized infrastructure improvements would however be required in order to allow full development of the subject site as proposed by the Project, and/or as otherwise allowed under the General Plan.

In general terms, comparative development intensities roughly translate to comparative infrastructure system and public services demands. In this regard, the Project would yield development intensities allowed and anticipated under the General Plan. Accordingly, infrastructure and public services improvements/enhancements necessary to serve the Project would not induce or support growth beyond that assumed for the subject site under the General Plan.

SCAG Regional Population Growth Projections

SCAG regional population growth projections reflect development scenarios incorporated in City general plans. As demonstrated in the preceding discussions, the Project would not

result in growth beyond that already allowed for the subject site under the General Plan. Nor would the Project induce or generate growth beyond that reflected in the General Plan. Accordingly, the Project would not result in growth not already anticipated within SCAG population growth projections for the region.

As supported by the preceding discussions, the potential for the Project to induce substantial population growth in the area, either directly or indirectly is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.10 AESTHETICS

4.10 AESTHETICS

Abstract

This Section identifies and addresses potential aesthetic impacts resulting from implementation of the Project. Specifically, the analysis presented here examines whether the Project would:

- *Substantially degrade the existing visual character or quality of the site and its surroundings; or*

- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

As supported by the analysis presented in this Section, the above potential aesthetic impacts of the Project are less-than-significant.

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to be less-than-significant, and are not further discussed here:

- *Have a substantial adverse effect on a scenic vista; and*

- *Substantially damage scenic resources, including, but not limited to trees, rocks, outcroppings, and historic buildings within a state scenic highway.*

4.10.1 INTRODUCTION

Potential aesthetic impacts of the Project, including its consistency with applicable design and development standards, are the focal issues considered within this assessment.

4.10.2 SETTING

4.10.2.1 Overview

The City of Wildomar is an urban/suburban community located in southwesterly Riverside County. The City is located on relatively flat terrain, and is located within the Elsinore Trough at approximately 1,400 feet above mean sea level (MSL). Topography within the City is characterized by mild slopes; with steeper and more varied terrain evidenced in the westerly and easterly portions of the City. Land uses within the City are primarily residential in character; but also evidence a variety of commercial, retail, service, office, recreational, open space, and institutional uses. The City is generally bounded by the mountains of the Cleveland National Forest and unincorporated rural areas to the west; the City of Lake Elsinore to the north and northwest; the City of Murrieta to the south and southeast; and the City of Menifee and unincorporated rural areas to the east.

4.10.2.2 City Visual Resources

No designated scenic vistas exist within the City. Notwithstanding, the City's physical setting and orientation provide opportunities for numerous and varied views of the community and surrounding natural features. These include but are not limited to: views of the Santa Ana and Elsinore mountains located generally westerly of the City and various undeveloped open space/rural areas located within the City and along the City boundaries. Views of dominant topographic features such as the Santa Ana and Elsinore mountains are available from properties throughout the City, and from area roadways and freeways.

No designated scenic corridors exist within the City. The segment of Interstate-15 (I-15) within the City of Wildomar is however designated by the California Department of Transportation (Caltrans) as an "eligible state scenic highway–not officially designated." Interstate-15 as it traverses the City of Wildomar provides opportunities for views of the City's mountain backdrops.

4.10.2.3 Project Site and Vicinity

The Project site comprises vacant hilly terrain. The northerly portion of the Project site, adjacent to Bundy Canyon Road, evidences substantial disturbance including trash dumping, tree cutting, and the construction of a complex of "jumps" used for off-road bicycling. The remainder of the Project site is moderately disturbed by human activities, including crossings by various paths and trails. Bundy Canyon Road forms the site's northerly border.

Topographically, the Project site manifests three main components: a relatively flat alluvial plain in the south; an east - west trending ridge of steep-sided hills traversing the central portion of the Project site; and a narrow riparian corridor along the Project site northerly boundary. Elevations within the Project site range from 1460 feet above mean sea level (AMSL) to 1676 feet AMSL. Steep gradients are evident along the site's central ridge, approaching a 1:1 slope. Floral evidence indicates that a permanent source of water exists within the riparian corridor in the northern portion of the property. There are also indications of measurable ephemeral flow throughout the property following seasonal precipitation. Drainages proximate the Project site have been largely channelized. Historic drainage patterns trend northwesterly toward Lake Elsinore. (Project Phase I Cultural Resources Assessment, p. 5). The undeveloped Project site is not a source of light or glare. Typical views of the Project site are presented at Figure 4.10-1.

View from the southwestern property corner looking northeast.

View from the center of the western property boundary looking east across the ridgeline.

Source: Jean A Keller, PhD.

applied planning inc

Figure 4.10-1
Project Site Photos

Vacant land similar in character to the Project site exists to the north (across Bundy Canyon Road) and east. Estate density (0.5 du/acre) residential uses and limited agricultural uses exist southerly of the Project site. Properties developed with medium density (2.1–5 du/ac) single-family residential uses and a pocket of vacant land are located westerly adjacent to the Project site. Southwesterly adjacent to the Project site, properties are undeveloped and are reserved for open space and recreational uses. Light and glare from off-site sources is typical of roadway traffic, suburban residential uses and rural uses, and does not substantively affect the Project site.

4.10.3 REGULATORY SETTING

4.10.3.1 California Department of Transportation State Scenic Highway Program

The California Scenic Highway Program (Streets and Highways Code, Section 260 et seq.) was established to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to state highways. A highway may be designated "scenic" depending on the quality and availability of views of proximate terrain and natural features. A designated or potential scenic corridor comprises land generally adjacent to and visible from a highway, and is identified using a motorist's view of off-site vantages. A reasonable corridor boundary terminus is identified when the view extends to the distant horizon.

The segment of I-15 that traverses Wildomar is designated as an "eligible state scenic highway–not officially designated." The status of a scenic highway changes from eligible to officially-designated when a local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval, and receives notification from Caltrans that the highway has been designated as a state scenic highway.

4.10.3.2 City of Wildomar

Municipal Code - Light Pollution Control

Wildomar Municipal Code Chapter 8.64 acts to control light pollution generated by City sources, as articulated below:

> The purpose of this chapter [Chapter 8.64] is to provide regulations for outdoor lighting that will:
>
> A. Preserve the access to the dark night sky enjoyed by Wildomar residents and residents of surrounding communities.
>
> B. Reduce light pollution in order to support astronomical activity and protect the viability of the Palomar Observatory.
>
> C. Minimize adverse off-site impacts of lighting such as light trespass, an obtrusive light, particularly in residential neighborhoods.
>
> D. Conserve energy and resources to the greatest extent possible.
>
> E. Ensure adequate lighting for the safety, security, and well-being of persons engaged in outdoor nighttime activities.
>
> [City of Wildomar Municipal Code, Chapter 8.64 Light Pollution, 8.64.010 *Purpose and Intent*]

Wildomar and the Project site are located approximately 45 miles from the Mount Palomar observatory, within Zone B of the Mount Palomar Nighttime Lighting Policy Area. Zone B restricts the use of certain types of illumination and light fixtures that may have a detrimental effect on nighttime skies and astronomical observation and research at the Palomar Observatory.

Lighting permitted under the Ordinance must be fully shielded if feasible and partially shielded in all other cases.[1] Lighting must be focused to minimize light spill into the night sky and onto adjacent properties.

[1] The Ordinance defines "fully shielded" as outdoor light fixtures shielded or constructed so that light rays emitted by the fixtures are projected below the horizontal plane passing through the lowest point on the fixture from which light is emitted. "Partially shielded" lighting comprises outdoor light fixtures designed or constructed so that 90 percent of the light rays emitted by the fixture are projected below the horizontal plane passing through the lowest point of the shield (Wildomar Municipal Code Section 8.64.040).

Municipal Code - Zoning Regulations and Development Standards

Development proposed by the Project would be contingent on compliance with the R-3 Zone District Regulations and Development Standards; and provided an approved plot plan be obtained pursuant to the provisions of City of Wildomar Municipal Code Chapter 17.216. Compliance with the R-3 Zone District Regulations and Development Standards ensures compatibility of development and acts to minimize potential visual/aesthetic impacts.

Project consistency and compatibility with R-3 Zone Regulations and Development Standards is summarized at Table 4.10-1.

Table 4.10-1
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
§17.44.010 Uses Permitted.	**Consistent.** Sections 17.44.010 (A) and (B) list some thirty-five use categories that would be permitted or conditionally permitted within the Project site pursuant to the requested Zone Change from R-R to R-3, subject to an approved plot plan. Section 17.44.010 (C) establishes requirements and performance standards for outside storage of materials in the R-3 Zone District. The Project residential and supporting uses are included in the list of permitted or conditionally permitted uses. The Project does not propose or require substantive outside storage of materials. All development within the Project site would occur only pursuant to City approval of the requested Zone Change from R-R to R-3 and a City-approved plot plan.
§17.44.010 (A). Uses Permitted Pursuant to an Approved Plot Plan. **§17.44.010 (B). Uses Permitted by Conditional Use Permit.** **§17.44.010 (C). Outside Storage.**	
§17.44.020 Development Standards.	**Consistent.** The Project Site Plan Concept and associated discussion of design and operational elements presented at EIR Section 3.0, *Project Description*, indicate that the Project would be developed consistent with applicable §17.44.020 Development Standards, as summarized below:

Table 4.10-1
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (A). The minimum lot area shall be 7,200 square feet with a minimum average width of 60 feet and a minimum average depth of 100 feet, unless different minimums are specifically required in a particular area. *The Project site comprises approximately 28.3 acres. The Project site dimensions are approximately 1,000 feet by 1,300 feet. The Project site therefore conforms to area and dimension development standards for the R – 3 Zone District. Subject to review and approval by the City, any Subsequent subdivision of the Project site would also conform to minimum lot area and lot dimension standards of the R – 3 Zone District.*
	§17.44.020 (B). The minimum front and rear yards shall be 10 feet for buildings that do not exceed 35 feet in height. Any portion of a building, which exceeds 35 feet in height, shall be set back from the front and rear lot lines no less than 10 feet plus two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from any existing or future street line as shown on any specific street plan of the City. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback. *The Project Site Plan Concept indicates that building front and rear yard setbacks would exceed 10 feet including contingencies noted above. The Project would therefore comply with front yard and rear yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate front yard and rear yard setbacks are established throughout the Project site.*

Table 4.10-1
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (C). The minimum side yard shall be five feet for buildings that do not exceed 35 feet in height. Any portion of a building, which exceeds 35 feet in height, shall be set back from each side lot line five feet and two feet for each foot by which the height exceeds 35 feet; if the side yard adjoins a street, the side setback requirement shall be the same as required for a front setback. No structural encroachments shall be permitted in the front, side, or rear yard except as provided in Section 17.172.140. *The Project Site Plan Concept indicates that side yards between buildings would exceed five feet including contingencies noted above. The Project would therefore comply with side yard setback development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that adequate and appropriate side yard setbacks are established throughout the Project site.*
	§17.44.020 (D). No lot shall have more than 50% of its net area covered with buildings or structures. *The Project Site Plan indicates that the approximately 28.3 acre Project site would be developed with approximately 83,000 square feet of structures, or about 15 percent of the Project site would covered with buildings and structures. The Project would therefore conform to lot coverage development standards established under the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building areas would not exceed 50 percent of the net Project site.*
	§17.44.020 (E). The maximum ratio of floor area to lot area shall not be greater than two to one, not including basement floor area. *The Project Site Plan concept indicates that the total building floor area proposed is approximately 168,000 square feet, including residential attached garages and the Project clubhouse. The total Project floor area (168,000 square feet) to lot area (28.3 acres) is 0.136 to 1 and would therefore conform to the ratio of floor area to lot area development standard established for the R – 3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that the Project floor area to lot area building areas would not exceed 2:1.*

Table 4.10-1
Municipal Code Chapter 17.44 R-3 General Residential Zone
Regulations and Development Standards Consistency

Regulation/Development Standard	Remarks
	§17.44.020 (F). All buildings and structures shall not exceed 50 feet in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230. *The Project Architectural Concepts indicates that buildings and other structures proposed by the Project would not exceed 45 feet above the adjacent grade. The Project would therefore conform to height development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that Project building heights would not exceed 50 feet in height; or in applicable instances, not greater than 75 feet as permitted under the provisions of Section 17.172.230.*
	§17.44.020 (G). Automobile storage space shall be provided as required by Chapter 17.188. (Ord. 18 § 2, 2008, RCC § 17.44.020). Pursuant to Chapter 17.188, 266 parking spaces would be required for the Project uses. *The Project Site Plan Concept indicates that 288 parking spaces would be provided; or 22 spaces more than the 266 spaces required by Ordinance. The Project would therefore conform to parking development standards established under the R-3 Zone District. Pursuant to City Plot Plan approval requirements, the City would ensure that parking provided by the Project comports with Municipal Code Chapter 17.188 requirements.*

Sources: Regulations and Development Standards from City of Wildomar Municipal Code; Remarks by Applied Planning, Inc.

Please refer also to the listings and descriptions of City Zoning Districts, permitted and conditionally permitted uses, and applicable development standards available at: http://www.cityofwildomar.org/zoningcode/index.asp.

General Plan-Clustering Policies

Moreover, clustered development proposed by the Project generally reduces environmental impacts and promotes land use compatibility. More specifically:

- Clustering of uses reflected in the Project Site Plan Concept facilitates efficient and safe access to and between all Project uses.

- The Project proposes clustered residential development with proximate access to local and regional transportation facilities. Clustered and intensified development and associated focused ridership base that would result from the Project support existing and future transit opportunities. Enhanced transit use acts generally to reduce traffic congestion, and mobile-source air pollutant emissions.

- Clustered development proposed by the Project acts to preserve and maintain open space, natural resources and biologically sensitive resources. In these regards, the Project design focuses development within the central portion of the subject site, and maintains perimeter areas in their natural condition. This generally preserves natural resources within the Project site and specifically minimizes or avoids impacts to protected biological resources. This design also acts to screen views of the developed Project area from off-site vantages.

- Clustered development proposed by the Project acts to minimize site grading and terrain alteration and retains slopes in their natural condition. Corollary benefits include, but are not limited to, preservation of natural terrain; generalized reduction in site disturbance (reduces potential construction-source air quality and noise impacts); and preservation of natural drainage patterns.

4.10.4 STANDARDS OF SIGNIFICANCE

Appendix G of the *CEQA Guidelines*, as applied by the City of Wildomar, indicates a project will normally have a significant effect related to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;

- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway;

- Substantially degrade the existing visual character or quality of the site and its surroundings; or

- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Based on the analysis presented in the EIR Initial Study (EIR Appendix A), the Project would not result in potentially significant impacts to scenic vistas; nor would the Project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a State scenic highway a designated State scenic highway. Impacts in these regards are considered less-than-significant. All other CEQA *Guidelines* aesthetic considerations are addressed below.

4.10.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.10.5.1 Impact Statements

Potential Impact: *Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?*

The Bundy Canyon Resort Apartment Project would implement an integrated and cohesive residential development on currently vacant and underutilized properties. The Project Site Plan, Landscape Plan, and Architectural design concepts (EIR Section 3.0, *Project Description*, Figures 3.4-1 through 3.4-4) act to ensure that the developed Project site would contribute to, and would not degrade, the existing visual character or quality of the site and its surroundings. More specifically, as substantiated at Table 4.10-1, the Project would implement, and would be consistent with, applicable City Municipal Code Regulations and Development Standards addressing City aesthetic sensibilities and protection/preservation of City visual resources.

Prior to the issuance of development permits, building plans would be reviewed by the City to ensure conformance with provisions of the City Municipal Code, thereby ensuring that the Project, as developed, would not substantially degrade the existing visual character or quality of the site and its surroundings.

As supported by the preceding discussions, the potential for the Project to substantially degrade the existing visual character or quality of the site and its surroundings is considered less-than-significant.

Level of Significance: Less-Than-Significant.

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

Impact Analysis: The Project would implement new on-site lighting including parking lot lighting, general area lighting, illuminated signs, and building/security lighting. Of the above sources, parking lot lighting poses the greatest potential to result in significant light/glare impacts, including potential light overspill onto neighboring properties. The Project is subject to lighting requirements and performance standards presented at Wildomar Municipal Code Chapter 8.64. Collectively, the provisions of Municipal Code Chapter 8.64, excerpted in pertinent part below, act to control light pollution generated by City sources:

> The purpose of this chapter [Chapter 8.64] is to provide regulations for outdoor lighting that will:
> A. Preserve the access to the dark night sky enjoyed by Wildomar residents and residents of surrounding communities.
> B. Reduce light pollution in order to support astronomical activity and protect the viability of the Palomar Observatory.
> C. Minimize adverse off-site impacts of lighting such as light trespass, an obtrusive light, particularly in residential neighborhoods.
> D. Conserve energy and resources to the greatest extent possible.
> E. Ensure adequate lighting for the safety, security, and well-being of persons engaged in outdoor nighttime activities.
> [City of Wildomar Municipal Code, Chapter 8.64 Light Pollution, 8.64.010 *Purpose and Intent*]

Lighting established under the Project would complement and would not otherwise conflict with the City Municipal Code lighting requirements and performance standards identified above. Final design and orientation of all Project lighting would be subject to the City's development review processes.

As supported by the preceding discussion, all development within the Project site would be subject to, and required to conform to, lighting requirements and performance standards of the City Development Code. This would ensure that the Project does not create substantial light or glare that could potentially affect surrounding land uses. This potential impact is, therefore, determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

4.11 BIOLOGICAL RESOURCES

4.11 BIOLOGICAL RESOURCES

Abstract

This Section identifies and addresses potential impacts to biological resources resulting from the Project. More specifically, the analysis presented here examines whether the Project would:

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

- *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations; or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

- *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.*

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

As supported by the analysis presented in this Section, with application of proposed mitigation measures, the Project's potential impacts to biological resources would be less-than-significant.

4.11.1 INTRODUCTION

Information presented in this Section is summarized and excerpted from: *Bundy Canyon Resort Apartments Project Biological Resources Assessment* (ESA PCR) August 2016 (Project Biological Resources Assessment). The Project Biological Resources Assessment is presented in its entirety at EIR Appendix H.

4.11.2 SETTING

4.11.2.1 Study Area and Scope

The Project Biological Resources Assessment Study Area (Study Area) comprises approximately 28.64-acres encompassing the proposed Bundy Canyon Resort Apartment Project site (Project site, Assessor's Parcel Number 367-250-008); and a 0.84-acre off-site area associated with City-required road improvements to Bundy Canyon Road.

The Project Biological Resources Assessment identifies relevant study methodologies and protocols; summarizes existing site conditions including presence or potential presence of biological resources; and evaluates potential impacts to biological resources. Avoidance, minimization, and/or mitigation measures are proposed for biological resources impacts determined to be potentially significant.

4.11.2.2 Existing Conditions

Following are discussions of existing biological resources, with focused consideration on species of special interest known to occur, or that could potentially occur within the Study Area.

Vegetation

Within the Study Area, native upland vegetation is predominant, characterized by California buckwheat scrub, California sagebrush scrub, chamise chaparral, and white sage scrub. The Study Area also evidences limited areas of riparian vegetation, including coast live oak woodland and red willow thicket. Certain portions of the Study Area evidence non-native and ruderal vegetation, generally associated with site disturbances.

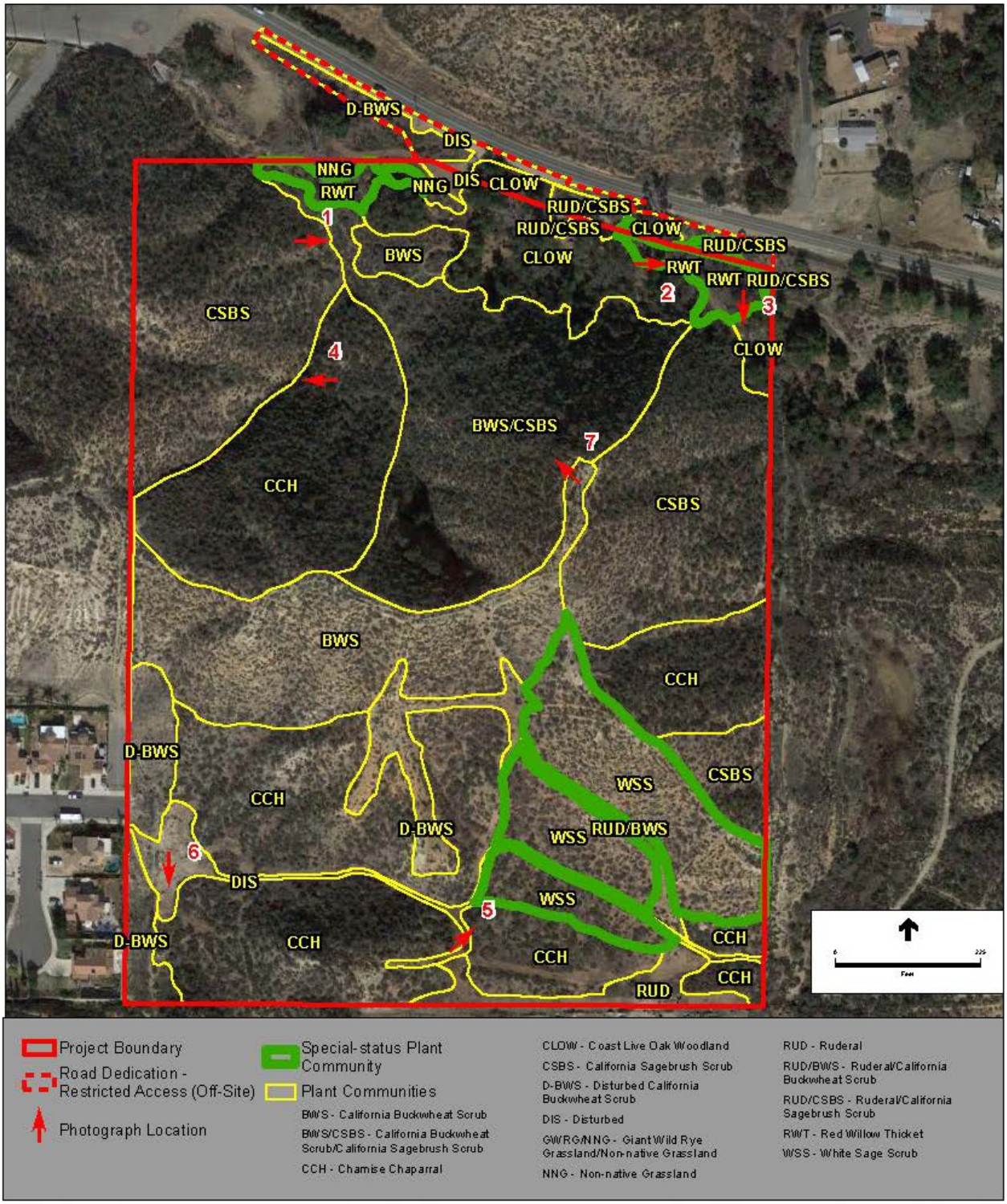
The off-site area along Bundy Canyon Road is dominated by ruderal vegetation, interspersed with California sagebrush scrub. This off-site area also supports riparian vegetation, including coast live oak woodland and red willow thicket.

Study Area plant communities are summarized at Table 4.11-1, and are mapped at Figure 4.11-1. Representative photographs of Study Area vegetation and plant communities are presented at Figures 4.11-2, 4.11-3. Special-status plant communities and special-status plant species occurring or potentially occurring within the Study Area are discussed subsequently within this Section. A list of all plant species observed within the Study Area is provided at Biological Resources Assessment Appendix A, *Floral and Faunal Compendium*.

Table 4.11-1
Study Area Plan Communities

Plant Communities	On-site (acres)	Off-site (acres)
California Buckwheat Scrub	3.08	-
California Sagebrush Scrub	5.83	-
California Buckwheat Scrub/California Sagebrush Scrub	3.89	-
Chamise Chaparral	8.86	-
Coast Live Oak Woodland	1.46	0.18
Giant Wild Rye Grassland*/Non-native Grassland	0.03	-
Red Willow Thicket*	0.47	0.04
White Sage Scrub*	2.55	-
Non-native Grassland	0.11	-
Ruderal	0.39	-
Ruderal/California Buckwheat Scrub	0.16	-
Ruderal/California Sagebrush Scrub	0.06	0.20
Disturbed	0.51	0.21
Disturbed-California Buckwheat Scrub	1.24	0.21
Total	**28.64**	**0.84**

Source: *Bundy Canyon Resort Apartments Project Biological Resources Assessment* (ESA PCR) August 2016.
Notes: * High priority conservation communities denoted in CDFW *List of California Terrestrial Natural Communities*.



Source: ESA PCR

Figure 4.11-1
Study Area Plant Communities

PHOTOGRAPH 1. View of the California buckwheat scrub community in the foreground and the coast live oak woodland community in the background, facing east.

PHOTOGRAPH 2. View of the red willow thicket community, facing east.

PHOTOGRAPH 3. View of the California sagebrush scrub community, facing south.

PHOTOGRAPH 4. View of the chamise chaparral community, facing west.

Source: ESA PCR

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Figure 4.11-2
Site Photos

PHOTOGRAPH 5. View of the chamise chaparral community in the foreground and the white sage scrub community in the background, facing northeast.

PHOTOGRAPH 6. View of one of the disturbed areas in the foreground and the California buckwheat scrub community in the background, facing south.

PHOTOGRAPH 7. Panoramic view of the northern portion of the project site, facing northwest.

Source: ESA PCR

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Figure 4.11-3
Site Photos

Wildlife

Plant communities discussed above provide habitat for common wildlife species and special-status wildlife species. Special-status wildlife species occurring or potentially occurring within the Study Area are discussed subsequently in this Section. A list of all wildlife species observed within the Study Area is provided at Biological Resources Assessment Appendix A, *Floral and Faunal Compendium*.

Special-status Biological Resources

Certain plant and wildlife species determined to be present, or potentially present within the Study Area are afforded special recognition by Federal, State, or local resource conservation agencies and organizations. These species are collectively termed "special-status" biological resources and are characterized by declining or limited population sizes. Special-status biological resources also include unique or limited habitats, or habitat of particular value to wildlife. Protected special-status biological resources are classified as threatened or endangered under provisions of the Federal and State Endangered Species Acts (FESA and CESA, respectively).

Special-status Plant Communities

The Study Area supports 8 plant communities dominated by native vegetation and totaling approximately 26.39 acres (26.17 acres on-site and 0.22 acre off-site). These plant communities include: California buckwheat scrub, California sagebrush scrub, California buckwheat scrub/California sagebrush scrub, chamise chaparral, coast live oak woodland, giant wild rye grassland/non-native grassland, red willow thicket, and white sage scrub. Of these species, giant wild rye grassland/non-native grassland, red willow thicket, and white sage scrub are considered special-status habitats by the California Department of Fish and Wildlife (CDFW). Collectively, these special-status habitat areas total approximately 3.09 acres (3.05 acres on-site and 0.04 acres off-site). Other native and non-native plant communities occurring within the Study Area do not constitute special-status habitats.

Special-status Plant Species

Special-status plants include those listed, or are candidates for listing by the United States Fish and Wildlife Service (USFWS) and CDFW; and plant species ranked as special-status

by the California Native Plant Society (CNPS - Lists 1A, 1B, and 2). A total of 73 USFWS/CDFW special-status plant species and CNPS-ranked plant species were reported within the 9-quadrangle California Natural Diversity Database (CNDDB) survey area evaluated in the Project Biological Resources Assessment (9-quadrangle CNDDB survey area). Of the 73 species reported, 23 species are considered to potentially occur within the Study Area (please refer to Biological Resources Assessment, Appendix B). To determine presence/absence of these species, focused Study Area plant surveys were conducted on May 17, 2016 and July 1, 2016. The survey dates align with blooming periods for the surveyed species. In the course of these surveys, no USFWS/CDFW special-status or CNPS-ranked species were observed.

Special-status Wildlife Species

Special-status wildlife species include those species listed as Endangered or Threatened under the FESA or CESA; candidates for listing by the USFWS or CDFW; and species of special concern to the CDFW. A total of 38 special-status wildlife species were reported within the 9-quadrangle CNDDB survey area. Of the 38 species reported, 20 species were identified as having a potential to occur within the Study Area, or may otherwise make use of the Study Area (please refer to Biological Resources Assessment, Appendix C). Of these 20 species, 2 special-status species were observed within the Study Area: coastal California gnatcatcher (*Polioptila californica*)-multiple individuals; and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)-one individual.

Special-Status Species Subject to Focused Surveys

Focused surveys were conducted for the least Bell's vireo and burrowing owl pursuant to Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requirements and protocols. In the course of these surveys, the least Bell's Vireo and burrowing owl were not observed.

Migratory Birds and Raptors

The Study Area supports potential nesting and foraging habitat for songbirds and raptors. Several common species of raptors and songbirds were observed within the Study Area. Observed raptor species included American kestrel (*Falco sparverius*) and red-tailed hawk

(*Buteo jamaicensis*). Observed songbird species included Bewick's wren (*Thryomanes bewickii*); California thrasher (*Toxostoma redivivum*); and song sparrow (*Melospiza melodia*). Twelve special-status bird species were recorded within the 9-quadrangle CNDDB survey area; 4 of these species have the potential to occur within the Study Area; with 1 observed species (please refer to Biological Resources Assessment, Appendix C). A complete list of bird species observed within the Study Area is presented at Biological Resources Assessment, Appendix A.

Wildlife Movement

The Study Area is bordered by a residential community to the west, rural residential uses to the east and southeast, and undeveloped areas to the southwest. Bundy Canyon Road establishes the northerly Study Area boundary, physically separating the Study Area from areas to the north. The primary opportunity for wildlife movement is via undeveloped properties northwesterly and southwesterly of the Study Area, which connect to larger undeveloped properties.

The Study Area is not within any MSHCP-designated Core Areas Linkages. The Study Area is not within or proximate to any other designated wildlife linkages. The Project does not propose or require facilities, land uses, or operations that would interfere with or obstruct existing or proposed wildlife linkages.

Wildlife may travel through the steep terrain of the Study Area to access more level open areas to the north and the south. More likely however, wildlife would transit relatively flat areas easterly adjacent to the Study Area. Regional wildlife movement to and from the Study Area is further restricted by vicinity urban development and urbanizing properties. Additionally, vicinity freeways and major roads act to discourage wildlife movement to or through the Study Area. Specifically, the I-15 freeway, approximately 0.7 miles westerly of the Study Area impedes wildlife movement, as does Bundy Canyon Road, the northerly Study Area boundary.

The nearest existing MSHCP Core Area is Core B, approximately 3.2 miles southwesterly of the Study Area. Core B includes land within the Cleveland National Forest and is

physically separated from the Study Area by the I-15 freeway and intervening developed properties.

The Study Area also evidences 3 drainage features (A, A1.1, and B) that could facilitate wildlife movement. Of these features, Drainages A1.1 and B are ephemeral headwater drainages that support limited upland vegetation or are devoid of vegetation, and are therefore not conducive to wildlife movement. Photographs of Study Area drainage features are provided at Figures 4.11-4, 4.11-5.

The mapped USGS blueline stream along the Study Area northerly boundary (Drainage A) supports riparian vegetation, including coast live oak woodland and red willow thicket. Between the northern Project boundary and Bundy Canyon Road, Drainage A does not support riparian vegetation that would be suitable for wildlife cover and/or foraging. Upstream of the Study Area, Drainage A supports riparian vegetation that may facilitate limited wildlife movement. This riparian corridor extends only approximately 1.7 miles upstream from the Study Area.

Wildlife movement with Drainage A is generally constrained by the limited length of the riparian corridor; intermittent and segmented canopy cover that provides protection for wildlife during their movement; and proximity of existing development and associated human activities.

Undeveloped portions of the Study Area support native vegetation communities and likely accommodate localized wildlife movement. The home range and average dispersal of many of these wildlife species may be entirely constrained within the Study Area and immediate vicinity, while bird species in the vicinity may utilize the Study Area for foraging. Populations of animals such as insects, reptiles, small mammals, and a few bird species may find all their resource requirements within or proximate to the Study Area. Occasional individuals may venture beyond the Study Area as they expand their home range and/or disperse from their parental range. Additionally, bird species may fly over the development and freeways to utilize the Study Area for foraging.

PHOTOGRAPH 1. Photograph of Drainage A, facing west (downstream).

PHOTOGRAPH 2. Photograph of Drainage A, facing east (upstream).

Source: ESA PCR

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Figure 4.11-4
Study Area Drainage Features Photos

PHOTOGRAPH 4. Photograph of Drainage A1.1, facing west (upstream).

PHOTOGRAPH 5. Photograph of Drainage B, facing northeast (upstream).

PHOTOGRAPH 6. Photograph of where Drainage B exits the project site via a pipe inlet, facing west (downstream).

Source: ESA PCR

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Figure 4.11-5
Study Area Drainage Features Photos

In summary, the Study Area likely supports habitat for resident and transient species locally, and would occasionally facilitate regional wildlife movement. However, regional movement through the Study Area is substantively constrained by unfavorable topography, proximate urban development, improved roadways, and marginal habitat. The Study Area is not within an MSHCP Core Area or Linkage and is not otherwise identified as a regionally important wildlife movement corridor.

Jurisdictional Waters/Wetlands

The Study Area supports approximately 0.282-acres of Army Corps of Engineers (Corps)/Regional Water Quality Control Board (RWQCB) "waters of the U.S." and 1.877 acres of CDFW jurisdictional streambed and riparian vegetation. No wetlands or other special aquatic sites were observed on the Study Area. Jurisdictional features within the Study Area are mapped at Figure 4.11-6.

Drainage A enters the Study Area from the northeast and traverses the northerly portion of the Study Area before exiting northwesterly. Drainages A1.1 and B originate within the Study Area where sheet flows combine to form jurisdictional indicators. Drainages A1.1 and B express less prominent features and convey flows only during moderate-to-significant storm events. The Study Area does not contain any wetlands or vernal pools. Study Area jurisdictional features are summarized at Table 4.11-2.

Table 4.11-2
Study Area Jurisdictional Features

Drainage	Length (ft)	USACE/RWQCB (acres)	CDFW (acres)	Flow Characteristics
A	1,030	0.242	1.666	Intermittent
A1.1	47	0.001	0.003	Ephemeral
B	118	0.001	0.005	Ephemeral
On-Site Subtotal	***1,195***	*0.244*	***1.674***	- - -
A (off-site)	156	0.038	0.203	Intermittent
Total	**1,351**	**0.282**	**1.877**	- - -

Source: *Bundy Canyon Resort Apartments Project Biological Resources Assessment* (ESA PCR) August 2016.

Source: ESA PCR

Figure 4.11-6
Jurisdictional Areas

4.11.3 REGULATORY SETTING

4.11.3.1 Federal Endangered Species Act/California Endangered Species Act

The United States Congress passed the federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984. The State and federal Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The USFWS is responsible for implementation of ESA, while the CDFW implements CESA. During Project review, each agency is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

4.11.3.2 U.S. Army Corps of Engineers-Waters of the United States/Wetlands

The U.S. Army Corps of Engineers (ACOE, Corps) and the Regional Water Quality Control Board (RWQCB) regulate discharge of dredged or fill material into Waters of the United States under Section 404 and 401 of the Federal Clean Water Act (CWA), respectively. "Discharges of fill material" is defined as the addition of fill material into waters of the U.S., including, but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)]. Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows.

In 2006, the United States Supreme Court[1] found that wetlands were "waters of the United States" if they significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable. Until this time, the Corps had typically regulated as waters of the United States, any body of water (navigable and non-

[1] Consolidated cases *Rapanos v. United States* and *Carabell v. United States* (2006) 547 U.S. 715, collectively referred to as "Rapanos."

navigable) displaying an ordinary high water mark (OHWM), defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area."

In June 2007, the ACOE issued guidelines responding to the Supreme Court's 2006 findings. This guidance states that the Corps will continue to assert jurisdiction over traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically three months), and wetlands that abut relatively permanent tributaries. The guidelines also state that ACOE will determine jurisdiction over non-navigable tributaries that are not relatively permanent and wetlands adjacent to non-navigable tributaries that are not relatively permanent only after making a significant nexus of water quality in traditional waters finding.

Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 C.F.R. §328.3(b)]. In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

4.11.3.3 CDFW Streambeds and Riparian Habitat

The California Department of Fish and Wildlife (CDFW, formerly California Department of Fish and Game) has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the state. Under Section 1602, a private party must notify the CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake

designated by the department, or use any material from the streambeds, except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the party, they may enter into an agreement with the CDFW identifying the approved activities and associated mitigation measures.

Additionally, CDFW, under Section 1600 of the California Fish and Game Code, regulates alterations to streambeds including adjacent riparian habitat areas. Typically, CDFW jurisdictional streambeds and riparian habitat are inclusive of Water of the United States and associated wetlands areas.

4.11.3.4 Regional Water Quality Control Board

For purposes of water quality certification pursuant to Section 401 of the Federal Clean Water Act, the Regional Water Quality Control Board (RWQCB) regulates all activities that are regulated by the Corps. The RWQCB also regulates "Waters of the State" pursuant to California's Porter-Cologne Water Quality Control Act. "Waters of the State" are defined by the Porter-Cologne Act as any surface or subsurface water or groundwater, including saline waters, within the boundaries of the State.

The RWQCB, under authority granted by the Porter-Cologne Water Quality Control Act, may choose to regulate discharges of dredge or fill materials by issuing or waiving (with or without conditions) Waste Discharge Requirements (WDRs), a type of state discharge permit, instead of taking a water quality certification action. Processing a WDR is similar to that of a Section 401 certification; however, the RWQCB has slightly more discretion to add conditions to a project under the state's Porter-Cologne Act than under the Federal Clean Water Act. Recently the RWQCBs have used the WDR process to regulate discharge of dredge or fill to isolated waters that are not subject to Corps jurisdiction.

4.11.3.5 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP), focusing on

conservation of species and their associated habitat in western Riverside County. The goal of the MSHCP is to maintain biological and ecological diversity within a rapidly urbanizing region. The MSHCP is administered by the Riverside County Regional Conservation Authority (RCA).

The MSHCP allows participating jurisdictions within the plan area to incorporate projects onto the incidental "take" permit for all species covered by the MSHCP, including State and federally listed species as well as other identified sensitive species and/or their habitat. Each city or local agency imposes a Development Mitigation Fee for projects within their jurisdiction.

Payment of the mitigation fee and compliance with the requirements of the MSHCP are intended to provide full mitigation under CEQA. Additionally, certain areas within the MSHCP boundaries require focused surveys to determine the presence or absence of specific MSHCP-covered resources, including sensitive plants, burrowing owls, and riparian or riverine areas. As a Project Condition of Approval, and restated as mitigation herein, the Project Applicant would be required to comply with applicable provisions of the MSHCP.

4.11.3.6 Other Statutes, Codes, and Policies

In addition to formal listing under ESA and CESA, plant and wildlife species receive additional consideration during the CEQA process as discussed below.

Species of Special Concern

Species that may be considered for focused review are included on CDFW's list of "Species of Special Concern." Species of Special Concern are generally defined as those California species whose numbers, reproductive success, or habitat may be threatened.

CNPS-Listed Plants

The California Native Plant Society (CNPS) maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular

Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Raptors and Migratory Birds

Raptors (birds of prey), migratory birds, and other avian species are protected by state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto."

4.11.4 STANDARDS OF SIGNIFICANCE

CEQA has identified the following significance thresholds relative to biological resources. If the Project would result in any one of the following, its impacts to biological resources would be considered significant.

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

- Have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or California plans, policies or regulations or by the CDFW or USFWS;

- 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;

- 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;

- Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance; or

- Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.11.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.11.5.1 Introduction

The following discussions focus on those areas where it has been determined that the Project may result in potentially significant biological resources impacts, based on the analysis presented within this Section and included within the EIR Initial Study (EIR Appendix A), and responses received pursuant to the EIR Notice of Preparation.

On this basis, the potential for the Project to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan or with local policies or ordinances protecting biological resources is determined to be less-than-significant. Please refer also to EIR Appendix A, Initial Study Checklist Item IV., *Biological Resources*. All other CEQA topics concerning the Project's potential impacts to biological resources are discussed below.

4.11.5.2 Impact Statements

Potential Impact: *Would the Project substantially affect, either directly or through habitat modifications, any species identified as a candidate, sensitive, or special status species in local or*

regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?

Impact Analysis:

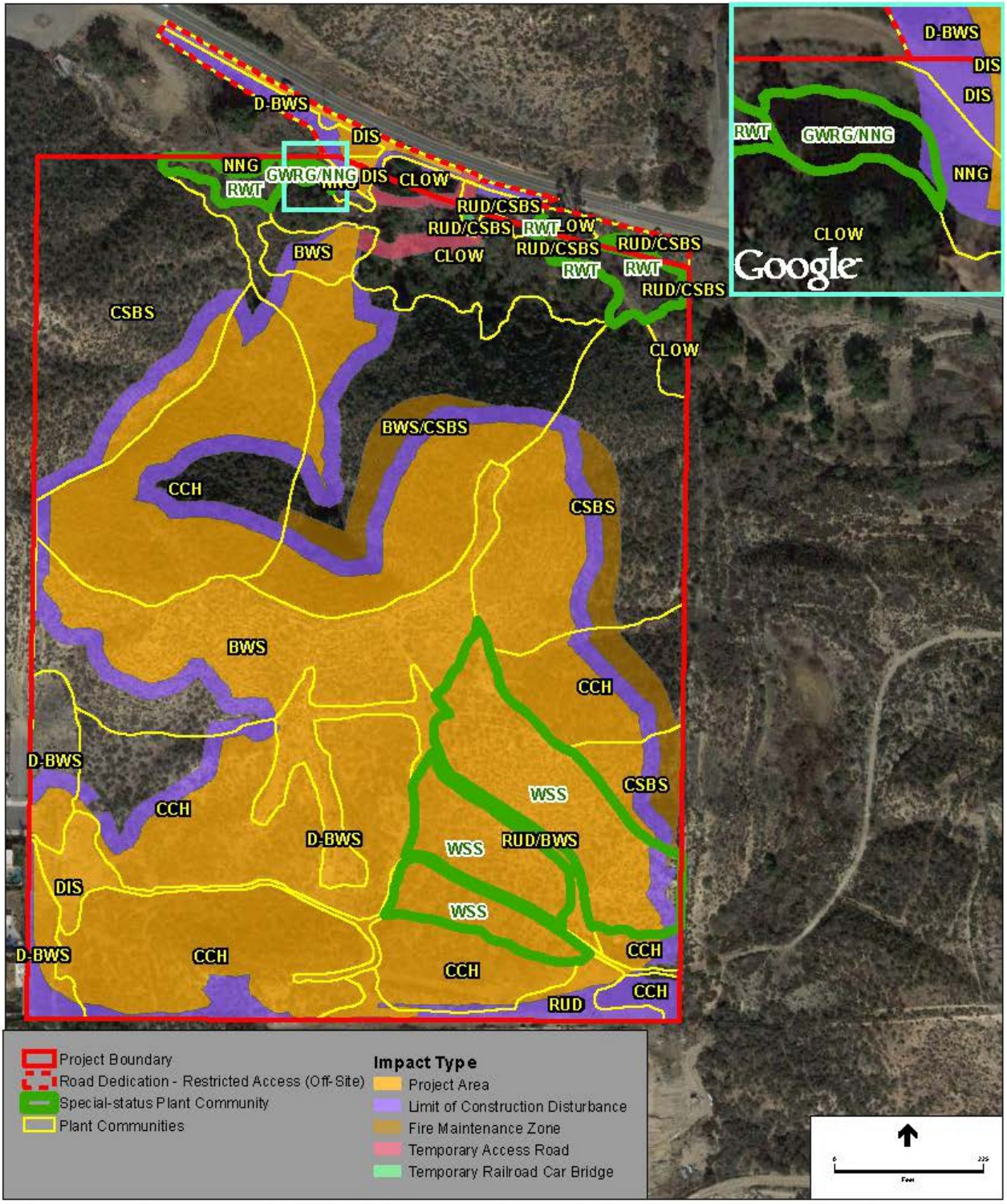
Special-status Plant Species

Development of the Study Area would result in the direct removal of numerous common plant species. Common plant species present within the Study Area occur in large numbers throughout the region and their removal does not represent a potentially significant impact to habitat or special-status species.

A total of 23 special-status plant species were determined to have a potential to occur within the Study Area. However, these 23 species are not expected to occur since focused surveys were negative. On this basis, potential impacts to special-status plant species or supporting habitat would be less-than-significant.

Special-status Plant Communities

Plant communities that would be affected in some manner by the Project are mapped at Figure 4.11-7. The Study Area supports 8 native plant communities totaling 26.39 acres, including California buckwheat scrub (3.08 acres), California sagebrush scrub (5.83 acres), California buckwheat/California sagebrush scrub (3.89 acres), chamise chaparral (8.86 acres), coast live oak woodland (1.64 acres), giant wild rye grassland/non-native grassland (0.03 acre), red willow thicket (0.51 acre), and white sage scrub (2.55 acres). Three of the 8 native plant communities occurring within the Study Area are considered special-status habitats (high priority for inventory) by CDFW. These include giant wild rye grassland/non-native grassland, red willow thicket, and white sage scrub. These 3 special-status plant communities total 3.09 acres within the Study Area. These habitats/plant communities are covered by the MSHCP and CDFW has authorized the take of these habitats/plant communities under the MSHCP. With mandated payment of the MSHCP Local Development Mitigation Fee and compliance with MSHCP requirements, impacts to special-status plant communities would be less-than-significant.



Source: ESA PCR

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Figure 4.11-7
Impacts to Plant Communities

Migratory Birds and Raptors

The Study Area supports potential foraging habitat for migratory birds and raptors. Notwithstanding, due to limited acreage of the Study Area and its urban/urbanizing context, foraging habitat is considered to be of moderate quality. Higher quality foraging habitat occurs in less developed areas within proximate larger expanses of open space, such as the areas to the north and south of Study Area. Loss of habitat within the Project site would not significantly impact the foraging of these species as the open areas to the north and south of the Study Area provide higher quality foraging habitat for any displaced individuals. Therefore, impacts to foraging habitat would be less-than-significant.

The Study Area also has the potential to support songbird and raptor nests due to the presence of shrubs, ground cover, and trees on-site. Nesting activity typically occurs from February 15 to August 31. There is therefore a potential for the Project to adversely affect migratory birds and raptors. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures:

Disturbing or destroying active nests is a violation of the *Migratory Bird Treaty Act (*MBTA) (16 U.S.C. 703 et seq.). In addition, bird nests and eggs are protected under Fish and Wildlife Code Section 3503. The Project would comply with these regulatory requirements. To ensure timely and monitored compliance with the Fish and Wildlife Code Section 3503 and the federal Migratory Bird Treaty Act, the following mitigation measure is incorporated:

4.11.1 Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the Project Applicant shall demonstrate to the satisfaction of the City of Wildomar that either of the following have been or will be accomplished.

Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds.

Other construction activities besides vegetation removal may occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) provided that all suitable habitat is thoroughly surveyed for the presence of nesting birds within 7 days prior to construction activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors) around the nest adjacent to construction will be delineated, flagged, and avoided until the nesting cycle is complete. The buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts.

Special-status Wildlife Species

Development of the Study Area would result in the disruption and removal of habitat and the loss and displacement of common wildlife species. Due to the limited amount of native habitat affected by permanent Project impacts and existing disturbance from human activity within the vicinity, loss of habitat resulting from the Project would not be expected to reduce general wildlife and common wildlife species populations below self-sustaining levels within the region, and would therefore be less-than-significant.

Of the 38 species identified as occurring in the 9-quadrangle CNDDB survey area, 18 special-status wildlife species have a potential to occur, but are not considered to be present within the Study Area due to the lack of suitable habitat, or because the Study Area is outside the known distribution range for the species (please refer to Biological Resources Assessment, Appendix C). Since these species are not expected to be present within the Study Area, no impacts would occur as a result of Project development.

The remaining 20 special-status wildlife species identified as occurring in the 9-quadrangle CNDDB survey area were determined to have a potential to occur within the Study Area. Of these species, 2 are special-status species (least Bell's vireo and burrowing owl) warranting additional evaluation under the MSHCP. Pursuant to MSHCP requirements and protocols, focused surveys were conducted for the least Bell's vireo and burrowing owl. As discussed below, there is potential for significant impacts to these species and mitigation measures are thus required to reduce potential impacts to levels that would be less-than-significant.

Of the remaining 18 special-status wildlife species, 13 species are covered under the MSHCP with no survey or conservation requirements. The Project Applicant would be required to pay applicable fees (the MSHCP Local Development Mitigation Fee and the SKR HCP fee for the Stephens' kangaroo rat) and to comply with guidelines articulated in the MSHCP. Payment of required fees and compliance with MSHCP guidelines would result in impacts that would be less-than-significant.

The remaining five species are not covered by the MSHCP. These are listed as species of special concern by the CDFW and do not carry a federal or state listing as threatened or endangered. These species are considered to have a moderate to very low potential to occur on the Study Area based on the limited habitat and/or marginal quality of the habitat. No potentially significant impacts to these species are anticipated, as summarized below.

- No potentially significant impacts to coast patch-nosed snake would result from the Project since this species has a low potential to occur within the Study Area due to a limited number of burrows observed. These burrows are required for overwintering of this species. Moreover, the nearest CNDDB occurrence of this species was recorded in 2004, approximately 9.5 miles to the northwest of the Study Area near Alberhill.

- No potentially significant impacts to long-eared owl would result from the Project since this species has a very low potential for foraging within the Study Area, and no potential for breeding within the Study Area. The potential for foraging was considered to be very low for this species since the Study Area supports very few open areas suitable for hunting. Moreover, there are only two CNDDB occurrence records of this species in Riverside County, both of which were recorded in 1983 approximately 12.75 miles to the northwest of the Study Area near Harford Springs County Park in the City of Perris.

- No potentially significant impacts to Dulzura pocket mouse would result from the Project. Specifically, this species has a low potential to occur since only a few fossorial mammal burrows were observed on the Study Area, and as such, the Study

Area would not be expected to support substantive populations of this species, if present at all. Additionally, the Study Area does not support this species' preferred habitat (grass-chaparral ecotone). Moreover, the nearest CNDDB occurrence of this species was recorded in 2005 approximately 6.75 miles to the southeast of the Study Area near Murrieta.

- No potentially significant impacts to southern grasshopper mouse would result from the Project. Specifically, this species has a very low potential to occur since only a few fossorial mammal burrows were observed within the Study Area, and as such, the Study Area would not be expected to support substantive populations of this species, if present at all. Additionally, the preferred habitat type (desert scrub habitat) is not present within the Study Area. Moreover, the nearest CNDDB occurrence of this species was recorded in 1932 approximately 8.25 miles to the northeast of the Study Area near Menifee.

- No potentially significant impacts to western mastiff bat would result from the Project since this species has a low potential to occur for foraging with no suitable roosting habitat on the Study Area. Foraging habitat exists in the open areas to the north and south of the Study Area and permanent impacts to a relatively small are of suitable foraging habitat would not likely reduce this species below self-sustaining populations. The nearest CNDDB occurrence of this species was recorded in 2001 approximately 3.1 miles to the northeast of the Study Area.

Further, the five species noted above were not considered for coverage under the MSHCP, indicating that regionally significant populations of these species do not exist within the MSHCP boundaries. Based on the above discussion, the Study Area is not capable of supporting large populations of these species and a loss of a few individuals, if present, is not likely to reduce regional population numbers. Therefore, any impacts to these species would be less-than-significant.

Burrowing Owl

The Study Area supports potentially suitable burrowing owl (Species of Special Concern) habitat, but no burrowing owl burrows, signs, or individuals were found on-site during

focused surveys. Although the Study Area does not currently support burrowing owls, a pre-construction survey is required in compliance with the MSHCP. Specifically, in accordance with the County of Riverside's *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area* (County of Riverside, 2006), a pre-construction survey for burrowing owl is required within 30 days prior to ground disturbance to avoid potential direct take of burrowing owls in the future.

Least Bell's Vireo

The least Bell's vireo (Federally Endangered, State Endangered) has a potential to occur within the Study Area, although available habitat is considered marginal. Focused surveys for least Bell's vireo were conducted, all of which were negative. Potential direct temporary impacts to Least Bell's vireo habitat associated with the installation of the Project's proposed temporary construction access road and railroad car bridge would be avoided since these facilities were specifically sited in areas that are already disturbed and do not support vegetation suitable for least Bell's vireo. Potential direct permanent impacts to least Bell's vireo habitat associated with the construction of the permanent bridge crossing Project access would be avoided since the bridge is designed to span the entire potentially affected jurisdictional areas, riparian vegetation and vireo habitat; and the bridge would be constructed in an area that supports little to no understory.

Riparian/Riverine Areas

MSHCP Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*, of the MSHCP provides for the protection of Riparian/Riverine Areas and Vernal Pools within the MSHCP Plan Area. Riparian/Riverine areas are defined in the MSHCP as "lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." Vernal pools are defined in the MSHCP as "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season."

The Study Area supports approximately 1.877 acres of MSHCP Riparian/Riverine Areas (Biological Resources Study, p. 52). The Project therefore implements avoidance and minimization measures in accordance with the measures identified at Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas. Due to the full avoidance of MSHCP Riparian/Riverine Areas on the study area, the project does not require a Determination of Biologically Equivalent or Superior Preservation (DBESP). See also: http://www.rctlma.org/Portals/0/mshcp/volume1/sec6.html#6.1.2.

Project avoidance of impacts to Jurisdictional Features and MSHCP Riparian/Riverine Areas is illustrated at Figure 4.11-8.

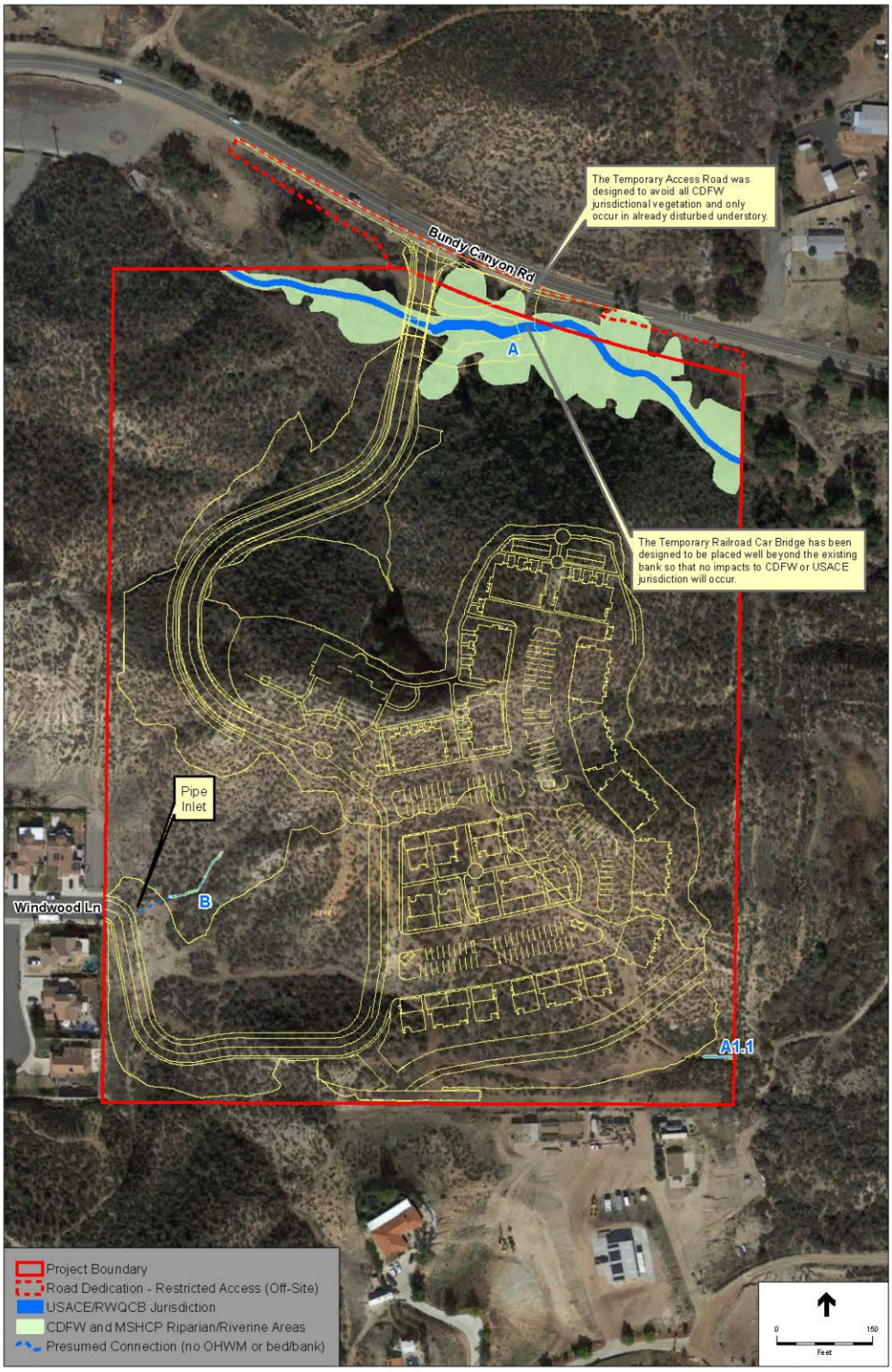
Based on the preceding, the Project could result in potentially adverse impacts to certain special-status wildlife species (burrowing owl and least Bell's vireo) and habitat supporting these species. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures:

Mitigation Measures 4.11.2 and 4.11.3, respectively, are incorporated in the Project to ensure compliance with the MSHCP generally, and specifically to avoid potentially significant impacts to the burrowing owl. Proposed mitigation for the burrowing owl is consistent with the burrowing owl mitigation guidelines published by CDFW (CDFW, 2012).

To avoid potential impacts to least Bell's vireo habitat during the nesting season, biological resources avoidance requirements and design features are incorporated in the Project (EIR Section 3.0, *Project Description*; Section 3.4.8, *Biological Resources Avoidance*). To ensure their timely monitored implementation, these requirements and design features are restated herein as Mitigation Measure 4.11.4.



Source: ESA PCR

applied planning inc

Figure 4.11-8
Avoidance of Jurisdictional Areas
and MSHCP Riparian/Riverine Areas

4.11.2 Prior to the issuance of any grading permit, the Project Applicant shall comply with applicable provisions of the MSHCP, including payment of the MSHCP Local Development Mitigation Fee; compliance with avoidance and minimization measures identified at Section 6.1.2 of the MSHCP pertaining to Riparian/Riverine Areas; compliance with Section 6.1.4 of the MSHCP pertaining to the Urban/Wildlands Interface; and compliance with Section 6.3.2 of the MSHCP pertaining to Burrowing Owl Survey Area requirements.

4.11.3 In compliance with the MSHCP, a pre-construction survey for the burrowing owl shall be completed within 30 days prior to ground disturbance to determine the presence of burrowing owls.

If burrowing owls are determined present during the 30-day pre-construction survey, occupied burrows shall be avoided to the greatest extent feasible, following the guidelines in the Staff Report on Burrowing Owl Mitigation published by Department of Fish and Wildlife (March 7, 2012) including, but not limited to, conducting pre-construction surveys, avoiding occupied burrows during the nesting and non-breeding seasons, implementing a worker awareness program, biological monitoring, establishing avoidance buffers, and flagging burrows for avoidance with visible markers.

If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by the County of Riverside Environmental Programs Department (EPD), in coordination with the CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation and the MSHCP.

In accordance with the MSHCP, take of active nests shall be avoided. Passive relocation (i.e., the scoping of the burrows by a burrowing owl biologist and collapsing burrows free of young) shall occur when owls are present outside the nesting season. The EPD may require translocation sites for the burrowing owl to be created in the MSHCP reserve for the establishment of new colonies pursuant to MSHCP objectives for the species. Translocation sites, if required, shall be provided in consultation with EPD and/or CDFW taking into

consideration unoccupied habitat areas, presence of burrowing mammals, existing colonies, and effects to other MSHCP Covered Species.

4.11.4 Prior to and During Construction of the Permanent Bridge Crossing access to Bundy Canyon Road:

- *Permanent bridge and abutments shall be scheduled to commence outside of the least Bell's vireo nesting season (approximately April 10 until July 31, depending on when the birds arrive from and depart to wintering areas).*

- *Any bridge construction activities that commence during the least Bell's vireo nesting season (April 10 until July 31) shall incorporate habitat surveys to determine potential presence of least Bell's vireo. Such surveys shall be conducted by a qualified biologist within three days prior to construction. The survey area shall consist of the bridge impact area (bridge footprint and abutments) and a 500-foot buffer around the bridge impact area. If any active nests are detected within the survey area, a buffer of 500 feet around the nest shall be delineated, flagged, and avoided until the nesting cycle is complete. The avoidance buffer may be modified and/or other recommendations proposed as determined appropriate by the biological monitor to minimize impacts. Supporting documentation in the form of the EIR Mitigation Monitoring Plan shall be prepared and submitted to CDFW and/or USFWS on completion of construction to outline any proposed monitoring activities.*

- *If least Bell's vireo is observed within the survey area during the 3-day pre-construction survey, the following measures shall be taken to minimize potential indirect impacts to least Bell's vireo:*
  - *Prior to construction, a training program shall be developed and implemented by the Project biologist to inform all construction personnel workers about the listed species, its habitat, and the importance of complying with species avoidance and impact minimization measures.*
  - *All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours determined by the City of Wildomar.*

- *Construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise. Mufflers shall be installed consistent with manufacturers' standards. Construction contractors shall orient stationary construction equipment so that emitted noise is directed away from any occupied least Bell's vireo habitat.*
- *Construction contractors shall stage equipment in areas that will create the greatest distance between construction noise sources and habitat that is occupied during the breeding season.*
- *If the Project biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of birds, the construction supervisor shall be informed and work shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 dBA within areas of occupied habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS and CDFW.*
- *If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of birds is still being affected, work shall again be ceased and the USFWS and CDFW shall be contacted to discuss the appropriate course of action.*

Level of Significance after Mitigation: With application of mitigation, the potential for the Project to substantially affect, either directly or through habitat modifications, any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS is considered less-than-significant.

Potential Impact: *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 Wildlife or U.S. Fish and Wildlife Service?*

Impact Analysis: The Study Area supports drainages that are CDFW and/or USACE/RWQCB jurisdictional areas. As discussed herein, the Project has been designed to avoid all permanent and temporary impacts to jurisdictional areas. On this basis, the potential for the Project to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service is less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *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?*

Impact Analysis: No wetlands exist within the Study Area. Nor does the Project propose uses or activities that would substantially and adversely affect any off-site wetlands areas. Moreover, as discussed herein, the Project has been designed to avoid all permanent and temporary impacts to jurisdictional areas that could potentially support wetlands. On this basis, the Project's potential to substantially and adversely affect federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruptions or other means, is determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *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 wildlife nursery sites?*

Impact Analysis: During preparation of the MSHCP, wildlife corridors and habitat linkages throughout western Riverside County were analyzed extensively. No MSHCP wildlife habitat linkages or movement corridors exist within the Study Area. Nor does the Project propose facilities or activities that would substantively and adversely affect any

offsite designated wildlife habitat linkage or movement corridor. Moreover, regional movement through the Study Area is likely limited due to topographical constraints, surrounding development, and limited habitat conducive to wildlife movement. The Study Area is not designated as, nor does it function as, a wildlife nursery.

Based on the preceding discussion, impacts to wildlife corridors, habitat linkages, or wildlife nursery sites that would occur as a result of the proposed Project are determined to be less-than-significant.

Level of Significance: Less-Than-Significant.

4.12 CULTURAL RESOURCES/TRIBAL CULTURAL RESOURCES

4.12 CULTURAL RESOURCES/ TRIBAL CULTURAL RESOURCES

Abstract

This Section examines the potential for implementation of the Bundy Canyon Resort Apartment Project to impact cultural, historic, and tribal resources in the Project area. Of primary concern are the protection of historic cultural resources, and conservation of known or currently unknown (buried or undiscovered) archaeological and paleontological resources that may be present in locations proposed for future development. Specifically, this analysis seeks to determine whether the Project would result in any of the following:

- *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*

- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or*

- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

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

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

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

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topic were previously determined to be less-than-significant and are not further discussed here:

- *Disturb any human remains, including those interred outside of dedicated cemeteries.*

Information contained within this section is based upon A Phase I Cultural Resources Assessment of PA 16-0006, APN 367-250-008*, prepared by Jean A. Keller, Ph.D., November 2015. In order to protect the location of sensitive cultural resources that may be identified as part of the Project Cultural Resources Assessment, a copy of the report has not been included in this EIR. Copies are available, upon request, at the City of Wildomar Planning Department. All references and sources to the information presented herein can be obtained through review of that report. As supported by the analysis presented in this Section, as mitigated, the Project's potential to impact cultural resources is determined to be less-than-significant.*

4.12.1 INTRODUCTION

Cultural resources can be of scientific, aesthetic, educational, archaeological, architectural, or historical significance to the community. The following discussions present the environmental setting of the site as it relates to cultural resources, and identifies and classifies the significance of prehistoric and/or historic cultural resources which may exist on the subject site, and assesses the Project's potential to impact such resources.

4.12.2 ENVIRONMENTAL SETTING

4.12.2.1 Topography and Geology

The Project site is situated in a topographically diverse region that is defined by the Elsinore Mountains to the west, Sedco Hills to the north, French Valley to the east, and Mesa de Colorado to the south.

Topographically, the Project site is comprised of three main components: a relatively flat alluvial plain in the south, an east/west trending ridge of steep-sided hills through the center, and a narrow riparian corridor along the northern boundary. Elevations range from 1,460 feet above mean sea level (AMSL) to a high of 1,676 feet AMSL. The slopes of the ridge are very steep, with some areas approaching a 1:1 slope. Floral evidence indicates that a permanent source of water exists within the riparian corridor in the northern portion of the property, although surface water was not present at the time of the cultural survey. There are also indications of measurable ephemeral flow throughout the property following seasonal precipitation. Virtually all drainage in the vicinity of the Project site has been channelized, but historically the flow pattern was in a northwesterly direction toward Lake Elsinore. For the most part, drainage in this region is intermittent, occurring only as the result of seasonal precipitation.

The Project site is situated on the Perris Peneplain, a portion of the Northern Peninsular Range Province of Southern California. The Perris Peneplain is a broad valley bounded on three sides by mountain ranges: the San Jacinto Mountains on the east, the San Bernardino Mountains on the north, and the Santa Ana Mountains on the southwest. The peneplain is a large depositional basin composed primarily of materials eroded from the bedrock surfaces of the Southern California Batholith. The geological composition of the Project site is representative of the region as a whole, with alluvial fans and terraces formed by local granitic bedrock decomposition. Limited exposed bedrock outcrops suitable for use in food processing by Native peoples of the region are located on the upper slopes of the ridge, as well as along the lower slopes near the northwestern property corner. Loose lithic material, primarily granitics and quartz, is very sparsely scattered across the property, but none of that observed would have been

even marginally suitable for the production of flaked and ground stone tools by indigenous inhabitants of the region.

4.12.2.2 Biology

Native vegetation within the Project site is representative of the Riversidian Sage Scrub Plant Community and the Riparian Oak Woodland Plant Community. The Riversidian Sage Scrub Plant Community is found in sparse to moderate density on the ridge slopes, on portions of the alluvial plain in the south, and as understory for the riparian vegetation in the north. Characteristic plant species include, but are not limited to, white sage (*Salvia apiana*), black sage (*Salvia mellifera*), California buckwheat (*Eriogonum fasciculatum*), chamise (*Adenostoma fasciculatum*), California sagebrush (*Artemisia californica*), and laurel sumac (*Rhus laurina*). The Riparian Oak Woodland Plant Community is found along the northern boundary of the Project site, although it has been subject to substantial adverse impacts resulting from a complex system of bicycle/motorcycle "jumps" built in the area. In addition, several trees have been cut down by trespassers and trash has been dumped in many places. Predominant plant species representing this native plant community on the subject property include coast live oaks (*Quercus agrifolia*), sycamore (*Platanus racemosa*), willows (*Salix* spp.), and reeds (*Phragmites communis*). The size of trees growing in this area indicates that many are very old and that there is a substantial permanent source of water, albeit subsurface at the time of the Cultural Resources Assessment. Indigenous peoples of the region extensively utilized all native plants found within the Project site for food, medicines, construction materials, and implement production.

During both the prehistoric and historical periods, an abundance of faunal species undoubtedly inhabited the Project area. However, due to regional urbanization, the current faunal community is generally restricted to those species that can exist in proximity to humans, such as valley pocket gopher (*Thomomys bottae*), black-tailed jackrabbit (*Lepus californicus*), Audobon's cottontail (*Sylvilagus audobonii*), California ground squirrel (*Spermophilus beecheyi*), coyote (*Canis latrans*), western fence lizard (*Scelopous occidentalis*), and occasionally, mule deer (*Odocoileus hemionus*).

4.12.2.3 Climate

The climate of the Project area is typical of Southern California, which on the whole is warm and rather dry. This climate is classified as Mediterranean or "summer-dry subtropical." Temperatures can fall below freezing or rise above 100 degrees Fahrenheit. The rather limited precipitation occurs primarily during the winter months.

4.12.2.4 Environmental Summary

Based on existing resources found on the Project site, it is probable that floral and faunal resources would have provided opportunities to Native Americans for procuring food, as well as components for medicines, tools, and construction materials. Bedrock outcrops suitable for use in food processing are primarily present on top of the highest ridge, making access very difficult. Loose lithic material suitable for flaked and ground stone tool production is not present within the site boundaries. A permanent source of water is present and, based on floral evidence, has existed for a significant period of time. With the exception of the relatively flat alluvial plain in the southern portion of the site and the riparian corridor in the northern portion, topography is extreme and definitely not conducive to habitation, long term or otherwise (these portions represent a relatively small percentage of the Project site). Based on the various environmental factors, it is likely that the Project site would have been viewed in a favorable light for seasonal resource exploitation, but not for long-term occupation.

Criteria for occupation during the historical era were generally somewhat different than for aboriginal occupation, since later populations did not depend solely on natural resources for survival. During the historical era, the Project site would probably not have been considered very desirable due to the lack of tillable soil and extreme topography, although the presence of a permanent source of water and the site's proximity to urban centers and major transportation corridors would have been mitigating factors.

4.12.3 CULTURAL SETTING

4.12.3.1 Prehistory

Based on currently available archaeological research, occupation of Southern California by human populations is believed to have begun at least 10,000 years ago. Theories proposing much earlier occupation, specifically during the Pleistocene Age, exist but at this time, archaeological evidence has not been fully substantiating. Therefore, for the purposes of this analysis, only human occupation within the past 10,000 years will be addressed.

A time frame of occupation may be determined on the basis of characteristic cultural resources. These comprise what are known as cultural traditions or complexes. It is through the presence or absence of time-sensitive artifacts at a particular site that the apparent time of occupation may be suggested.

In general, the earliest established cultural tradition in Southern California is accepted to be the San Dieguito Tradition, first described in the 1920's. The San Dieguito people were nomadic large-game hunters whose tool assemblage included large domed scrapers, leaf-shaped knives and projectile points, stemmed projectile points, chipped stone crescentics, and hammerstones. The San Dieguito Tradition was further divided into three phases: San Dieguito I is found only in the desert regions, while San Dieguito II and III occur on both sides of the Peninsular Ranges.

These phases formed a sequence in which increasing specialization and refinement of tool types were the key elements. Although absolute dates for the various phase changes have not been hypothesized or fully substantiated by a stratigraphic sequence, the San Dieguito Tradition as a whole is believed to have existed from approximately 7,000 to 10,000 years ago (8000 to 5000 B.C.).

Throughout southwestern California, the La Jolla Complex followed the San Dieguito Tradition. The La Jolla Complex is recognized primarily by the presence of millingstone assemblages within shell middens. Characteristic cultural resources of the La Jolla

Complex include basined millingstones, unshaped manos, flaked stone tools, shell middens, and a few Pinto-like projectile points. Flexed inhumations under stone cairns, with heads pointing north, are also present.

The La Jolla Complex existed from 5500 to 1000 B.C. Although there are several hypotheses to account for the origins of this complex, it would appear that it was a cultural adaptation to climatic warming after c. 6000 B.C. This warming may have stimulated movements to the coast of desert peoples who then shared their millingstone technology with the older coastal groups. The La Jollan economy and tool assemblage seems to indicate such an infusion of coastal and desert traits, rather than a total cultural displacement.

The Pauma Tradition may be an inland variant of the La Jolla Complex, exhibiting a shift to a hunting and gathering economy, rather than one based on shellfish gathering. Implications of this shift are an increase in number and variety of stone tools and a decrease in the amount of shell. At this time, it is not known whether the Pauma Complex represents the seasonal occupation of inland sites by La Jollan groups or whether it represents a shift from a coastal to a non-coastal cultural adaptation by the same people.

The late period is represented by the San Luis Rey Complex, which is divided into two periods: San Luis Rey I (A.D. 1400-1750) and the San Luis Rey II (A.D. 1750-1850). The San Luis Rey I type component includes cremations, bedrock mortars, millingstones, small triangular projectile points with concave bases, bone awls, stone pendants, Olivella shell beads, and quartz crystals. The San Luis Rey II assemblage is the same as San Luis Rey I, but with the addition of pottery vessels, cremation urns, tubular pipes, stone knives, steatite arrow straighteners, red and black pictographs, and such non-aboriginal items as metal knives and glass beads. Inferred San Luis Rey subsistence activities include hunting and gathering with an emphasis on acorn harvesting.

4.12.3.2 Ethnography

According to available ethnographic research, the Project area was included in the known territory of the Shoshonean-speaking Luiseño Indians during both prehistoric and historic times. The name Luiseño is Spanish in origin and was used in reference to those aboriginal inhabitants of Southern California associated with the Mission San Luis Rey. As far as can be determined, the Luiseño, whose language is of the Takic family (part of Uto-Aztecan linguistic stock), had no equivalent word for their nationality.

The territory of the Luiseño was extensive, encompassing over 1,500 square miles of coastal and inland Southern California. Known territorial boundaries extended on the coast from Aliso Creek on the north to Agua Hedionda Creek on the south, then inland to Santiago Peak, across to the eastern side of the Elsinore Fault Valley, southward to the east of Palomar Mountain, and finally, around the southern slope of the Valley of San Jose. Their habitat included every ecological zone from sea level to 6,000 AMSL.

Territorial boundaries of the Luiseño were shared with the Gabrieliño and Serrano to the north, the Cahuilla to the east, the Cupeño and Ipai to the south. With the exception of the Ipai, these tribes shared similar cultural and language traditions. Although the social structure and philosophy of the Luiseño were similar to that of neighboring tribes, they had a greater population density and correspondingly, a more rigid social structure.

The settlement pattern of the Luiseño was based on the establishment and occupation of sedentary autonomous village groups. Villages were usually situated near adequate sources of food and water, in defensive locations primarily found in sheltered coves and canyons. Typically, a village was comprised of permanent houses, a sweathouse, and a religious edifice. The permanent houses of the Luiseño were earth-covered and built over a two-foot excavation. The dwellings were conical roofs resting on a few logs leaning together, with a smoke hole in the middle of the roof and entrance through a door. Cooking was done outside when possible, and on a central interior hearth when necessary. The sweathouse was similar to the houses except that it was smaller, elliptical, and had a door in one of the long sides. Heat was produced directly by a

wood fire. Finally, the religious edifice was usually just a round fence of brush with a main entrance for viewing by the spectators and several narrow openings for entry by the ceremonial dancers.

Luiseño subsistence was based on seasonal floral and faunal resource procurement. Each village had specific resource procurement territories, most of which were within one day's travel of the village. During the autumn of each year, however, most of the village population would migrate to the mountain oak groves and camp for several weeks to harvest the acorn crop, hunt, and collect local resources not available near the village. Hunters typically employed traps, nets, throwing sticks, snares, or clubs for procuring small animals, while larger animals were usually ambushed, then shot with bow and arrow. The Luiseño normally hunted antelope and jackrabbits in the autumn by means of communal drives, although individual hunters also used bow and arrow to hunt jackrabbits throughout the year. Many other animals were available to the Luiseño during various times of the year, but were generally not eaten. These included dog, coyote, bear, tree squirrel, dove, pigeon, mud hen, eagle, buzzard, raven, lizards, frogs, and turtles.

Game was prepared by broiling it on coals. Venison and rabbit were either broiled on coals or cooked in an earthen oven. Whatever meat was not immediately consumed was crushed on a mortar, then dried and stored for future use. Of all the food sources utilized by the Luiseño, acorns were by far the most important. Six species were collected in great quantities during the autumn of every year, although some were favored more than others. In order of preference, they were black oak (*Quercus kelloggii*), coast live oak (*Q. agrifolia*), canyon live oak (*Q. chrysolepsis*), Engelmann Oak (*Q. engelmannii*), interior live oak (*Q. wislizenii*), and scrub oak (*Q. berberidifoilia*). The latter three were used only when others were not available. Acorns were prepared for consumption by crushing them in a stone mortar and leaching off the tannic acid, then made into either a mush or dried to a flour-like material for future use.

Herb and grass seeds were used almost as extensively as acorns. Edible seeds were collected between April and November. Important seeds included, but were not limited to: California sagebrush (*Artemisia californica*), wild tarragon (*Artemisia dracunculus*), white tidy tips (*Layia glandulosa*), sunflower (*Helianthus annus*), calabazilla (*Cucurbita foetidissima*), sage (*Salvia carduacea* and *S. colombariae*), California buckwheat (*Eriogonum fasciculatum*), peppergrass (*Lepidium nitidum*), and chamise (*Adenostoma fasciculatum*). Seeds were parched, ground, cooked as mush, or used as flavoring in other foods.

Fruit, berries, corms, tubers, and fresh herbage were collected and often immediately consumed during the spring and summer months. Among those plants commonly used were basketweed (*Rhus trilobata*), Manzanita (*Arctostaphylos Adans.*), miner's lettuce (*Montia Claytonia*), thimbleberry (*Rubus parviflorus*), and California blackberry (*Rubus ursinuss*). When an occasional large yield occurred, some berries, particularly juniper and manzanita, were dried and made into a mush at a later time.

Tools for food acquisition, preparation, and storage were made from widely available materials. Hunting was done with a bow and fire-hardened or stone-tipped arrows. Coiled and twined baskets were used in food gathering, preparation, serving, and storage. Seeds were ground with handstones on shallow granitic mutates, while stone mortars and pestles were used to pound acorns, nuts, and berries. Food was cooked in clay vessels over fireplaces or earthen ovens. The Luiseño employed a wide variety of other utensils produced from locally available geological, floral, and faunal resources in all phases of food acquisition and preparation.

The Luiseño subsistence system described above constitutes seasonal resource exploitation within their prescribed village-centered procurement territory. In essence, this cycle of seasonal exploitation was at the core of all Luiseño lifeways. During the spring, collection of roots, tubers, and greens was emphasized, while seed collecting and processing during the summer months shifted this emphasis. The collection areas and personnel (primarily small groups of women) involved in these activities remained virtually unchanged. However, as the autumn acorn harvest approached, the settlement pattern of the Luiseño altered completely. Small groups joined to form the larger groups

necessary for the harvest and village members left the villages for the mountain oak groves for several weeks. Upon completion of the annual harvest, village activities centered on the preparation of collected foods for use during the winter. Since few plant food resources were available for collection during the winter, this time was generally spent repairing and manufacturing tools and necessary implements in preparation for the coming resource procurement seasons.

Each Luiseño village was a clan tribelet – a group of people patrilineally related who owned an area in common and who were both politically and economically autonomous from neighboring villages. The chief of each village inherited his position and was responsible, with the help of an assistant, for the administration of religious, economic, and warfare powers. A council comprised of ritual specialists and shamans, also hereditary positions, advised the chief on matters concerning the environment, rituals, and supernatural powers.

The social structure of the villages is obscure, since the Luiseño apparently did not practice the organizational system of exogamous moieties used by many of the surrounding Native American groups. At birth, a baby was confirmed into the householding group and patrilineage. Girls and boys went through numerous puberty initiation rituals during which they learned about the supernatural beings governing them and punishing any infractions of the rules of behavior and ritual. The boys' ceremonies included the drinking of toloache (Datura), visions, dancing, ordeals, and the teaching of songs and rituals. Girls' ceremonies included advice and instruction in the necessary knowledge for married life, "roasting" in warm sands, and rock painting. Shortly after the completion of the puberty initiation rituals, girls were married, typically to someone arranged for by the girl's parents. Although the Luiseño were concerned that marriages not occur between individuals too closely related, it has been suggested that cross-cousin marriages were the norm prior to Spanish Catholic influences beginning in 1769. Luiseño marriages created important economic and social alliances between lineages and were celebrated accordingly with elaborate ceremonies and a bride price. Residence was typically patrilineal and polygyny, often sororal, practiced especially by chiefs and shamans.

One of the most important elements in the Luiseño life cycle was death. At least a dozen successive mourning ceremonies were held following an individual's death, with feasting taking place and gifts being distributed to ceremony guests. Luiseño cosmology was based on a dying god theme, the focus of which was Wiyó-t', a creator-culture hero and teacher who was the son of earth-mother. The Luiseño believed that the order of the world was established by this entity and he was one of the first "people" or creations. Upon the death of Wiyó-t', the nature of the universe changed and the existing world of plants, animals, and humans was created. The original creations took on the various life forms now existing and worked out solutions for living. These solutions included a spatial organization of species for living space and a chain-of-being concept that placed each species into a mutually beneficial relationship with all others.

Based on Luiseño settlement and subsistence patterns, the type of archaeological sites associated with this culture may be expected to represent the various activities involved in seasonal resource exploitation. Temporary campsites usually evidenced by lithic debris and/or milling features, may be expected to occur relatively frequently. Food processing stations, often only single milling features, are perhaps the most abundant type of site found. Isolated artifacts occur with approximately the same frequency as food processing stations. The most infrequently occurring archaeological site is the village site. Sites of this type are usually large, in defensive locations amidst abundant natural resources, and usually surrounded by the types of sites previously discussed, which reflect the daily activity of the villagers. Little is known of ceremonial sites, although the ceremonies themselves are discussed frequently in the ethnographic literature. It may be assumed that such sites would be found in association with village sites, but with what frequency is not known.

4.12.4 HISTORIC PERIOD

Four principle periods of historical occupation existed in Southern California: the Explorer Period (A.D. 1540-1768), the Colonial Spanish-Mission Period (A.D. 1769-1830), the Mexican Ranch-Pastoral/Landless Indian Period (A.D. 1830-1860), and the American Developmental/Indian Reservation Period (A.D. 1860-present).

In the general Project area, the Colonial Spanish-Mission Period represents the first historical occupation. Although earlier European explorers had traveled throughout Southern California, it was not until the 1769 "Sacred Expedition" of Captain Gaspar dé Portola and Franciscan Father Junipero Serra that there was actual contact with aboriginal inhabitants of the region. The intent of the expedition, which began in San Blas, Baja California, was to establish missions and presidios along the California coast, thereby serving the dual purpose of converting Indians to Christianity and expanding Spain's military presence in the "New World."

In addition, each mission became a commercial enterprise utilizing Indian labor to produce commodities such as wheat, hides, and tallow that could be exported to Spain. Founded on July 16, 1769, the Mission San Diego de Alcalá was the first of the missions, while the Mission San Francisco Solana was the last mission, founded on July 4, 1823. Although the Portola and Serra expedition apparently bypassed the Project area, there is a possibility that Pedro Fages, a lieutenant in Portola's Catalan Volunteers, may have stopped in the area while looking for deserters from San Diego in 1772. In addition, historian Phillip Rush credits Captain Juan Pablo Grijalva and his party with the first white discovery of the region in 1795. The first white men of record to enter the region were Father Juan Norberto de Santiago and Captain Pedro Lisalde. In 1797, their expedition party, comprised of seven soldiers and five Indians (probably Juaneños from the Mission San Juan Capistrano) stopped briefly near Temecula on their journey to find another mission site. Upon leaving the valley, Fr. Santiago remarked in his journal that the expedition had encountered an Indian village called "Temecula."

In 1798, on the site Santiago had selected, the Mission San Luis Rey de Francia was founded and all aboriginals living within the mission's realm of influence became known as the "Luiseño." Within a 20-year period, under the guidance of Fr. Antonio Peyri, the mission prospered to a degree that it was often referred to as the "King of the Missions." At its peak, the Mission San Luis Rey de Francia, which is located in what is now Oceanside, controlled six ranches and annually produced 27,000 cattle; 26,000 sheep; 1,300 goats; 500 pigs; 1,900 horses; and 67,000 bushels of grain. During this period, the Mission San Luis Rey de Francia claimed the entire region that is now

western Riverside County and northern San Diego County as a cattle ranch, although records of the Mission San Juan Capistrano show this region as part of their holdings.

By 1818, the greater Temecula Valley had become the Mission San Luis Rey's principle producer of grain and was considered one of the mission's most important holdings. It was at approximately this time that a granary, chapel, and majordomo's home were built in Temecula. These were the first structures built by whites within the boundaries of Riverside County. This entire area continued to be an abundant producer of grain, as well as horses and cattle, for the thriving Mission San Luis Rey until the region became part of Mexico on April 11, 1822. Following this event, the Spanish missions and mission ranches began a slow decline.

During the Mexican Ranch-Pastoral/Landless Indian period, the first of the Mexican ranchos was established following the enactment of the Secularization Act of 1833 by the Mexican government. Mexican governors were empowered to grant vacant land to "contractors (empresarios), families, or private citizens, whether Mexicans or foreigners, who may ask for them for the purpose of cultivating or inhabiting them."

Mexican governors granted approximately 500 ranchos during this period. Although legally a land grant could not exceed 11 square leagues (about 50,000 acres or 76 square miles) and absentee ownership was officially forbidden, neither edict was rigorously enforced. While the Project site was not located within any of the Spanish or Mexican land grants, it was located approximately one mile east of the La Laguna Rancho. This was apparently a very desirable area for Spanish settlers in that two other ranchos, the Santa Rosa and the Temecula, were located within a two-mile radius of the site. It is probable that activities on all three ranchos had an impact on the area due to its relatively close proximity.

The La Laguna Rancho, encompassing three square leagues, was granted to Julian Manriquez by Mexican Governor Manuel Micheltorena on June 7, 1844. The land grant included all of the lake and shoreline, but did not extend very far onto land around the lake in any direction. Manriquez died a few years after receiving the grant and the

property passed to his widow, Trinidad, and their two sons. They sold the rancho to Abel Stearns in 1852 for $4,125, but Stearns only held the rancho for six years, selling it to Augustin Machado for $6,000. Machado built an adobe on the northwest corner of his property and with the advent of the Butterfield Stage Road, the house became a focal point and a stage stop for the mail stages. Augustin Machado died in 1865 and left the La Laguna Rancho to his wife, Ramona, and their 12 children. Ramona received an undivided one-half interest, while each child received an undivided twenty-sixth interest.

Throughout the 1840's and 1850's, thousands of settlers and prospectors traveled through the Project area on the Emigrant Trail in route to various destinations in the West. The southern portion of the trail ran from the Colorado River to Warner's Ranch and then westward to Aguanga, where it split into two roads. The main road continued westward past Aguanga and into the valley north of the Santa Ana Mountains. This road was alternately called the Colorado Road, Old Temescal Road, or Fort Yuma Road and what is now SR-79 generally follows its alignment. The second road, known as the San Bernardino Road, split off northward from Aguanga and ran along the base of the San Jacinto Mountains. In large part this was due to the Gold Rush, which began with the discovery of gold at Sutter's Mill in 1848. Between 1848 and 1870, it has been estimated that the Anglo-American population of California increased from 200 to 560,000. During these years, most mining occurred in the northern and central portions of the state and as a result, these areas were far more populated than most of Southern California. Nevertheless, there was an increasing demand for land throughout the state, and the federal government was forced to address the issue of how much land in California would be declared public land for sale. The Congressional Act of 1851 created a land commission to receive petitions from private land claimants and to determine the validity of their claims. The United States Land Survey of California, conducted by the General Land Office (GLO), began that year.

In the final period of historic occupation, the American Developmental/Indian Reservation Era, the first major changes in the Project area took place as a result of the land issues addressed in the previous decade. Following completion of the GLO land

survey, large tracts of federal land became available for sale and for preemption purposes, particularly after Congress passed the Homestead Act of 1862. The state was eventually granted 500,000 acres of land by the federal government for distribution, as well as two sections of land in each township for school purposes. Much of this land was in the southern part of the state. Under the Homestead Act of 1862, 160-acre homesteads were available to citizens of the United States (or those who had filed an intention to become one) who were either head-of-household or a single person over the age of 21 (including women). Once the homestead claim was filed, the applicant had six months to move onto the land and was required to maintain residency for five years as well as to build a dwelling and raise crops. Upon completion of these requirements, the homesteader was required to publish an intent to close on the property in order to allow others to dispute the claim; if no one did so, the homesteader was issued a patent to the property, thus conveying ownership. Individuals were attracted to the federal lands by their low prices and as a result, the population began to increase in regions where the lands available for homestead were located. It was at this time that the region of Southern California, which came to be known as Riverside County, saw an influx of settlers, as well as those seeking other opportunities, including gold mining.

In June of 1873, Augustin Machado's wife and eleven of the children sold their rights to 12,832 acres of the La Laguna Rancho for $29,000 to Charles Ammon Sumner. The oldest of Machado's children, Juan Machado, retained his share, a 513-acre pie-shaped piece, whose point extended into the lake. Machado built an adobe to house his family and continued to live there for many years. In 1875, Sumner mortgaged the La Laguna Rancho to the Temple and Workman Bank of Los Angeles for $5,000. In 1876, the note was foreclosed on and sold to Milton S. Latham at a sheriff's sale in 1877 for $6,714.49. Later the same year, Latham sold the rancho to Frederick M. Sumner, brother of Charles Ammon Sumner. In 1881, Sumner transferred the land grant to Arthur Scrivener, Trustee for the London and San Francisco Bank, Ltd. On March 17, 1882 the California Southern Railroad (San Bernardino and Temecula Line) was opened, extending from National City near the Mexican border in San Diego County, northerly to Temecula and Murrieta, across the Perris Valley, down Box Springs Grade, and on to the City of San Bernardino and the entire region anticipated a boom in industry and population. With

the arrival of rail access, the La Laguna Rancho flourished, and within fifteen years no fewer than eight separate developments were founded on, or adjacent to, rancho lands.

Unfortunately, rail access was short-lived. Flooding and washouts in Temecula Canyon plagued the California Southern Railroad from the beginning. Railway service was disrupted for months at a time, and substantial sums of money were spent on rebuilding the washed out tracks. Finally, in 1891, the Santa Fe Railway constructed a new line from Los Angeles to San Diego down the coast and when, later that year, the California Southern Railway's route through Temecula Canyon once again was washed out, that portion of the line was discontinued.

On September 24, 1883, approximately 18 months after the opening of the California Southern Railroad, Franklin H. Heald, Donald M. Graham, and William Collier purchased the 12,832-acre La Laguna Rancho for $12,000. It was renamed Elsinore and subdivided into town lots and small acreages for sale. However, in 1885 the partnership was dissolved and the unsold land within the rancho was divided. Collier and Graham took as their share the land that lay southeasterly of Coydon Street and platted a town site with the name "Wildon" on the land. In November of 1886, a second plat for the new town was recorded with the name "Wildomar." This final name was comprised of letters of each partner's first name, plus letters from the first name of Margaret Collier, who was Graham's sister and Collier's wife.

On April 16, 1886 Wildomar's first post office was established and when Riverside County incorporated in 1893, Wildomar was designated as one of the original 40 election precincts and the Wildomar school district as one of the original 52 accepted school districts. Many Quakers from West Branch, Iowa settled in Wildomar and the town became known as a Quaker colony. According to the Riverside Daily Press, the proprietors of Wildomar (presumably Graham & Collier) were temperance men and they decided that their new town should never be cursed by the presence of a saloon, so they incorporated into every deed of acre property, as well as the town lots, the "no saloon" clause. It is for this reason, theorized the newspaper, that the 1898 population of Wildomar was almost entirely comprised of Prohibitionists and also exclusively of

members of one or the other of the churches that were built as soon as the town was created.

Around the time that the California Southern Railroad commenced service and Wildomar was first established, Mr. L. Menifee Wilson, a 20-year-old from Kentucky, moved to the area and located what appears to have been the first gold quartz mine in Southern California. The mine was located approximately eight miles south of Perris and was named the Menifee Quartz Lode. As news of his find spread, miners flocked to the region to try their luck. Hundreds of gold mining claims were subsequently filed in the region around Menifee's mine and this area became known as Menifee and the Menifee Valley. Gold quartz discoveries in the Winchester, Perris, Murrieta, and Wildomar areas further fueled the belief that the entire region was one of unsurpassed mineral wealth, ripe for the taking. Wilson was one of the major proponents of this belief and in addition to his original mine, claimed several others in the general area.

From the time of L. Menifee Wilson's first gold discovery in the early 1880's, gold production through hard rock mining in western Riverside County increased considerably, reaching its peak in 1895. At that time the value of gold produced was reported in the Mining and Scientific Press (Vol. 85) as being $285,106. Although the gold value was still relatively high in 1896 ($262,800), from that point on production decreased substantially every year until in 1917 the value of gold was reported as being zero.

Based on numerous reports found in local newspapers such as the Winchester Record, Perris New Era, and Riverside's Press and Horticulturist, the gold boom in western Riverside County occurred primarily between late 1893 and mid-1895. During this period there were almost daily articles enthusiastically touting the number of new mining claims being recorded, yields from the various operations, and the resultant population boom as news of the region's mineral wealth spread. By early 1896, the mining related articles were less frequent and those appearing often lamented the closing of mines, which was generally due to the lack of water necessary for processing gold-bearing ore. By this time, a far greater emphasis began to be placed on the

agricultural potential of the region. Replacing daily reports on gold yields from the mines were crop yields and bushel counts from the growing number of farms in southwestern Riverside County. Although settlers continued to move into this region and a number of small towns, such as Wildomar, continued to develop, the migration was less dynamic than it had been during the early years of the gold rush and the region retained the essentially rural flavor it has maintained until recently.

4.12.5 EXISTING POLICIES AND REGULATIONS

4.12.5.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. Historic properties are cultural resources (e.g., archeological sites, historic built environment features, or Native American sites) that are listed, or determined to be eligible for listing, on the National Register of Historic Places. The implementing regulations of this mandate, found in the Code of Federal Regulations (36 CFR 800), outline an involved consultative process known as the Section 106 process. The Section 106 process requires a project lead federal agency to consult with the State Historic Preservation Officer.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act, passed in 1978, serves to protect and preserve the traditional religious rights of American Indians, Eskimos, Aleuts, and Native Hawaiians. Before the Act was passed, certain federal laws interfered with the traditional religious practices of many American Indians.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act establishes a federal policy of respect for, and protection of, Native American religious practices. It also has provisions for allowing limited access to Native American religious sites. The Act provides for the repatriation of certain items from the federal government and certain museums to the

native groups to which they once belonged. The Act defines "cultural items," "sacred objects," and "objects of cultural patrimony" and establishes a means for determining ownership of these items. However, the provisions for repatriation only apply to items found on federal lands.

Executive Order 13007 and Executive Order 13084

Executive Order 13007 requires federal agencies with land management responsibilities to allow access to and use of Indian sacred sites on public lands, and to avoid adversely affecting these sites. Executive Order 13084 reaffirms the government-to-government relationship between the federal government and recognized Indian tribes, and requires federal agencies to establish procedures for consultation with tribes. These executive orders only apply to projects that include federal undertakings.

4.12.5.2 State

CEQA and the California Register of Historical Resources

Historical resources are recognized as part of the environment under the California Environmental Quality Act (CEQA). The California Register of Historical Resources (California Register) is the authoritative guide for the State's historical resources, and properties included in the California Register are considered significant for the purposes of CEQA. The California Register includes resources listed, or formally determined eligible for listing, on the National Register of Historic Places, and some California State Landmarks and Points of Historical Interest. Properties of local significance designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the California Register and are presumed to be significant resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC § 5024.1, 14 CCR § 4850).

An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social,

political, military, or cultural annals of California (PRC § 5020.1(j)), or if it meets the criteria for listing on the California Register (14 CCR § 4850).

The *CEQA Guidelines* direct lead agencies to evaluate an archaeological site to determine if it meets the criteria for listing in the California Register. If it does, potential adverse impacts must be considered. If an archaeological site is not a historical resource, but meets the definition of a "unique archaeological resource" as defined in PRC §21583.2, then it should be treated in accordance with the provisions of that section.

Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired (PRC § 5020.1(q)). While demolition and destruction would constitute significant impacts, it is sometimes more difficult to assess when change, alteration, or relocation results in a substantial adverse change. The *CEQA Guidelines* provide that a project that alters those physical characteristics of a historical resources that convey its significance (i.e., its character-defining features), can be considered to materially impair the resource's significance.

California Native American Graves Protection and Repatriation Act (2001)

The California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010-8030) contains broad provisions for the protection of Native American cultural resources. The California Native American Graves Protection and Repatriation Act establishes policy to ensure that California Native American human remains and cultural items are treated with respect and dignity. The Act also provides the mechanism for disclosure and return of these items held by publicly funded agencies and museums in California. Additionally, the Act outlines the mechanism by which California Native American tribes not recognized by the federal government may file claims for human remains and cultural items held in agencies or museums.

California Public Resources Code

The California Public Resources Code contains several sections applicable to the preservation of cultural resources and human remains. These sections detail procedures to be followed whenever Native American remains are found, and delineate the

unauthorized disturbance or removal of archaeological, historical, paleontological resources, or human remains as an act punishable by law (Sections 5020, 5097.5, 5097.9-5097.996, 7050.5, 7051). As matter of law, the Project would comply with applicable provisions of the California Public Resources Code addressing preservation and protection of cultural resources and human remains.

California Code of Regulations

Under Title 14, Division 3, Section 4308, no person shall remove, injure, disfigure, deface, or destroy any object of archeological or historical interest or value.

Assembly Bill 52 (AB 52) Tribal Cultural Resources

Enacted as of July 1, 2015, AB 52 established a new category of resources under CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigations. The Bill was built on the concept that California Native American tribes have the expertise "with regard to tribal history and practices" to identify significant cultural resources. To this end, AB 52 requires early consultation in the CEQA process to ensure that local and Tribal governments, public agencies, and project proponents have information available, early in the CEQA environmental review process, for the purpose of identifying and addressing potential adverse impacts to tribal cultural resources.

AB 52 requires that the lead agency contact (in writing) all culturally affiliated tribes that could be affected by a project, within 14 days of deeming a development application complete. The notice commences a 30-day period for the tribe to request consultation. Upon receipt of a request consultation, the lead agency has an additional 30 days to begin the consultation process. AB 52 states that the consultation concludes when either "1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal resource, or 2) a party, acting on good faith and after a reasonable effort, concludes that mutual agreement cannot be reached." AB 52 notes that the consultation can be ongoing throughout the CEQA process.

4.12.6 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, Project-related impacts to cultural/tribal resources would be considered potentially significant if they cause or result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;

- Disturb any human remains, including those interred outside of dedicated cemeteries; or

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

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

    - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the

lead agency shall consider the significance of the resource to a California Native American tribe.

4.12.7 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.12.7.1 Introduction

The following analysis is focused on areas where it has been determined that the Project may result in potentially significant impacts, based on the analysis included within the Initial Study. In this regard, as substantiated in the Initial Study, the Project's potential to disturb any human remains, including those interred outside of dedicated cemeteries was previously determined to be less-than-significant. Please refer to EIR Appendix A, Initial Study Checklist Item V., *Cultural Resources*. All other potential cultural resources impacts of the Project are discussed below.

4.12.7.2 Impact Statements

Potential Impact: *Cause a substantial adverse change in the significance of an archaeological or historic resource as defined in §15064.5; directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

Impact Analysis: The Project site is located within a well-studied region, with 47 cultural resource studies having been conducted within a one-mile radius. Additionally, two previous studies have included all or a portion of the Project site. No cultural resources were identified on the Project site as part of these previous surveys.

Notwithstanding previous surveys, a site-specific Phase I Cultural Resources Assessment has been conducted. The following paragraphs discuss the research and field reconnaissance that has been conducted to assess the Project's potential impacts to historical, archaeological, and/or paleontological resources.

Research

A records search was conducted at the Eastern Information Center located at the University of California, Riverside. The research included a review of all site maps, site records, survey reports, and mitigation reports relevant to the Project area. The National Register of Historic Places, the California Office of Historic Preservation Archaeological Determinations of Eligibility, and the California Office of Historic Preservation Historic Property Directory were also reviewed. A request for a Sacred Lands File search was submitted to the Native American Heritage Commission and Project scoping letters were sent to eight tribal representatives listed as being interested in development of the Wildomar area.

Following the records and Sacred Lands File searches, a literature search of available published references to the Project area was undertaken. Reference material included all available photographs, maps, books, journals, historical newspapers, registers, and directories at the Riverside Public Library Local History Collection and the University of California, Riverside libraries. Cartographic research was conducted at the Science Library Map Collection of the University of California, Riverside. Archival research relating to the original ownership of the subject property was conducted using the General Land Office records currently maintained by the California Office of the Bureau of Land Management.

Field Reconnaissance

A field survey of the subject property was conducted on November 16, 2015. All of the property was accessible for survey. Special attention was given to bedrock outcrops, especially those located in the vicinity of the watercourse, for evidence of milling features, rock art, and shelter opportunities. Ground surface visibility ranged from less than 25 percent in sections of the watercourse obscured by a dense understory, to 100 percent on trails, areas around the "jumps," and open areas in both the southern and northern portions of the property, to 50 percent on those areas of the hills with the densest vegetation.

Potential Impacts

The Sacred Lands File search conducted by the Native American Heritage Commission had negative results, which is presumed to mean that Native American cultural resources were not identified in the Project Area of Potential Effect (APE). Additionally, potentially affected Native American Tribes (Tribes) have been notified of the Project through the EIR Notice of Preparation (NOP); and have been consulted with pursuant to AB 52 requirements. NOP documentation is provided at EIR Appendix A; AB 52 consultation documentation is attached to this Section.

The literature search described above offered no information specific to the Project site. According to General Land Office records maintained by the Bureau of Land Management, the first application for non-Native ownership of the Project site was filed by an agent of the Southern Pacific Railroad on July 13, 1885. Authorization for this claim was given by the July 27, 1866 act of Congress "to aid in the construction of a Railroad and Telegraph Line from the States of Missouri and Arkansas to the Pacific Coast," commonly referred to as the Atlantic and Pacific Railroad Grant Act of 1866.

During that time, if the railroad determined that they did not need a particular property, they commonly sold or leased it to private individuals. This was the case with the Project site. Cartographic research shows no structures or improvements within the Project site between 1854 (date of first GLO survey) and 1979 (date of aerial photographs taken for the 1982 photorevised USGS Lake Elsinore and Wildomar quadrangles), indicating that the property was vacant during this period.

No cultural resources of either prehistoric (Native American) or historical origin were observed within the boundaries of the Project site during the current field survey. During the current archaeological evaluation, no artifacts or remains were identified or recovered that could be reasonably associated prehistoric or historical practices.

Potential Impact: *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural*

landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

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

Impact Analysis: Tribal resources consultation (AB 52 consultation) requests have been received from the Soboba Band of Luiseño Indians, and from the Pechanga Band of Luiseño Indians.

The City has complied with notification requirements and has initiated consultation as required under AB 52. AB 52 consultation documentation is attached at the conclusion of this Section.

Based on the information presented in the Project Cultural Resources Investigation, the Project would not affect known or probable resources that are listed or eligible for listing in the California Register of Historical Resources; or resources listed in a local register of historical resources as defined in Public Resources Code section 5020.1(k). The Project Cultural Resources Investigation also substantiates that the Project would not adversely affect known or probable resources 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. Mitigation is incorporated in the EIR to ensure protection and preservation of as-yet unknown cultural resources/tribal cultural resources that may be present within the Project site.

To ensure protection of as yet unknown cultural resources that may be encountered in developing the Project; as well as protection of tribal cultural resources that may be determined significant through consultation(s) with potentially affected Native American Tribe(s) the following Mitigation Measures are incorporated.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.12.1 *To address the possibility that historical, archaeological, and/or tribal cultural resources (collectively referred to as "cultural resources" in these mitigation measures) may be encountered during grading or construction, a qualified professional archaeologist shall monitor all construction activities that could potentially impact cultural resources (e.g., grading, excavation, and/or trenching). Tribe(s) may assign individuals to monitor all grading, excavation and groundbreaking activities as well, and the Tribal monitor(s) shall be allowed on site during any construction activities that could potentially impact cultural resources. However, monitoring may be discontinued as soon as the qualified professional and the appropriate Tribe(s) are satisfied that construction will not disturb cultural resources.*

4.12.2 *Prior to the issuance of any grading permit, the project archaeologist shall file a pre-grading report with the City to document the proposed methodology for grading activity observation which will be determined in consultation with the Tribe(s) that intend to assign Tribal monitor(s) pursuant to Mitigation Measure 4.12.1. The archaeologist and the Tribal monitor(s) will have the authority to temporarily halt and redirect grading activities in order to evaluate the significance of any cultural resources discovered on the project site.*

4.12.3 *Prior to the issuance of any grading permit, the project applicant shall contact the Tribe(s) with notification of the proposed grading and shall enter into a Tribal Cultural Resources Treatment and Monitoring Agreement with each Tribe that*

determines its tribal cultural resources may be present on the site. The agreements shall include, but not be limited to, outlining provisions and requirements for addressing the handling of tribal cultural resources; project grading and development scheduling; terms of compensation for the Tribal monitors; treatment and final disposition of any tribal cultural resources, including but not limited to sacred sites, burial goods and human remains, discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. The terms of the agreements shall not conflict with any of these mitigation measures. A copy of the signed agreements shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

4.12.4 *If during grading or construction activities, cultural resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by the archaeologist and the Tribal monitor(s). Any cultural resources that are discovered shall be evaluated and a final report prepared by the archaeologist. The report shall include: a list of the resources discovered; documentation of each site/locality; interpretation of the resources identified; a determination of whether the resources are historical resources, unique or non-unique archeological resources and/or tribal cultural resources; and the method of preservation and/or recovery for the identified resources. The archaeologist shall take into account the significance of a resource to the appropriate Tribe in making the determination that a resource is or is not a tribal cultural resource. If the archaeologist determines the cultural resources to be either historic resources or unique archaeological resources, but not tribal cultural resources, avoidance and/or mitigation will be required pursuant to and consistent with CEQA Guidelines Section 15064.5(c) and Public Resources Code Section 21083.2. If the qualified archeologist determines the cultural resources to be tribal cultural resources, mitigation shall be consistent with the Tribal Cultural Resources Treatment and Monitoring Agreement required under Mitigation Measure 4.12.3 and Public Resources Code Section 21084.3. For all other cultural resources discovered on the project site, the project archaeologist shall assess the significance of such resources*

based on the provisions of CEQA with respect to archaeological resources and all significant cultural resources shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to a curation facility, that meets the standards set forth in 36 CFR Part 79 for federal repositories.

If the project applicant, project archaeologist, and Tribe cannot agree on the significance of, avoidance of, or mitigation for such resources, then the project applicant and the Tribe shall agree on an independent qualified archeologist who shall make the determination based on the information submitted by the Tribe, the religious beliefs, customs, and practices of the Tribe, and the provisions of the California Environmental Quality Act regarding tribal cultural resources. The decision of the independent qualified archeologist may be challenged by the City, project applicant or the Tribe through any appropriate legal means including, but not limited to, a temporary restraining order or preliminary injunction.

4.12.5 *Construction personnel involved in excavation and grading activities shall be informed of the possibility of discovering fossils at any location and the protocol to be followed if fossils are found. A professional meeting the Society of Vertebrate Paleontology standards shall provide the preconstruction training. The City shall ensure the grading plan notes include specific reference to the potential discovery of fossils. If potentially unique paleontological resources (fossils) are inadvertently discovered during project construction, work shall be halted immediately within 50 feet of the discovery, the City shall be notified, and a professional paleontologist shall be retained to determine the significance of the discovery. The paleontologist shall establish procedures for paleontological resource surveillance throughout project construction and shall establish, in cooperation with the project applicant, procedures for temporarily halting or redirecting work to permit sampling, identification, and evaluation of fossils. Excavated finds shall be offered to a State-designated repository such as the Museum of Paleontology at the University of California, Berkeley, or the California Academy of Sciences.*

4.12.6 If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the county coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within twenty-four (24) hours. Subsequently, the Native American Heritage Commission shall identify the most likely descendant and notify them of discovery. The most likely descendant shall then make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98 and the Agreement required under Mitigation Measure 4.12.2.

Compliance with Mitigation Measures 4.12.1 through 4.12.6, complemented by ongoing consultation pursuant to AB 52, will ensure that development pursuant to the Bundy Canyon Resort Apartment Project will not result in any significant impacts to cultural resources and/or tribal cultural resources.

Level of Significance: Less-Than-Significant.

AB 52 Consultation Documentation

Bridgette Moore, Mayor
Timothy Walker, Mayor Pro Tem
Bob Cashman, Council Member
Marsha Swanson, Council Member
Ben J. Benoit Council Member

23873 Clinton Keith Rd, Ste. 201
Wildomar, CA 92595
951/677-7751 Phone
951/698-1463 Fax

January 12, 2016

Ms. Patricia Garcia
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA 92264

Subject: Native American Consultation (AB 52 Consultation) for the City of Wildomar – Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Ms. Garcia,

The City of Wildomar has received a new development application on January 11, 2016 for the above-referenced project which will include an EIR or Mitigated Negative Declaration (MND). In accordance with AB 52, this letter serves as official notification to your Tribe for early consultation in accordance with State law.

Project Description - The applicant is requesting to develop 140-unit luxury apartment project on 28.8 acres located on the south side of Bundy Canyon Road about 800 feet east of Oak Canyon Drive. The APN of for the project site is 367-250-008. The project includes the following development applications:

- **Change of Zone (CZ) No. 16-0006:** The proposed development project requires approval of a Change of Zone to change the current zoning designation of R-R (Rural Residential) to R-3 (General Residential) for the entire 28.8 acre project site. As the R-3 zone in "Conditionally Consistent" with the existing Medium Density Residential (MDR) land use designation, no General Plan Amendment is needed for the project.

- **Plot Plan (PP) No. 16-0006:** The proposed development project requires approval of a Plot Plan to develop the 28.8 acre site with a 140-unit luxury apartments site and related site development improvements (i.e., parking, landscaping, etc.).

The City of Wildomar values your feedback as part of our development review process. Thus, in accordance with Pub. Res. Code 21080.3, we would request that you notify the City within 30 days of receipt of this letter if you would like to meet and discuss the project. To help facilitate review of the proposed project, we have included a copy of the application(s) forms, development plans package and a CD (pdf's of the development plans.

The City looks forward to working with you and your team during this process. You may contact me by phone at (951) 677-7751, extension 213, or by email at mbassi@cityofwildomar.org to arrange a date and time to meet.

Sincerely,

Matthew C. Bassi
Planning Director

Attachments:
Development Plans / Application Forms on CD

Bridgette Moore, Mayor
Timothy Walker, Mayor Pro Tem
Bob Cashman, Council Member
Marsha Swanson, Council Member
Ben J. Benoit Council Member

23873 Clinton Keith Rd, Ste. 201
Wildomar, CA 92595
951/677-7751 Phone
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January 12, 2016

Mr. Raymond Huaute
Morongo Band of Mission Indians
12700 Pumarra Road
Banning, CA 92220

Subject: Native American Consultation (AB 52 Consultation) for the City of Wildomar – Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Mr. Huaute,

The City of Wildomar has received a new development application on January 11, 2016 for the above-referenced project which will include an EIR or Mitigated Negative Declaration (MND). In accordance with AB 52, this letter serves as official notification to your Tribe for early consultation in accordance with State law.

Project Description - The applicant is requesting to develop 140-unit luxury apartment project on 28.8 acres located on the south side of Bundy Canyon Road about 800 feet east of Oak Canyon Drive. The APN of for the project site is 367-250-008. The project includes the following development applications:

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The City looks forward to working with you and your team during this process. You may contact me by phone at (951) 677-7751, extension 213, or by email at mbassi@cityofwildomar.org to arrange a date and time to meet.

Sincerely,

Matthew C. Bassi
Planning Director

Attachments:
Development Plans / Application Forms on CD

Bridgette Moore, Mayor
Timothy Walker, Mayor Pro Tem
Bob Cashman, Council Member
Marsha Swanson, Council Member
Ben J. Benoit Council Member

23873 Clinton Keith Rd, Ste. 201
Wildomar, CA 92595
951/677-7751 Phone
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January 12, 2016

Ms. Anna Hoover
Pechanga Band of Mission Indians
PO Box 2183
Temecula, CA 92593

Subject: Native American Consultation (AB 52 Consultation) for the City of Wildomar – Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Ms. Hoover,

The City of Wildomar has received a new development application on January 11, 2016 for the above-referenced project which will include an EIR or Mitigated Negative Declaration (MND). In accordance with AB 52, this letter serves as official notification to your Tribe for early consultation in accordance with State law.

Project Description - The applicant is requesting to develop 140-unit luxury apartment project on 28.8 acres located on the south side of Bundy Canyon Road about 800 feet east of Oak Canyon Drive. The APN of for the project site is 367-250-008. The project includes the following development applications:

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- **Plot Plan (PP) No. 16-0006:** The proposed development project requires approval of a Plot Plan to develop the 28.8 acre site with a 140-unit luxury apartments site and related site development improvements (i.e., parking, landscaping, etc.).

The City of Wildomar values your feedback as part of our development review process. Thus, in accordance with Pub. Res. Code 21080.3, we would request that you notify the City within 30 days of receipt of this letter if you would like to meet and discuss the project. To help facilitate review of the proposed project, we have included a copy of the application(s) forms, development plans package and a CD (pdf's of the development plans.

The City looks forward to working with you and your team during this process. You may contact me by phone at (951) 677-7751, extension 213, or by email at mbassi@cityofwildomar.org to arrange a date and time to meet.

Sincerely,

Matthew C. Bassi
Planning Director

Attachments:
Development Plans / Application Forms on CD

Bridgette Moore, Mayor
Timothy Walker, Mayor Pro Tem
Bob Cashman, Council Member
Marsha Swanson, Council Member
Ben J. Benoit Council Member

23873 Clinton Keith Rd, Ste. 201
Wildomar, CA 92595
951/677-7751 Phone
951/698-1463 Fax

January 12, 2016

Mr. Jim McPherson
Rincon Band of Luiseno Indians
1 West Tribal Road
Valley Center, CA 92082

Subject: Native American Consultation (AB 52 Consultation) for the City of Wildomar – Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Mr. McPherson,

The City of Wildomar has received a new development application on January 11, 2016 for the above-referenced project which will include an EIR or Mitigated Negative Declaration (MND). In accordance with AB 52, this letter serves as official notification to your Tribe for early consultation in accordance with State law.

Project Description - The applicant is requesting to develop 140-unit luxury apartment project on 28.8 acres located on the south side of Bundy Canyon Road about 800 feet east of Oak Canyon Drive. The APN of for the project site is 367-250-008. The project includes the following development applications:

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The City of Wildomar values your feedback as part of our development review process. Thus, in accordance with Pub. Res. Code 21080.3, we would request that you notify the City within 30 days of receipt of this letter if you would like to meet and discuss the project. To help facilitate review of the proposed project, we have included a copy of the application(s) forms, development plans package and a CD (pdf's of the development plans.

The City looks forward to working with you and your team during this process. You may contact me by phone at (951) 677-7751, extension 213, or by email at mbassi@cityofwildomar.org to arrange a date and time to meet.

Sincerely,

Matthew C. Bassi
Planning Director

Attachments:
Development Plans / Application Forms on CD

Bridgette Moore, Mayor
Timothy Walker, Mayor Pro Tem
Bob Cashman, Council Member
Marsha Swanson, Council Member
Ben J. Benoit Council Member

23873 Clinton Keith Rd, Ste. 201
Wildomar, CA 92595
951/677-7751 Phone
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January 12, 2016

Mr. Joseph Ontiveros
Soboba Band of Mission Indians
PO Box 487
San Jacinto, CA 92581

Subject: Native American Consultation (AB 52 Consultation) for the City of Wildomar – Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Mr. Ontiveros,

The City of Wildomar has received a new development application on January 11, 2016 for the above-referenced project which will include an EIR or Mitigated Negative Declaration (MND). In accordance with AB 52, this letter serves as official notification to your Tribe for early consultation in accordance with State law.

Project Description - The applicant is requesting to develop 140-unit luxury apartment project on 28.8 acres located on the south side of Bundy Canyon Road about 800 feet east of Oak Canyon Drive. The APN of for the project site is 367-250-008. The project includes the following development applications:

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The City of Wildomar values your feedback as part of our development review process. Thus, in accordance with Pub. Res. Code 21080.3, we would request that you notify the City within 30 days of receipt of this letter if you would like to meet and discuss the project. To help facilitate review of the proposed project, we have included a copy of the application(s) forms, development plans package and a CD (pdf's of the development plans.

The City looks forward to working with you and your team during this process. You may contact me by phone at (951) 677-7751, extension 213, or by email at mbassi@cityofwildomar.org to arrange a date and time to meet.

Sincerely,

Matthew C. Bassi
Planning Director

Attachments:
Development Plans / Application Forms on CD

PECHANGA CULTURAL RESOURCES
Temecula Band of Luiseño Mission Indians

Post Office. Box 2183 • Temecula, CA 92593
Telephone (951) 308-9295 • Fax (951) 506-9491

Chairperson:
Mary Bear Magee

Vice Chairperson:
Darlene Miranda

Committee Members:
Evie Gerber
Bridgett Barcello Maxwell
Richard B. Scearce, III
Neal Ibanez
Michael Vasquez

Director:
Gary DuBois

Coordinator:
Paul Macarro

Planning Specialist:
Tuba Ebru Ozdil

Cultural Analyst:
Anna Hoover

January 29, 2016

VIA E-MAIL and USPS

Matthew C. Bassi
Planning Director
City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

Re: Pechanga Tribe Request for Consultation Pursuant to AB 52 for the Bundy Canyon Apartment Project (PA No. 16-0006)

Dear Mr. Bassi:

This letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter, "the Tribe" and/or "Payómkawichum"), a federally recognized Indian tribe and sovereign government in response to the AB 52 notice provided by the City of Wildomar dated January 12, 2016 and received in our office January 21, 2016.

This letter serves as the Tribe's formal request to begin consultation under AB 52 for this Project. Per AB 52, we intend to assist the City in determining the type of environmental document that should be prepared for this Project (i.e. EIR, MND, ND); with identifying potential tribal cultural resources (TCRs); determining whether potential substantial adverse effects will occur to them; and to develop appropriate preservation, avoidance and/or mitigation measures, as appropriate. Preferred TCR mitigation is always avoidance and the Tribe requests that all efforts to preserve sensitive TCRs be made as early in the development process as possible.

Please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archaeological reports, development plans, conceptual grading plans (if available), and all other applicable documents pertaining to this Project. The Tribe further requests to be directly notified of all public hearings and scheduled approvals concerning this Project, and that these comments be incorporated into the record of approval for this Project.

The Pechanga Tribe asserts that the Project area is part of Payómkawichum (Luiseño), and therefore the Tribe's, aboriginal territory as evidenced by the existence of Payómkawichum cultural resources, named places, *tóota yixélval* (rock art, pictographs, petroglyphs), and an

extensive Payómkawichum artifact record in the vicinity of the Project. This culturally sensitive area is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's cultural ties to this area as well as our extensive history with the City of Wildomar and other projects within the area. During our consultation we will provide more specific, confidential information on potential TCRs that may be impacted by the proposed Project.

As you know, the AB 52 consultation process is ongoing and continues until appropriate mitigation has been agreed upon for the TCRs that may be impacted by the Project. As such, under both AB 52 and CEQA, we look forward to working closely with the City of Wildomar on ensuring that a full, comprehensive environmental review of the Project's impacts is completed, including addressing the culturally appropriate and respectful treatment of human remains and inadvertent discoveries.

In addition to those rights granted to the Tribe under AB 52, the Tribe reserves the right to fully participate in the environmental review process, as well as to provide further comment on the Project's impacts to cultural resources and potential mitigation for such impacts.

The Pechanga Tribe looks forward to working together with the City of Wildomar in protecting the invaluable Pechanga cultural resources found in the Project area. The formal contact person for this Project will be Ebru Ozdil. Please contact her at 951-770-8113 or at eozdil@pechanga-nsn.gov within 30 days of receiving these comments so that we can begin the consultation process. Thank you.

Sincerely,

PP Ebru Ozdil

Ebru Ozdil
Planning Specialist

Cc Pechanga Office of the General Counsel

February 10, 2016

Attn: Matthew C. Bassi, Planning Director
City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

RE: AB 52 Consultation; Bundy Canyon Apartment Project (PA No. 16-0006)
APN 367-250-008

The Soboba Band of Luiseño Indians has received your notification pursuant under Assembly Bill 52.

Soboba Band of Luiseño Indians is requesting to initiate formal consultation with the City of Wildomar. A meeting can be scheduled by contacting me via email or phone. All contact information has been included in this letter.

I look forward to hearing from and meeting with you soon.

Sincerely,

Joseph Ontiveros, Director of Cultural Resources
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581
Phone (951) 654-5544 ext. 4137
Cell (951) 663-5279
jontiveros@soboba-nsn.gov

Confidentiality: The entirety of the contents of this letter shall remain confidential between Soboba and the City of Wildomar. No part of the contents of this letter may be shared, copied, or utilized in any way with any other individual, entity, municipality, or tribe, whatsoever, without the expressed written permission of the Soboba Band of Luiseño Indians.

5.0 OTHER CEQA CONSIDERATIONS

5.0 OTHER CEQA CONSIDERATIONS

This Section of the EIR addresses other environmental considerations and topics mandated under the California Environmental Quality Act (CEQA). These topics include Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant Environmental Effects of the Project, Significant and Irreversible Environmental Changes, and Energy Conservation.

5.1 CUMULATIVE IMPACT ANALYSIS

5.1.1 Overview

The *CEQA Guidelines* require that an EIR identify any significant cumulative impacts associated with a project [*CEQA Guidelines*, Section 15130 (a)]. When potential cumulative impacts are not deemed significant, the document should explain the basis for that conclusion. Cumulative impacts are "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." [*CEQA Guidelines*, Section 15355]. Thus, a legally adequate cumulative impact analysis is an analysis of a particular project viewed over time and with other related past, present, and foreseeable probable future projects, whose impacts might compound or interrelate with those of the Project considered here.

CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness [*CEQA Guidelines*, Section 15130 (b)]. Only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation. CEQA does not require as much detail in the analysis of cumulative environmental impacts as must be provided for the Project alone.

The *CEQA Guidelines* identify two basic methods for satisfying the cumulative impacts analysis requirement: the list-of-projects methodology, and the summary-of-projections methodology. Because each environmental resource is affected by its surroundings in different manners, either of the two methodologies, or a combination of both, may be applied to the analysis of cumulative impacts to each resource. For example, because the approval process and construction phase of development typically takes at least one to two years, the list-of-projects method is likely to provide a more accurate projection of growth in the near term. This method may overstate potential cumulative impacts because the considered list-of-projects may include proposals that would never be developed. Similarly, because development proposals are rarely publicly known until within five years of the expected development, the summary-of-projections method provides a more accurate projection of growth over the long term. This method may not accurately predict growth in any given year, but aggregates various growth trends over the long term.

For each topical discussion presented herein, the cumulative geographic context is identified, which in turn relates to the amount and type of growth that is anticipated to occur within the geographic area under consideration. Where appropriate to the analysis in question, cumulative impacts are assessed with reference to a list of "related projects," as described in *CEQA Guidelines* §15130(b). In this manner, the EIR appropriately characterizes and evaluates potential cumulative impacts.

Consistent with direction provided in the *CEQA Guidelines,* related projects considered in these cumulative analyses are "only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation." In this regard, it is recognized that within the context of the cumulative impacts analysis, varied criteria are employed in determining the scope and type of "cumulative projects" considered. For example, the analysis of cumulative traffic impacts evaluates the Project's traffic impacts in the context of other past, present or reasonably foreseeable future "related" development proposals that would discernibly affect traffic conditions within the Traffic Impact Analysis Study Area. As another example, cumulative air quality impacts are evaluated in the context of the Project's contribution to other air emissions impacts affecting the encompassing Air Basin.

The manner in which each resource may be affected also dictates the geographic scope of the cumulative impacts analysis. For example, cumulative traffic impacts would typically be localized to the vicinity of a given project site because after a relatively short distance, traffic patterns tend to normalize; whereas cumulative air quality impacts are more appropriately analyzed with a Basin-wide approach because the Basin's meteorological and geographic conditions generally define the extent of cumulative air quality considerations. Similar considerations are discussed in evaluating potential cumulative impacts for each of the EIR's environmental topics (Land Use and Planning, Transportation/Traffic, Air Quality, Global Climate Change and Greenhouse Gas Emissions, Noise, Hydrology and Water Quality, Geology and Soils, Public Services and Utilities, Population and Housing, Aesthetics, Biological Resources, and Cultural Resources).

Unless otherwise noted herein, the cumulative impact analysis ultimately evaluates effects of the Project within the context of anticipated buildout of the City as envisioned under the General Plan and related regional plans. Specific cumulative or "related" projects have also been identified where this information may be different or more detailed than that provided within the General Plan or applicable regional plans, or where such specific information otherwise benefits the cumulative impact analyses.

5.1.2 Cumulative Impact Topical Discussions

Section 15139(a) of the *CEQA Guidelines (Guidelines)* notes that:

> An EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined at *Guidelines* Section 15065(c). Where a lead agency is examining a project with an incremental effect that is not 'cumulatively considerable,' a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

Cumulative impacts for each of the EIR's environmental topics are listed below:

- Land Use and Planning;
- Transportation/Traffic;
- Air Quality;
- Global Climate Change and Greenhouse Gas Emissions;
- Noise;
- Hydrology and Water Quality;
- Geology and Soils;
- Public Services and Utilities;
- Population and Housing;
- Aesthetics;
- Biological Resources; and
- Cultural Resources/Tribal Cultural Resources.

5.2 DISCUSSION OF CUMULATIVE IMPACTS

5.2.1 Cumulative Impacts Related to Land Use and Planning

The cumulative impact area when considering potential cumulative land use and planning issues includes areas that are currently, or are anticipated to be, subject to provisions of the City General Plan and Zoning Ordinance.

General Plan and Zoning Considerations

Residential uses and their configurations proposed by the Project are consistent with, and are allowed under, the site's current Medium Density Residential (MDR) General Plan Land Use designation. As discussed at EIR Section 4.1, *Land Use and Planning*, the Project is consistent with, and appropriately responds, to applicable City General Plan Land Use Policies. Project conformance with applicable R-3 Zone District Regulations and Development Standards is also presented at EIR Section 4.1, *Land Use and Planning*.

Summary

The Project uses and operations would conform to all governing land use plans, regulations and development standards. The related discussions presented in EIR Section 4.1, *Land Use and Planning*, substantiate that the Project would not otherwise result in any potentially significant land use or planning impacts.

Based on the preceding discussions, the Project's contributions to potential impacts related to Land Use and Planning are not cumulatively considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.2 Cumulative Impacts Related to Transportation/Traffic

The cumulative impact area for traffic and circulation impacts is defined by the Traffic Impact Study Area (Study Area), as described within the Project Traffic Impact Analysis (Project TIA–*Wildomar Residential Traffic Impact Analysis, City of Wildomar, CA* [Urban Crossroads, Inc.] October 11, 2016, EIR Appendix B). The Study Area includes potentially affected intersections within the City of Wildomar and all potentially affected California Department of Transportation (Caltrans) and Congestion Management Program (CMP) facilities.

As summarized in the following discussions, cumulative impacts affecting the Study Area traffic facilities would be considered significant and unavoidable. These findings are due largely to the necessary transition of the existing rural roadway system to one capable of supporting an urbanizing environment, and resulting near-term and long-term circulation system deficiencies occurring as the area circulation system is improved commensurate with the development it supports. In brief, development of the City and surrounding areas would generate traffic, the cumulative effects of which would result in deficient operating conditions within the existing roadway system. The Project would contribute incrementally to these deficiencies.

As means of mitigating or avoiding these cumulative deficiencies, the Project Applicant would pay requisite fees (DIF, TUMF, and fair-share) to be employed for the construction of area traffic improvements. Improvements required to mitigate potentially significant

cumulative impacts would be implemented consistent with demonstrated demands and pursuant to priorities established through the jurisdictional capital improvements programs. The City of Wildomar is the authoritative body in determining when and how local municipal improvements are programmed and implemented to ensure near-term and long-term adequacy of the City roadway system. Similarly, other jurisdictional authorities, e.g., Caltrans, WRCOG, would determine appropriate programming and implementation of required improvements.

Related Projects

The Project TIA comprehensively reflects anticipated cumulative traffic increases affecting the Study Area and addresses related potential cumulative traffic impacts. In this regard, the TIA first assumes a compounded annual traffic growth rate of 2 percent (4.04 percent aggregate growth in background traffic for the period 2015—2017). The 2 percent annual growth rate captures non-specific ambient traffic growth. Traffic generated by other known or probable related projects was then added to the TIA ambient traffic growth estimates. Related projects are identified at EIR Section 4.2, *Transportation/Traffic*.

Cumulative Impacts

Project traffic contributions to potentially cumulatively significant Study Area impacts are summarized below. Please refer also to related discussions presented at EIR Section 4.2, *Transportation/Traffic*.

Intersections

Existing Conditions (2015) Cumulative Traffic Impacts

Under Existing with Project conditions, Project traffic would contribute to potentially significant cumulative impacts at the Study Area Intersections listed below:

- Intersection No. 4 Sellers Rd. / Canyon Rd.
- Intersection No. 7 Walnut Creek Rd. / Bundy Canyon Rd.

Opening Year Conditions (2017) Cumulative Traffic Impacts

Under Opening Year with Project conditions, Project traffic would contribute to potentially significant cumulative impacts at the Study Area Intersections listed below:

- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 6 Canyon Ranch Rd. / Bundy Canyon Rd.
- Intersection No. 7 Walnut Creek Rd. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Horizon Year (2040) Cumulative Traffic Impacts

Under Horizon Year with Project conditions, Project traffic would contribute to potentially significant cumulative impacts at the following Study Area Intersections:

- Intersection No. 1 Orange St. / Bundy Canyon Rd.
- Intersection No. 3 I-15 NB Ramps / Bundy Canyon Rd.
- Intersection No. 4 Sellers Rd. / Bundy Canyon Rd.
- Intersection No. 5 Monte Vista Dr. / Bundy Canyon Rd.
- Intersection No. 8 Oak Canyon Dr. / Bundy Canyon Rd.
- Intersection No. 9 Road "A" / Bundy Canyon Rd.

Mitigation

Project mitigation responsibilities for incremental contributions to cumulative traffic impacts at Study Area intersections, are satisfied by payment of requisite fees toward the construction of the necessary improvements. The Project Applicant would pay all requisite fees.

Notwithstanding, payment of traffic impact fees does not ensure timely completion of those traffic improvements necessary to mitigate potentially significant cumulative traffic impacts affecting the study area. ***On this basis, pending completion of required improvements, the Project's contributions to Existing (2015), Opening Year (2017) and Horizon Year (2040) cumulative traffic impacts at intersections identified above are considered cumulatively significant and unavoidable.***

Freeway Ramp Progression/Queuing Analysis

Under all analytic scenarios (Existing, Opening Year, and Horizon Year), cumulatively significant ramp progression/queuing deficiencies are not projected to occur at freeway ramps within the Study Area.

On this basis, the Project's potential contribution to cumulative impacts in regard freeway ramp operations are not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Site Access

Site access driveways, traffic controls, and on-site circulation improvement concepts proposed by the Project act to minimize and avoid potentially significant access and on-site circulation impacts. Final site access and on-site circulation designs would incorporate any additional provisions or modifications suggested within the Project TIA, or as may otherwise be required by the City. City design review processes, and any resultant modifications incorporated in the Project Final Site Plan, would ensure that potential parking, site access, and internal circulation impacts are less-than-significant.

On this basis, the Project's potential contribution to cumulative impacts in regard to site access are not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Summary

Project mitigation responsibilities for incremental contributions to cumulative traffic impacts at Study Area intersections, are satisfied by payment of requisite fees toward the construction of the necessary improvements. The Project Applicant would pay all requisite fees.

Notwithstanding, payment of traffic impact fees does not ensure timely completion of those traffic improvements necessary to mitigate potentially significant cumulative traffic impacts affecting the Study Area. In these instances, while Project-specific traffic impacts would not be individually significant, they would be cumulatively considerable. On this basis,

pending completion of required improvements, the Project's contributions to Existing (2015), Opening Year (2017), and Horizon Year (2040) cumulative traffic impacts at intersections identified within this Section are therefore considered cumulatively significant and unavoidable.

5.2.3 Cumulative Impacts Related to Air Quality

The cumulative impact area for air quality considerations is generally defined by the encompassing Air Basin and boundaries of the jurisdictional air quality management agency. In this case, that is the South Coast Air Basin (Basin) and the South Coast Air Quality Management District (SCAQMD), respectively. Project air pollutant emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Due to the defining geographic and meteorological characteristics of the Basin, pollutant emissions that could cumulatively impact air quality would be, for practical purposes, restricted to the Basin. Accordingly, the geographic area encompassed by the Basin is the appropriate limit for this cumulative Air Quality analysis.

Construction-Source Air Quality Impacts

As discussed at EIR Section 4.3, *Air Quality*, mitigated Project construction-source air quality impacts would be less-than-significant, and by SCAQMD criteria, not cumulatively considerable. The potential for Project construction-source air pollutant emissions to result in or cause cumulatively significant air quality impacts is therefore considered less-than-significant.

Operational-Source Air Quality Impacts

Project operational-source emissions would not exceed applicable SCAQMD regional thresholds and by SCAQMD criteria, not cumulatively considerable. The potential for Project operational-source air pollutant emissions to result in or cause cumulatively significant air quality impacts is therefore considered less-than-significant.

Non-Attainment Impacts

The Project would not cause or result in significant air quality impacts and therefore would not contribute to non-attainment impacts. The potential for Project air pollutant emissions to result in or cause cumulatively significant non-attainment air quality impacts is therefore considered less-than-significant.

CO Hotspot Impacts

The Project would generate additional vehicular traffic, and therefore would generate mobile source air pollutant emissions that could cause or contribute to adverse CO concentrations (CO "hotspots"). Potential CO hotspot impacts were evaluated in the Project Air Quality Impact Analysis (EIR Appendix C), and were determined to be less-than-significant. Less-than-significant impacts at the Project level are, by SCAQMD criteria, not cumulatively considerable.

5.2.4 Cumulative Impacts Related to Global Climate Change Impacts and Greenhouse Gas Emissions

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative, and should be evaluated in the context of CEQA's requirements for cumulative impacts analysis (*CEQA Guidelines* Section 15130(f)). In this regard, the Project Greenhouse Gas (GHG) Analysis (EIR Appendix D) is by its nature a cumulative analysis.

As demonstrated in the Project GHG Analysis and the information presented at EIR Section 4.4, the Project would not cause or result in a substantial increase in GHG emissions and Project GHG emissions would not exceed a threshold of significance that the lead agency determines applies to the Project. Further, the Project GHG analysis demonstrates that the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. The potential for the Project to contribute considerably (either individually or cumulatively) to a global climate change impact through GHG emissions is therefore considered less-than-significant.

5.2.5 Cumulative Impacts Related to Noise and Vibration

The cumulative impact area for noise and vibration considerations is generally defined as surrounding properties that could receive Project-generated noise and vibration (either construction-source or operational-source), and would also include roadway corridors affected by Project-related traffic and associated vehicular noise. Potential noise and vibration impacts of the Project are discussed at EIR Section 4.5, *Noise*, and EIR Appendix E.

Construction-Source Noise

Even after compliance with regulations and application of mitigation measures, Project construction-source noise levels received at nearby properties would represent a substantial temporary periodic increase in ambient noise conditions compared to conditions without the Project. Project construction-source noise impacts affecting these properties are therefore recognized as significant and unavoidable. Cumulative noise impacts for the duration of Project construction activities are also recognized as significant and unavoidable. It is further recognized, however, that construction-source noise impacts would be temporary and transient, and would dissipate entirely at the conclusion of Project construction activities.

Operational/Area-Source Noise

The Project's operational/area-source noise levels are determined to be less-than-significant. There are no known off-site noise sources that would interact with noise generated by Project operations, thereby resulting in cumulative significant noise impacts. The potential for Project operational/area-source noise to result in or cause cumulatively significant noise impacts is therefore considered less-than-significant.

Vehicular-Source Noise

Cumulative effects of vehicular-source noise are demonstrated by comparing noise levels under Existing (2015) conditions, to noise levels with the Project under Horizon Year (2040) conditions. Cumulative vehicular-source noise impacts within the Project Noise Impact Analysis Study Area are summarized at Table 5.2-1.

As indicated at Table 5.2-1, the total cumulative noise increase along roadways within the Study Area over the considered 25-year cumulative timeframe would range from 5.3 dBA CNEL to 5.6 dBA CNEL. Along these roadway segments, vehicular-source noise increases from Existing (2015) conditions to Horizon Year (2040) conditions would be 3.0 dBA CNEL or greater and would be potentially cumulatively significant. In all instances, these potentially significant cumulative vehicular-source noise impacts would occur irrespective of the Project, and the Project's incremental contributions would be less than ≤ 0.1 dBA, and would therefore be inaudible. On this basis, the Project's vehicular-source noise impacts are not cumulatively considerable.

Table 5.2-1
Cumulative Vehicular-Source Noise

Roadway	Segment[1]	CNEL at Nearest Land Use (dBA)					Cumulative Increase in CNEL (dBA) Existing - 2040	
		Existing (2015)	2017		2040			
			Without Project	With Project	Without Project	With Project	Total Increase	Project Increment
Bundy Canyon Rd.	w/o Orange St.	65.2	68.1	68.1	70.7	70.8	5.6	0.0
Bundy Canyon Rd.	e/o Orange St.	67.7	67.7	67.7	73.1	73.1	5.4	0.0
Bundy Canyon Rd.	e/o I-15 SB Ramps	67.7	67.7	67.8	73.0	73.0	5.3	0.0
Bundy Canyon Rd.	w/o Sellers Rd.	67.3	67.3	67.4	72.7	72.7	5.4	0.0
Bundy Canyon Rd.	e/o Sellers Rd.	67.0	67.0	67.2	72.5	72.5	5.5	0.1
Bundy Canyon Rd.	w/o Canyon Ranch Rd.	67.3	67.3	67.5	72.8	72.8	5.5	0.1
Bundy Canyon Rd.	e/o Canyon Ranch Rd.	67.2	67.2	67.3	72.5	72.6	5.4	0.1
Bundy Canyon Rd.	w/o Oak Canyon Dr.	67.0	67.0	67.2	72.5	72.6	5.6	0.1
Bundy Canyon Rd.	e/o Oak Canyon Dr.	66.9	66.9	67.2	72.3	72.4	5.5	0.1
Bundy Canyon Rd.	w/o Road "A"	67.0	67.0	67.2	72.3	72.4	5.4	0.1
Bundy Canyon Rd.	e/o Road "A"	67.0	67.0	67.0	72.3	72.3	5.3	0.0

Source: *Wildomar Residential Project Noise Impact Analysis* (Urban Crossroads, Inc.) September 6, 2016.
Notes: [1] e/o = east of; w/o = west of; n/o = north of; s/o = south of.
Totals may not agree due to rounding.

Construction-source Vibration

Even after compliance with regulations and application of mitigation measures, peak Project construction-source vibration levels received at nearby properties would exceed

applicable City standards. Project construction-source vibration impacts affecting these properties are therefore recognized as significant and unavoidable. Cumulative vibration impacts for the duration of Project construction activities are also recognized as significant and unavoidable. It is further recognized, however, that construction-source vibration impacts would be temporary and transient, and would dissipate entirely at the conclusion of Project construction activities.

Operational/Area-source Vibration

The Project does not propose or require uses or activities that would be substantive sources of operational/area-source vibration, and Project operational/area-source vibration impacts are determined to be less-than-significant. There are no known potentially significant off-site vibration sources that would interact with, or compound noise generated by Project operations thereby resulting in cumulative significant noise impacts. The potential for Project operational/area-source vibration to result in or cause cumulatively significant vibration impacts is therefore considered less-than-significant.

Summary

Even after compliance with regulations and application of mitigation measures, Project construction-source noise levels received at adjacent properties would represent a substantial temporary increase in ambient noise conditions without the Project. Additionally, peak construction-source vibration impacts received at adjacent properties would exceed applicable City standards. Project construction-source noise impacts and construction-source vibration impacts are therefore recognized as individually and cumulatively significant and unavoidable for the duration of Project construction activities. The predominance of any potential construction-source noise exceedances and construction-source vibration impacts would be short-term, transient and intermittent, occurring during the initial site preparation/grading operations, and would dissipate entirely at the conclusion of construction activities.

The Project's potential contributions to cumulative operational-source noise impacts and operational-source vibration impacts is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.6 Cumulative Impacts Related to Hydrology/Water Quality

The cumulative impact area for hydrology/water quality impact considerations is defined as the area encompassed by the jurisdictional Regional Water Quality Control Board (RWQCB), in this case the San Diego Regional Water Quality Control Board (SDRWQCB). Local oversight is also provided by the City of Wildomar and Riverside County. Development of the Project site would incrementally increase impervious surfaces within the cumulative impact area, with related potential increases in the rate and quantity of local stormwater discharges. In response, the Project incorporates stormwater management components that collectively act to ensure that post-development stormwater discharges are conveyed to available receiving systems and would not exceed those systems' capacities.

Under post-development conditions, stormwater drainage patterns within the Project site would conform generally to pre-development conditions. As substantiated at EIR Section 4.6, and within the Project Drainage Study and Preliminary Water Quality Management Plan (EIR Appendix F), stormwater discharges from the developed Project site would not exceed receiving systems capacities; and stormwater discharges would comply with City and SDRWQCB water quality performance standards.

The Project stormwater management system would be developed and operated in compliance with City/SDRWQCB regulations and water quality standards. The City of Wildomar is required to comply with the Municipal Separate Storm Sewer System (MS4) Permit issued by the SDRWQCB. Design, configuration, and locations of proposed drainage system improvements would be reviewed and approved by the City/SDRWQCB prior to, or concurrent with, application for grading permits.

Summary

The Project incorporates all necessary stormwater management systems and facilities. No substantive off-site stormwater management system improvements or modifications are proposed or required. The Project would comply with established stormwater management and stormwater treatment policies and regulations. As complemented by implementation of Project-specific stormwater management components, the Project's potential

contribution to cumulative impacts in regard to hydrology/water quality is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.7 Cumulative Impacts Related to Geology and Soils

The Project site and all of Southern California lie within a seismically active area, generally susceptible to earthquake hazards. In this sense, Southern California is considered the cumulative impact area for geology and soils considerations. As substantiated at EIR Section 4.7, the Project's potential geology and soils impacts are determined to be less-than-significant as mitigated. No unique geologic features are present within the Project site or vicinity.

The Project would result in the construction of new residential land uses and supporting facilities. Infrastructure improvements and utility extensions implemented by the Project would include transportation system improvements, water lines, sewer lines, gas lines, electricity lines, and storm water management systems. Consistent with market demands, telephone and cable television services would also be extended into the subject site.

Based on the creation and occupation of additional uses and implementation of supporting infrastructure described above, the Project would incrementally increase concentrations of persons, structures, and infrastructure systems on a previously undeveloped site within an earthquake-prone region. Potential impacts of increased exposure to seismic effects as a result of new development were considered, and determined to be less-than-significant with implementation of Project mitigation measures; together with application of standard seismic design and engineering practices, requirements of the California Building Code (CBC) and State Seismic Mapping Act, and applicable City building standards. Potential impacts related to erosion, subsidence, shrinkage, expansion, and soil consolidation are mitigated through conformance with local, regional, state, and federal permitting and regulatory requirements. Locally and regionally, project-by-project compliance with seismic design and engineering standards, soil conservation and erosion protection is mandated through existing regulations and requirements as outlined above, thereby reducing potential cumulative geology and soils impacts within the region.

Summary

With the application of proposed mitigation, the Project's potential contribution to cumulative impacts in regard to geology and soils is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.8 Cumulative Impacts Related to Public Services and Utilities

The EIR at Section 4.8, *Public Services and Utilities*, substantiates that Project impacts related to public services or utilities would be less-than-significant. Potential cumulative impacts affecting public services and utilities are summarized below.

Police and Fire Protection Services

The cumulative impact areas for fire and police protection services are generally defined by respective fire protection and police protection service boundaries, though such agencies also provide extra-jurisdictional mutual support allowing for additional and supplemental services under emergency situations.

Cumulatively, the Project and other development in the City and surrounding communities would add to demands on fire protection, law enforcement, and emergency medical response services. Demands for these services are addressed through review and coordination of development projects with potentially affected service providers, and incorporation of appropriate design and construction elements that act to enhance safety and minimize potential hazards.

Based on the availability of existing facilities, services, and infrastructure, and incrementally nominal demands generated by the Project, the potential for the Project to result in the need or requirement for new physical fire or police protection facilities, the construction of which would result in potentially significant environmental impacts is considered less-than-significant.

The Project would pay required Police Facilities fees and Fire Protection Facilities and Equipment fees stipulated under the City of Wildomar Development Impact Fee (DIF) Program. Currently, Police Facilities DIF assessed of multi-family residential projects such

as the proposed Bundy Canyon Resort Apartment Project is $ 161.00 per dwelling unit.[1] The Project proposes 140 multi-family dwelling units. The Project Applicant would therefore pay an estimated $22,540 Police Facilities DIF. Currently, Fire Protection DIF assessed of multi-family residential projects such as the proposed Bundy Canyon Resort Apartment Project is $312.00 per dwelling unit. Based on 140 dwelling units, the Project Applicant would pay an estimated $43,680 Fire Protection DIF.

Project Police Facilities DIF and Fire Protection DIF, in combination with fees assessed of other new development proposals within the City, would be employed to finance police protection and fire protection facilities necessary to support cumulative police and fire protection service demands as the City develops pursuant to the General Plan. Based on the preceding, the Project's potential contribution to cumulative impacts in regard to police and fire protection services is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Public Schools Services

The cumulative impact area for public school impacts is generally defined by the Lake Elsinore Unified School District (LEUSD, District) boundaries. The LEUSD encompasses more than 144 square miles and serves TK-12 students from the cities of Lake Elsinore, Canyon Lake and Wildomar, and several unincorporated Riverside County communities, including Lakeland Village and Horsethief Canyon.[2]

Student populations generated by the Project would not warrant construction of new school facilities. Cumulative impacts to District school facilities are addressed through payment of school impact fees. The Project would pay requisite school impact mitigation fees pursuant to District requirements and the Project Conditions of Approval offsetting incremental and cumulative impacts to school facilities. Based on the preceding, the Project's potential contribution to cumulative impacts in regard to school services is not

[1] *City of Wildomar Impact Fee Study Update Report* (Colgan Consulting Corporation) April 23, 2015, p. ES-5, Table ES-3.

[2] Lake Elsinore Unified School District. *About Us*.Web. July 28, 2016. http://www.leusd.k12.ca.us/apps/pages/index.jsp?uREC_ID=324467&type=d&pREC_ID=732453

considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Stormwater Management

Cumulative impacts to stormwater management facilities are addressed at previous Section 5.2.6, *Cumulative Impacts Related to Hydrology/Water Quality*.

Water Service, Supplies and Treatment

Overview

The cumulative impact area for water supply, water service, and water treatment considerations is the Elsinore Valley Municipal Water District (EVMWD) Service Area (Service Area) and encompassing Metropolitan Water District Water of Southern California (MWD) jurisdiction. Water supply issues germane to the Project, including cumulative water supply impacts are addressed within:

- *Elsinore Valley Municipal Water District 2011 Urban Water Management Plan* (UWMP),[3] http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Elsinore%20Valley%20Municipal%20Water%20District/EVMWD%20UWMP%202010_Final.pdf.

Water Service

The Project would connect to existing water lines located in road rights-of-ways adjacent to the Project site. In this regard, a 20-inch EVMWD water line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD water line is located in Windwood Lane at the southwesterly limits of the Project site. The Project would extend and connect to available water lines. Extensions of and connections to EVMWD water lines would comply with EVMWD requirements. A Will Serve letter for water service from

[3] The EVMWD Board of Directors, at the Board's 06.23.2016 Regular Meeting, approved a draft 2015 UWMP. The draft 2015 UWMP has been forwarded to the California Department of Water Resources (DWR). DWR staff will review the UWMP to ensure it is complete and complies with requirements identified at Water Code, Sections §10608– 10656. DWR staff will then submit a report to the Legislature summarizing the UWMP status. As of this writing, DWR has not yet completed its review of the EVMWD 2015 UWMP.

EVMWD has been obtained indicating the District's ability and capacity to meet the Project's water demands. Please refer to EVMWD Preliminary Service Planning Letter #2749-0, December 21, 2015 - available through the Lead Agency.

The Project does not propose or require construction or alteration of water service systems that would cumulatively impact other facilities in the Service Area or delivery of water to the Service Area in total.

Water Supply Availability

Water Supplies

The Elsinore Valley Municipal Water District (District) is the principal water purveyor to the City and would be the water purveyor for the Project. The District must, by law, coordinate its water supply planning with multiple agencies as it relies on a combination of local and non-local water supply sources.

Since EVMWD's Service Area population is expected to increase in the next 25 years, additional water supply sources are necessary to meet future growth. Availability of future supplies would be enhanced by the construction of a pump station that would increase the Temescal Valley Pipeline (TVP) capacity, as well as implementation of the Back Basin Groundwater Storage Project as part of the Elsinore Basin Groundwater Management Plan (GWMP). EVMWD also plans to complete three near-term groundwater projects: Terra Cotta well; Cereal 1 and Corydon well blending pipeline; and Palomar well replacement. Anticipated additional supplies available from the above-noted planned water projects would range from approximately 12,900 acre-feet per year under normal conditions (assumes groundwater production and recharge are equal); up to 21,500 acre-feet per year under a single-dry-year scenario reflecting maximum groundwater production from the planned projects (UWMP, pp. 5-6).

Water Supply/Demand Comparison

The UWMP provides a comparison of projected water supplies and water demands within the Service Area under varying hydrologic scenarios (normal year, single dry-year, multiple dry-year) as required under the California Urban Water Management Plan Act (Division 6 Part 2.6 of the Water Code §§ 10610 - 10656). In summary, the UWMP concludes that water supplies available to the Service Area would be adequate under all anticipated hydrologic conditions.

Water supply/demand planning reflected in the UWMP anticipates development of the City of Wildomar pursuant to the City's General Plan. In this regard, the UWMP reflects and anticipates cumulative water demands within the EVMWD Service Area, including water demands of the residential uses proposed by the Project.

Water Treatment

Water quality of all potable water deliveries within the Service Area comply with federal and state standards,[4] and water treatment is not considered a substantive constraint on water supplies. Additionally, EVMWD does not anticipate any groundwater quality to have adverse impacts on supply reliability (UWMP, p. 5-4). Currently there are no restrictions on water supply due to imported water quality (UWMP, p. 5-4). The UWMP reflects and anticipates cumulative water treatment demands within the EVMWD Service Area, including water treatment demands of the residential uses proposed by the Project.

Groundwater Considerations

The Project does not propose elements or aspects that would substantially interfere with, or detract from known or anticipated groundwater recharge plans or policies. In this regard, the Project site is not a designated groundwater recharge area, and development of the site with residential uses proposed by the Project is consistent with development anticipated under the General Plan. Moreover, Project site development and proposed stormwater management systems would employ and reflect appropriate structural and operational best management practices (BMPs) providing for treatment of stormwater discharges; and

[4] 2015 *Elsinore Valley Municipal Water District Water Quality Report* (EVMWD), pp. 7-8.

would incorporate permeable materials to the extent feasible. Use of permeable materials acts to reduce total runoff from the site, and facilitates runoff percolation to groundwater. Additionally, as components of the Project stormwater management system, detention/retention areas would be constructed acting to hold stormwater discharges within the Project site providing time for percolation of stormwater runoff and related groundwater recharge. On this basis, the Project's potential cumulative impacts to groundwater resources are less-than-significant and not cumulatively considerable.

As supported by the preceding discussion, potential cumulative impacts attributable to Project water demands are adequately planned and provided for under jurisdictional water management plans. The Project in combination with current and anticipated future uses can be adequately served by existing and proposed water sources, water delivery services, and water treatment capabilities, with neither Project-related, nor cumulatively adverse impacts on the availability, reliability, or quality of water supplies or their delivery. The Project's potential contribution to cumulative impacts in regard to water supplies, water delivery, and water treatment are, on this basis, not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

Wastewater Treatment

Elsinore Valley Municipal Water District (EVMWD) provides wastewater collection and treatment services to the City of Wildomar, inclusive of the Project site. The cumulative impact area for wastewater collection and treatment considerations is the EVMWD Service Area (Service Area).

The Project would connect to existing water lines located in road rights-of-way adjacent to the Project site. A 12-inch EVMWD sanitary sewer line exists in Bundy Canyon Road along the Project site northerly boundary; and an 8-inch EVMWD sanitary sewer line is located in Windwood Lane at the southwesterly limits of the Project site. The Project would extend and connect to available sanitary sewer lines. Extensions of and connections to EVMWD sanitary sewer lines would comply with EVMWD requirements. The Project does not propose or require construction or alteration of sewer service systems that would cumulatively affect other facilities in the Service Area.

A Will Serve letter for sanitary sewer service from EVMWD has been obtained indicating the District's ability and capacity to meet the Project's wastewater treatment demands. Please refer to EVMWD Preliminary Service Planning Letter #2749-0, December 21, 2015 - available through the Lead Agency.

In context, wastewater generated by the Project (48,112 gallons/day) would represent approximately 0.6 percent (0.006) of the Regional WRF's average daily design treatment capacity (8.0 mgd).

Wastewater treatment demands of the Project (48,112 gpd) would represent approximately 3.8 percent of the Regional WRF's estimated 2016 residual capacity (1.24 mgd). Wastewater generated by the Project would be typical of domestic generators, and wastewater resulting from the Project uses would not require treatment beyond that provided by existing EVMWD facilities.

Based on the preceding, there is sufficient available capacity at the Regional WRF to serve the Project in the near-term; and planned Regional WRF treatment capacity expansion would adequately accommodate demands of the Project as well as future anticipated long-term demands of the Service Area. Connection and service fees paid by the Project and other customers within the Service Area provide funds available to EVMWD to provide for expansion, enhancement, and maintenance of wastewater collection and treatment facilities commensurate with anticipated cumulative Service Area demands.

On this basis, the potential for the Project to result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's demand in addition to the provider's existing commitments is not cumulatively considerable; and the cumulative effects of the Project are determined to be less-than-significant.

Solid Waste Management

Riverside County Waste Management Department (RCWMD) facilitates waste management services for Riverside County as a whole, and manages the landfills serving

the City of Wildomar. Solid waste disposal and landfill services are available to all residents and public/private enterprises on a countywide basis. Typically, proximity to a given landfill is the determining factor in its selection for waste disposal. The cumulative impact area for solid waste management is Riverside County in general; and more specifically, the six landfills operated by the County (Badlands, Blythe, Desert Center, Lamb Canyon, Mecca II, and Oasis); and the privately owned and operated El Sobrante Landfill.[5]

Solid waste transport and recycling services for Wildomar residential and commercial properties are currently provided by Waste Management of the Inland Empire (serving City areas east of I-15); and CR&R Environmental Services (serving City areas west of I-15). Household Hazardous Waste Disposal (HHWD) services are provided through the County of Riverside Regional Household Hazardous Waste Collection Program. Landfills nearest the City and those that would likely serve the Project are El Sobrante, Badlands, and Lamb Canyon, all of which are Class III municipal solid waste landfills. Class III landfills accept only non-hazardous municipal solid waste for disposal; no hazardous or liquid wastes are accepted.

The Project would generate an estimated 280.77 tons of solid waste annually, or approximately 0.77 tons of solid waste on a daily basis. Project-generated solid waste (0.77 tons/day) would represent a nominal increment of the receiving landfills' permitted daily throughputs (0.005 percent of El Sobrante's permitted daily throughput of 16,054 tons/day; 0.02 percent of Badlands' permitted daily throughput of 4,800 tons/day; and 0.01 percent of Lamb Canyon's permitted daily throughput of 5,500 tons/day).

Additionally, consistent with Section 5.408 "Construction Waste Reduction, Disposal, and Recycling" of the California Green Building Standards Code (CALGreen Code), as adopted by the City of Wildomar, a minimum of 50 percent of the Project's nonhazardous construction and demolition waste would be recycled or salvaged for reuse. To these ends, a Project Construction Waste Management Plan would be prepared consistent with Section

[5] The El Sobrante Landfill provides waste disposal services under contract to the County.

5.408.1.1 of the CALGreen Code. These measures would collectively reduce Project construction waste and would act to reduce demands on solid waste management resources.

Project-generated solid waste can be accommodated at any of the three likely receiving landfills; and there is available throughput capacity to serve the Project and other customers within the cumulative impact area. Solid waste diversion achieved pursuant to the City Source Reduction and Recycling Element (SRRE) would further reduce potential Project-related and cumulative impacts affecting area landfills. The Project would implement a Construction and Demolition (C&D) program acting to further reduce Project-related and cumulative solid waste management impacts. On this basis, the Project's potential contribution to cumulative solid waste management impacts is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.9 Cumulative Impacts Related to Population and Housing

The cumulative impact area for population and housing considerations is the City of Wildomar and the encompassing SCAG Region. As discussed at EIR Section 4.9, *Population and Housing*, the Project would not result in potentially significant population and housing impacts. Population growth and housing that would result from the Project are consistent with anticipated buildout of the City pursuant to the City General Plan. In this regard, the Project would result in population growth and housing demands no greater than would result from land uses and development envisioned under the City General Plan. The Project conforms to adopted projections for cumulative population, housing, and employment growth as well as the anticipated balance of these demographic elements within the City and the SCAG Region.

On this basis, the Project's potential contribution to cumulative impacts in regard to population and housing is not considerable, and the cumulative effects of the Project are less-than-significant.

5.2.10 Cumulative Impacts Related to Aesthetics

The cumulative impact area when considering potential cumulative aesthetics and light/glare issues includes areas that are currently, or are anticipated to be, subject to design guidelines and performance standards of the City of Wildomar General Plan and City of Wildomar Development Code. Cumulative aesthetic and light/glare impacts are typically more pronounced at vantages with direct line-of-sight to a given use or group of uses.

As discussed at EIR Section 4.10, *Aesthetics*, the Project would not result in potentially significant impacts to any scenic vistas, scenic resources, or scenic highways. Nor would the Project degrade the existing visual character of the site or its surroundings, or result in potentially significant light and glare impacts.

Final designs of the Project uses would be subject to City review process and Conditions of Approval to ensure consistency with design and development standards articulated in the Project design concepts presented at EIR Section 3.0, *Project Description*, and compliance with applicable provisions of the City Development Code. This would ensure that the Project does not create aesthetic or light/glare impacts that could potentially affect surrounding land uses. On this basis, the Project's potential aesthetic and light/glare impacts are determined to be less-than-significant.

Based on the preceding discussion, the Project's potential contribution to cumulative impacts in regard to aesthetic and light/glare impacts is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.2.11 Cumulative Impacts Related to Biological Resources

The cumulative impact areas for biological resources are generally defined by available habitat, species' range(s), physical constraints, and other limiting factors as discussed within the Project Biological Resources Report (EIR Appendix H). Biological resources occurring, or potentially occurring within the Project site, and any related potentially significant impacts and mitigation are summarized below.

CEQA Guidelines §15130(d) provides that no further cumulative impacts analysis is required when a given project is consistent with an adopted general, specific, master, or comparable programmatic plan where the Lead Agency determines that the regional or areawide cumulative impacts of the project have already been adequately addressed in a certified EIR for that plan.

As substantiated herein, the Project is consistent with the Western Riverside County MSHCP (MSHCP), the germane adopted plan addressing cumulative impacts to biological resources within the region. Cumulative biological resources impacts of the MSHCP have been adequately addressed within the certified EIR prepared for the MSHCP (SCH No. 20011011080). On this basis, and consistent with *CEQA Guidelines* §15130(d), no further cumulative impacts analysis is required for the Project. Moreover, compliance with the MSHCP; conformance with applicable jurisdictional waters regulations; and implementation of proposed EIR mitigation measures ensures that the Project would result in a minimum no-net-loss of the biological function and value of Study Area biological resources, and as such impacts would not be considered cumulatively significant.

Based on the preceding, the Project's potential contribution to cumulative impacts in regard to biological resources is not considerable, and the cumulative effects of the Project are less-than-significant.

5.2.12 Cumulative Impacts Related to Cultural Resources/Tribal Cultural Resources

The cumulative impact area for prehistoric, archaeological, and historic resources generally includes the City of Wildomar and surrounding areas of Riverside County. Impacts to any cultural resources/tribal cultural resources within this area would be site-specific. Consistent with CEQA requirements, in the event that potentially significant cultural resources/tribal cultural resources are encountered within the cumulative impact area, mitigation measures would be applied before to ensure the preservation and protection of potentially significant resources. (*CEQA Guidelines* §15064.5. et al.) As substantiated at EIR Section 4.12, the Project's potential impacts to cultural resources are determined to be less-than-significant as mitigated, and would not be cumulatively considerable. Mitigation proposed for the Project (i.e., monitoring of construction activities for potential discovery of

cultural resources) is typical of, and consistent with, mitigation required within developing urban and suburban areas throughout the City of Wildomar and surrounding region.

With the application of proposed mitigation measures, the Project's potential contribution to cumulative impacts in regard to cultural resources is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.3 ALTERNATIVES ANALYSIS

Pursuant to *CEQA Guidelines* §15126.6, an EIR must describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain the Project objectives, but would avoid or substantially lessen any of the significant environmental effects of the proposal. As further presented in the *CEQA Guidelines,* an EIR need not consider every conceivable alternative, but rather, the discussion of alternatives and their relative merits and impacts should be provided in a manner that fosters informed decision-making and public participation. To this end, the *CEQA Guidelines* indicate that the range of alternatives selected for examination in an EIR should be governed by "rule of reason," and requires the EIR to set forth only those alternatives necessary to permit an informed decision. Consistent with the provisions of the *CEQA Guidelines,* the following analysis presents alternatives to the Project that would potentially lessen its environmental effects while allowing for attainment of Project Objectives.

5.3.1 Alternatives Overview

Descriptions of, and the rationale underlying, the alternatives considered in this EIR are presented below. As provided for under CEQA, the ultimate rationale underlying the development and selection of alternatives to the Project is the reduction or avoidance of otherwise resulting significant environmental impacts, while allowing for attainment of the basic Project Objectives. Alternatives considered within this analysis include:

- CEQA-mandated "No Project" Alternative;
- Reduced Intensity Alternative-Bundy Canyon Resort Apartment Project Land Use Plan;
- Alternative Sites;

- "No Threshold Exceedance" Alternative for Significant Traffic Impacts; and
- "No Threshold Exceedance" Alternative for Noise Impacts.

The above-listed Alternatives are further defined at Section 5.3.2, *Description of Alternatives*. To provide context for the subsequent consideration of Alternatives, significant Project impacts are summarized below at Table 5.3-1, and the Project Objectives are restated subsequently.

Table 5.3-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
Traffic	
	The Project would construct, or pay required fees toward, completion of all necessary Study Area transportation/traffic system improvements. At the significantly-impacted locations noted below, the Project cannot feasibly construct the required improvements, and/or payment of fees would not assure their timely completion. **<u>Cumulatively Significant Impacts</u>** **Existing (2015) Conditions:** ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Existing Conditions cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: **ID No. Intersection** 4 Sellers Rd. / Canyon Rd. 7 Walnut Creek Rd. / Bundy Canyon Rd. **Opening Year (2017) Conditions:** ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Opening Year Cumulative traffic impacts at or affecting the following intersections are considered cumulatively significant and unavoidable: **ID No. Intersection** 4 Sellers Rd. / Canyon Rd. 5 Monte Vista Dr. / Bundy Canyon Rd. 6 Canyon Ranch Rd. / Bundy Canyon Rd. 7 Walnut Creek Rd. / Bundy Canyon Rd. 9 Road "A" / Bundy Canyon Rd.

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Table 5.3-1
Summary of Significant and Unavoidable Impacts

Environmental Consideration	Comments
	Horizon Year (2040) Conditions: ***Intersections*** Pending completion of required improvements, the Project's incremental contributions to Post-2035 traffic impacts at or affecting the following intersections are therefore considered cumulatively significant and unavoidable: **ID No. Intersection** 1 Orange St. / Bundy Canyon Rd. 3 I-15 NB Ramps / Bundy Canyon Rd. 4 Sellers Rd. / Canyon Rd. 5 Monte Vista Dr. / Bundy Canyon Rd. 8 Oak Canyon Dr. / Bundy Canyon Rd. 9 Road "A" / Bundy Canyon Rd.
	Congestion Management Plan (CMP) Facilities Impacts Study Area Intersection 3, I-15 - NB Ramps / Bundy Canyon Rd., is a CMP facility. Pending completion of required improvements, the Project's contributions to significant traffic impacts at or affecting Study Area Intersection No. 3, I-15 - NB Ramps / Bundy Canyon Rd., are considered cumulatively significant and unavoidable.
Noise and Vibration	
	<u>Project Impacts</u> **Temporary Construction-Source Noise and Vibration Impacts** Construction-source noise and vibration impacts would be significant and unavoidable for the duration of Project construction activities. **<u>Cumulatively Significant Impacts</u>** **Temporary Construction-Source Noise and Vibration Impacts** Construction-source noise and vibration impacts would be cumulatively considerable, and significant and unavoidable for the duration of Project construction activities.

Project Objectives

The primary goal of the Project is the development of the subject site with contemporary multi-family residential uses and complementary amenities. Project Objectives include the following:

- Capitalize on the site's location proximate to the I-15/Bundy Canyon Road interchange;

- Create a complementary mix of multi-family residential products and supporting amenities;

- Take advantage of available infrastructure; enhance and improve local infrastructure systems to the benefit of the Project and surrounding areas; and to maximize access opportunities for the convenience of residents and visitors;

- Maximize development potential of the subject site, while maintaining and protecting natural site features;

- Establish an efficient and sustainable development through clustering of multi-family residential products and supporting amenities;

- Provide a multi-family residential development that expands and diversifies the locally available housing stock; and that responds to the current and projected demand for multi-family residential products within the City.

Please refer also to EIR Section 3.5, *Project Objectives*.

5.3.2 Description of Alternatives

Five alternatives to the Project, listed below, are evaluated herein. Descriptions of the selected Alternatives are provided in the following paragraphs.

- CEQA-mandated "No Project" Alternative;

- Reduced Intensity Alternative-Bundy Canyon Resort Apartment Project Land Use Plan;
- Alternative Sites;
- "No Threshold Exceedance" Alternative for Significant Traffic Impacts; and
- "No Threshold Exceedance" Alternative for Noise/Vibration Impacts.

5.3.2.1 No Project Alternative

Overview

The *CEQA Guidelines* specifically require that the EIR include in its evaluation a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

> If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment (*CEQA Guidelines*, Section 15126.6 (e)(3)(b)).

In the case considered here, the subject site is a vacant and available property absent any significant environmental or physical constraints. Further, the Project site is fully served by proximate available utilities and supporting public services; and is provided appropriate

access. Areas around the subject site are developed with, or are being developed with urban uses.

The City General Plan Land Use Map designates the Project site as "Medium Density Residential" (MDR). The MDR General Plan Land Use allows for development with single-family detached and attached residential uses at 2 – 5 dwelling units/acre (du/ac), with an anticipated population density of 7 – 17 persons per acre. Limited agriculture and animal keeping are permitted. Intensive animal keeping is discouraged.

A development similar to the Project was previously proposed for the subject site, and was approved through the Tentative Tract Map stage (TT 26372). This proposal however was abandoned at the direction of the proponent due to market/financial considerations. In this context, failure to proceed with the Project would likely not result in preservation of existing environmental conditions, and the practical result of the Project's non-approval would be the development of some other variety or optimal configuration of urban residential uses within the subject site. As a consequence, any development of the subject site under a No Project Alternative would likely be materially consistent with the Project, though internal land use configurations, development intensities, and specific uses may be realigned within the constraints and allowances of the City General Plan and Municipal Code. Environmental impacts resulting from development of the subject site under a No Project Alternative would likely therefore be comparable to those occurring under the Project.

If, however, development of the subject site was significantly delayed by economic, political, or other outside influences, existing environmental conditions would likely prevail, and in most instances, environmental impacts would be reduced when compared to the Project. To provide an analysis differentiated from that developed for the Project within the body of this EIR, the No Project Alternative considered herein is assumed to represent a "No Build" condition.

5.3.2.2 Reduced Intensity Alternative - Bundy Canyon Resort Apartment Project Land Use Plan

Under the Reduced Intensity Alternative - Bundy Canyon Resort Apartment Project Land Use Plan (hereafter referred to as the Reduced Intensity Alternative) the subject site would be developed with the types and configurations of land uses currently proposed by the Project, but at an aggregate intensity that would provide a demonstrable reduction in impacts otherwise resulting from the Project. For illustrative purposes, the Reduced Intensity Alternative evaluated herein assumes a 50 percent reduction in residential intensity otherwise resulting from the Project; yielding development of the subject site with 70 multi-family dwelling units. For the purposes of this analysis, housing unit proportionalities proposed under the Project would be maintained. The Reduced Intensity Alternative would diminish, but would not eliminate significant and unavoidable traffic and construction-source noise impacts resulting from the Project. Table 5.3-2 compares the composition and scope of uses under the Project with development that would occur under the Reduced Intensity Alternative.

Table 5.3-2
Site Development Comparison
Project and Reduced Intensity Alternative

Dwelling Unit Type	Number of Units	
	Project	Reduced Intensity Alternative
1 Bedroom Apartment	57	29
2 Bedroom Apartment	33	16
2 Bedroom Townhome	35	18
3 Bedroom Townhome	15	7
Total Units	***140***	***70***

Sources: Project data from Bundy Canyon Resort Apartment Project Site Plan Concept, August 2016; Reduced Intensity Alternative-Applied Planning, Inc.

5.3.2.3 Alternative Sites Considered and Rejected

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." *CEQA Guidelines* §15126.6 (f) (1) also provides

that when considering the feasibility of potential alternative sites, the factors that may be taken into account include: "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives."

The Project considered herein is not subject to relocation to an alternative site. Notably, relocation of the Project would not substantively or materially reduce the Project's significant environmental impacts, the basis for the consideration of Alternative sites under CEQA. Moreover, there are no other suitable alternative locations that the Applicant can reasonably acquire, control, or otherwise have access to.

In this latter regard, relocation to an Alternative Site is not likely to achieve any measurable reduction in the Project's traffic impacts. Specifically, implementation of traffic improvements, including intersection signalization and roadway segment widening as envisioned under the City General Plan Circulation Element, is an ongoing process undertaken in conjunction with the development of vacant or underutilized properties throughout the City. As such, it is highly unlikely that a suitable Alternative Site could be identified that would distribute Project trips only to roadways that have already been improved to their ultimate General Plan configurations, thus avoiding the Project's cumulatively significant impacts at City transportation facilities.

Similarly, construction-source noise and vibration impacts would not be materially affected by relocation of the Project. These impacts would not be reduced, but rather would only be transferred to a different area within the City.

Moreover, as noted previously in this Section, there are no feasible alternative sites under control of likely control of the Applicant that would allow for relocation of the Project and associated reassignment of traffic and/or relocation of construction activities.

Based on the preceding considerations, the analysis of an Alternative Site was not further considered.

5.3.2.4 "No Threshold Exceedance" Alternative for Significant Traffic Impacts Considered and Rejected

Specific improvements identified in the Project TIA (EIR Appendix B) and summarized at Draft EIR Section 4.2 would provide a physical solution to identified potentially significant cumulative traffic impacts. Project mitigation responsibilities at affected Study Area faculties are fulfilled through fee payments directed to completion of the required improvements. Notwithstanding, Project fee payments would not ensure timely implementation of improvements required as mitigation for potentially significant cumulative traffic impacts, and impacts are therefore considered cumulatively significant and unavoidable pending completion of the required improvements.

Any measurable additional traffic contributed to the facilities noted previously in this Section would result in cumulatively significant traffic impacts similar to those occurring under the Project, requiring some manner of currently infeasible mitigation. In that any viable development of the subject site would generate trips likely affecting some or all of the above-referenced facilities, an alternative to the Project developed specifically to alleviate cumulatively significant traffic impacts within the Study Area was not further evaluated. Notwithstanding, the Reduced Intensity Alternative considered herein would act to generally reduce traffic volumes within the Study Area and would likely diminish the magnitude of traffic impacts; but would not avoid cumulatively significant traffic impacts affecting Study Area facilities.

5.3.2.5 "No Threshold Exceedance" Alternative for Significant Noise/Vibration Impacts Considered and Rejected.

Project construction-source noise/vibration impacts reflect maximum noise levels generated by operations of typical construction equipment. The types and quantities of equipment employed, and associated maximum noise/vibration levels generated, would not differ substantively under any reasonable development scenario for the subject site. As such,

potential alternatives with the specific goal of avoiding significant construction-source noise/vibration impacts were rejected from further substantive consideration.

5.3.3 Comparative Impacts of Alternatives

For each environmental topic addressed in the EIR, the alternative analyses present an assessment of comparative impacts. Environmental impacts associated with each of the considered Alternatives are described relative to potential impacts of the Project. At the conclusion of these discussions, Table 5.3-3 summarizes and compares relative impacts of the considered Alternatives.

5.3.3.1 Comparative Land Use Impacts

Land use impacts of the Project are associated in part with its requested discretionary actions and permits.

City Discretionary Actions and Permits

Requested decisions, or discretionary actions of the City necessary to realize the Project include, but may not be limited to the following:

- Certification of the EIR;
- Approval of a zone change from R-R (Rural Residential) to R-3 (General Residential); and
- Plot Plan approval for Project design and architectural details.

Additionally, the Project would require a number of non-discretionary construction, grading, drainage and encroachment permits from the City to allow implementation of the Project facilities.

Other Consultation and Permits

Based on the current Project design concept, anticipated permits necessary to realize the proposal would likely include, but are not limited to the following:

- Permitting may be required by/through the South Coast Air Quality Management District (SCAQMD).

- Permitting may be required by/through the Santa Ana Regional Water Quality Control Board and/or the San Diego Regional Water Quality Control Board.

- Permitting (i.e., utility connection permits) may be required from utility providers.

- Other ministerial permits necessary to realize all on and offsite improvements related to the development of the site.

Approval of the requested discretionary actions, issuance of necessary permits, and Project compliance with associated requirements incorporated therein, would reduce potential land use impacts of the Project below levels of significance. No mitigation measures were found to be necessary as part of the EIR Project land use analysis.

No Build Alternative

The No Build Alternative assumes the subject site would remain vacant and undeveloped. No discretionary actions would be required. On this basis, potential land use impacts under the No Build Alternative would be incrementally reduced when compared to the Project.

Reduced Intensity Alternative

Implementation of the Reduced Intensity Alternative would diminish the extent of residential development within the subject site. Like the Project, the Reduced Intensity Alternative would incorporate all discretionary actions and mitigation measures necessary to preclude or reduce potential land use impacts. Potential land use impacts of the Reduced Intensity Alternative would be comparable to the impacts of the Project.

5.3.3.2 Comparative Transportation/Traffic Impacts

The Project would generate approximately 931 net new weekday trips. During the morning peak period (7:00 to 9:00 a.m.), 71 trips would be generated. During the evening peak period (4:00 to 6:00 p.m.), 87 trips would be generated. Project trips in combination with existing and future traffic would result in cumulatively significant traffic impacts at certain Study Area intersections.

No Build Alternative

Under the No Build Alternative, no additional traffic would be generated and traffic impacts would be reduced when compared to the Project. No mitigation would be required. However, improvements implemented by the Project would also not be realized. Nor would fees be paid toward planned and programmed near-term and long-range traffic improvements within the Study Area. Additionally, cumulatively significant near-term and long-range traffic impacts would persist at the predominance of facilities within the Study Area, with or without implementation of the Project.

Reduced Intensity Alternative

Assuming proportional reduction based on the reduced scope of development, the Reduced Intensity Alternative would generate approximately 50 percent of the trips generated by the Project. Based on this reduction in traffic volumes, the Reduced Intensity Alternative might require less extensive traffic improvements, although the reduction in trip generation under this Alternative may not be sufficient to realize any discernible difference in the extent or configuration of required traffic improvements. Proportional fair share fees for these improvements are reduced under the Reduced Intensity Alternative. Under either the Project or Reduced Intensity Alternative, cumulatively significant traffic impacts listed previous at Table 5.3-1 would likely persist.

5.3.3.3 Comparative Air Quality Impacts

Project construction and operations would generate additional air pollutant emissions. Project construction-source air pollutant emissions impacts would be less-than-significant as mitigated. Project operational-source emissions impacts would be less-than-significant, not requiring mitigation.

No Build Alternative

Under the No Build Alternative, no additional operational-source air pollutant emissions would be generated. Less-than-significant air quality impacts occurring under the Project would be avoided.

Reduced Intensity Alternative

The diminished scope of development under the Reduced Intensity Alternative may reduce the extent of site disturbance required, and may similarly reduce the overall Project construction timeframe. Nonetheless, peak daily emissions generated by Project construction activities would likely be similar to those occurring under the Project, requiring mitigation similar to that proposed by the Project. As with the Project, construction-source air pollutant emissions impacts under the Reduced Intensity Alternative would be less-than-significant as mitigated.

Assuming proportional reduction in operational-source air pollutant emissions based on the reduced scope of development, the Reduced Intensity Alternative would generate approximately 50 percent of the air pollutant emissions generated by the Project. Less-than-significant operational-source air quality impacts occurring resulting from the Project would be diminished under the Reduced Intensity Alternative.

5.3.3.4 Comparative Greenhouse Gas/Global Climate Change Impacts

The Project would not cause or result in a substantial increase in Greenhouse Gas (GHG) emissions. In this regard, the GHG Analysis demonstrates that Project-source GHG emissions would not exceed applicable thresholds employed by the City of Wildomar, and that the Project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Moreover, Project GHG emissions would be consistent with the City's GHG emissions reduction target established under the WRCOG Subregional Climate Action Plan. The Analysis substantiates further that Project GHG Emissions would be less-than-significant in the context of *CEQA Guidelines* GHG/GCC significance factors.

The potential for the Project to contribute considerably (either individually or cumulatively) to global climate change through GHG emissions is therefore considered less-than-significant.

No Build Alternative

No additional uses or development would be implemented under the No Build Alternative, and GHG emissions otherwise generated by the Project would be avoided.

Reduced Intensity Alternative

Reduced building areas under this Alternative would incrementally reduce building energy consumption, and would thereby reduce the extent and scope of area-source GHG emissions otherwise generated by the Project. Additionally, reduced trip generation and associated reduction in vehicle emissions under this Alternative would result in reduced vehicular-source GHG emissions when compared to the Project.

On this basis, the Reduced Intensity Alternative would not cause or result in a substantial increase in Greenhouse Gas (GHG) emissions; would not exceed an applicable Lead Agency threshold of significance; and would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. The potential for the Reduced Intensity Alternative to contribute considerably (either individually or cumulatively) to a global climate change impact through GHG emissions would be incrementally reduced when compared to the Project, and would be considered less-than-significant.

5.3.3.5 Comparative Noise and Vibration Impacts

Development of the subject site as proposed under the Project would result in temporary short-term construction-source noise and construction-source vibration, as well as long-term operational noise. Noise and vibration generated by Project construction activities as received at sensitive land uses nearest the Project site would result in temporary exceedances of applicable standards. These impacts impact are recognized as significant and unavoidable at the Project level, and when considered cumulatively.

No Build Alternative

No construction would occur under the No Build Alternative. Significant construction-source noise and vibration impacts otherwise resulting from the Project would not occur under the No Build Alternative. Construction-source noise and vibration impacts otherwise occurring under the Project would be avoided.

No additional area/operational-source or traffic or vehicular-source noise would be generated under the No Build Alternative. Impacts would be diminished when compared to the Project.

Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the duration of site preparation and associated duration and frequency of peak construction-source noise and vibration may be reduced proportionally to the reduction in development scope. Notwithstanding, the types of construction equipment employed and their operational characteristics, including maximum operating noise and vibration levels, would not be substantively different than would otherwise result from the Project. As with the Project, construction-source noise and vibration impacts as received at sensitive land uses nearest the Project site would likely remain significant and unavoidable under the Reduced Intensity Alternative.

Operational/area-source noise impacts would be similar to the Project, and would be less-than-significant. The approximately 50 percent reduction in vehicle trips under the Reduced Intensity Alternative would act to reduce vehicular (mobile-source) noise levels along area roadways, which noise reductions may be perceptible.[6]

5.3.3.6 Comparative Hydrology/Water Quality Impacts

The Project would be developed and operated in a manner that ensures post-development stormwater discharges do not exceed available systems capacities. The Project would implement stormwater management systems that would ensure adequate and appropriate

[6] An audible (3.0 dBA) decrease/increase in vehicular-source noise typically requires a 50 percent reduction/doubling in traffic volumes.

conveyance and treatment of developed stormwater discharges. Further, the Project would implement a construction Storm Water Pollution Prevention Plan (SWPPP) and operational Water Quality Management Plan (WQMP) ensuring that stormwater discharges for the Project site do not adversely affect water quality. On this basis, the Project's impacts to hydrology and water quality are considered less-than-significant.

No Build Alternative

Under the No Build Alternative, no additional development within the Project site would occur, and no additional storm water runoff would be generated. Potential hydrology/water quality impacts otherwise occurring under the Project would be avoided under the No Build Alternative.

Reduced Intensity Alternative

The diminished scope of development under the Reduced Intensity Alternative would tend to decrease the amount of impervious areas within the subject, and could reduce the rate and quantity of post-development storm water runoff when compared to the Project. In this regard, the Project's already less-than-significant hydrology impacts would be further reduced under this Alternative. As with the Project, the Reduced Intensity Alternative would also comply with mandated SWPPP and WQMP requirements, thereby reducing potential water quality impacts to levels that are less-than-significant.

5.3.3.7 Comparative Geology and Soils Impacts

As concluded in the Project Geotechnical Investigation (Geotechnical Investigation), the subject site can be developed as proposed under the Project, contingent on adherence to the recommendations and requirements of the Geotechnical Investigation and incorporation of applicable city and California Building Code (CBC) design/construction requirements. Specific recommendations of the Geotechnical Investigation are restated as EIR Mitigation Measures to ensure their monitored implementation. As mitigated, potential geology/soils impacts affecting the Project are determined to be less-than-significant.

No Build Alternative

No development would occur. Potential geology and soils impacts otherwise occurring under the Project would be avoided.

Reduced Intensity Alternative

Under the Reduced Intensity Alternative, as with the Project, compliance with requirements and recommendations identified in the geotechnical investigation, and incorporation of applicable City and CBC design/construction requirements would act to reduce potential geotechnical/soils impacts to levels that are less-than-significant. In this sense, potential geology/soils impacts of the Reduced Intensity Alternative would be similar to those of the Project.

5.3.3.8 Comparative Public Services and Utilities Impacts

Potentially increased demands for public services such as fire protection and police protection services are addressed in part through the Project's physical design features, (e.g., fire protection systems, security systems), which act to reduce the extent and frequency of fire and police service calls.

As required by the City and serving utility purveyors, the Project would construct all utilities extensions and connections necessary to serve the Project uses. Further, development impact fees (DIF) and taxes paid by the Project would provide funds available for public services and utilities expansion and enhancement commensurate with Project demands.

Based on the preceding, Project-related public services and utilities impacts were determined to be less-than-significant.

No Build Alternative

No additional development would occur under the No Build Alternative, and no incremental demands for public services and utilities would result. Public services and utilities impacts otherwise occurring under the Project would be avoided under the No Build Alternative.

Reduced Intensity Alternative

The Reduced Intensity Alternative, because it would result in development of similar land uses at a lower intensity than the Project, can be expected to have similar, though reduced, public services and utilities impacts. Potential public services and utilities impacts of the Project are determined to be less-than-significant. The Reduced Intensity Alternative would further diminish these potential impacts.

5.3.3.9 Comparative Population and Housing Impacts

The Project would not induce substantial population growth in the area, either directly or indirectly. The Project's potential population and housing impacts are therefore considered less-than-significant.

No Build Alternative

No residential development would occur under the No Build Alternative. Potential population and housing impacts otherwise occurring under the Project would be avoided.

Reduced Intensity Alternative

The approximate 50 percent reduction in development intensity under the Reduced Intensity Alternative would decrease the availability and diversity of housing opportunities otherwise resulting from the Project. As with the Project, development of the subject site under the Reduced Intensity Alternative would support and would be consistent with City of Wildomar General Plan. Under either the Project or the Reduced Intensity Alternative, development of the subject site would not result in growth of the City not already anticipated under the General Plan and incorporated in local and regional demographic projections. Like the Project, potential population and housing impacts would be less-than-significant under the Reduced Intensity Alternative.

5.3.3.10 Comparative Aesthetic/Light and Glare Impacts

Potential aesthetic and light/glare impacts of the Project would be less-than-significant.

No Build Alternative

No development of the subject site would occur under the No Build Alternative. Potential aesthetic and light/glare impacts otherwise occurring under the Project would be avoided.

Reduced Intensity Alternative

The approximate 50 percent reduction in development intensity under the Reduced Intensity Alternative would tend to diminish overall aesthetic and light/glare impacts when compared to those of the Project. As with Project, development of the subject site would be subject to regulations and development standards articulated in the City of Wildomar Municipal Code; as well as design review processes implemented by the City. Potential aesthetic and light/glare impacts under the Reduced Intensity Alternative would be less-than-significant and would be diminished when compared to the Project.

5.3.3.11 Comparative Biological Resources Impacts

With application of proposed mitigation measures, the Project's potential impacts to biological resources would be less-than-significant.

No Build Alternative

No new development would occur under the No Build Alternative, and potential impacts to biological resources otherwise occurring under the Project would be avoided. It is noted however, that current site disturbances would likely persist. In these regards, the northerly portion of the Project site, adjacent to Bundy Canyon Road, evidences substantial disturbance including trash dumping, tree cutting, and the construction of a complex of "jumps" used for off-road bicycling. The remainder of the Project site is moderately disturbed by human activities, including crossings by various paths and trails.

Reduced Intensity Alternative

The reduction in overall site development realized under this Alternative could result in a portion of the site remaining, for the time being, in an undeveloped condition. Realistically however, given the extent of necessary construction activities and areas disturbed by development operations, potential impacts to biological resources would likely be similar to those of the Project. As with the Project, mitigation would be provided that reduces potential biological resources impacts to levels that are less-than-significant.

5.3.3.12 Comparative Cultural Resources/Tribal Cultural Resources Impacts

There are no known historic, archaeological, paleontological, or tribal cultural resources within the Project site. Additionally, consultation protocols completed pursuant to *AB 52*,

Gatto. Native Americans: California Environmental Quality Act, indicates that the Project would not result in any impacts to tribal cultural resources. Should as-yet-unidentified cultural/tribal cultural resources be encountered in the course of Project development, mitigation is provided requiring that construction activities be halted, allowing for identification, cataloguing, and as applicable, protection and preservation of resources. As mitigated, potential cultural/tribal cultural resources impacts of the Project are less-than-significant.

No Build Alternative

Under the No Build Alternative, no development of the site would occur, and there would be no requirement for cultural/tribal resources monitoring or other cultural/tribal resources mitigation required under the Project. Potential cultural resources/tribal cultural resources impacts otherwise occurring under the Project would be avoided under the No Build Alternative.

Reduced Intensity Alternative

Under the Reduced Intensity Alternative, the area to be graded could be reduced when compared to the Project. As such, potential impacts would be similar to those of the Project, albeit at a somewhat reduced scale and/or affecting different locations within the subject site. As with the Project, mitigation would be implemented to ensure that initial site disturbance activities are monitored by a professional and halted if the presence of cultural resources/tribal cultural resources is suspected, allowing for identification, cataloguing, and as applicable, protection and preservation of resources. As with the Project, potential cultural resources/tribal resources impacts would be less-than-significant.

5.3.4 Comparative Attainment of Project Objectives

Comparative Attainment of Project Objectives is summarized for each of the Alternatives considered here. For ease of reference, the Project Objectives are restated below.

5.3.4.1 Project Objectives

The primary goal of the Project is the development of the subject site with a productive mix of multi-family residential uses. Complementary Project Objectives include the following:

- Capitalize on the site's location proximate to the I-15/Bundy Canyon Road interchange;

- Create a complementary mix of multi-family residential products and supporting amenities;

- Take advantage of available infrastructure; enhance and improve local infrastructure systems to the benefit of the Project and surrounding areas; and to maximize access opportunities for the convenience of residents and visitors;

- Maximize development potential of the subject site, while maintaining and protecting natural site features;

- Establish an efficient and sustainable development through clustering of multi-family residential products and supporting amenities;

- Provide a multi-family residential development that expands and diversifies the locally available housing stock; and that responds to the current and projected demand for multi-family residential products within the City.

No Build Alternative

The Project site would remain vacant and undeveloped under the No Build Alternative. The No Build Alternative would therefore realize none of the basic Project Objectives.

Reduced Intensity Alternative

Reduced development intensity would tend to diminish attainment of certain of the Project Objectives as summarized below:

- Take advantage of available infrastructure; enhance and improve local infrastructure systems to the benefit of the Project and surrounding areas; and to maximize access opportunities for the convenience of residents and visitors. *The Reduced Intensity Alternative, at approximately 50 percent of the Project scope, would*

eliminate or substantively reduce the scope of residential uses, failing to optimize advantages offered by existing available infrastructure that has been planned, programmed, and/or developed to support residential development intensities proposed by the Project.

- Maximize development potential of the subject site, while maintaining and protecting natural site features. *The Reduced Intensity Alternative, at approximately 50 percent of the Project scope fails to maximize development potential of the subject site. Further, the Reduced Intensity Alternative would not demonstrably enhance or improve upon protection of natural site features incumbent in the Project design.*

- Provide a multi-family residential development that expands and diversifies the locally available housing stock; and that responds to the current and projected demand for multi-family residential products within the City. *The Reduced Intensity Alternative, at approximately 50 percent of the Project scope would eliminate or substantively reduce the extent and variety of residential uses, diminishing total housing assets available within the City as well as the diversity of residential products.*

- Establish new development that would increase locally available employment opportunities; and would further the City's near-term and long-range fiscal goals and objectives. *The Reduced Intensity Alternative, at approximately 50 percent of the Project scope would directly reduce the scope of residential construction jobs otherwise resulting from the Project. Property tax revenues as well as second tier economic and fiscal benefits of residential development would also be diminished under the Reduced Intensity Alternative.*

5.3.5 Comparison of Alternatives

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Build [No Project] Alternative) be identified among the Project and other Alternatives considered in an EIR. Table 5.3-3, following, provides a summary, by topic, of the preceding alternatives analysis, indicating whether impacts may be reduced (or increased) when compared to the Project. Potential reductions in impacts or avoidance of impacts otherwise resulting from the Project are identified by **bold** text. Potential reductions in

impacts that would avoid otherwise significant and unavoidable impacts resulting from the Project; or that would avoid Project contributions to cumulatively significant and unavoidable impacts are identified by bold/shaded text. Comparative impacts that would be greater than those of the Project are indicated by *italicized* text. Instances where alternatives may result in significant impacts beyond those occurring under the Project, or where the Project Objectives are not substantively realized, are indicated with ***bold italicized*** text.

Table 5.3-3
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

Topic of Analysis - Project Impacts	No Build Alternative	Reduced Intensity Alternative
Land Use and Planning: Project impacts would be less-than-significant.	**Potential land use impacts otherwise resulting from the Project would be avoided under the No Build Alternative.**	Impacts would be similar to those of the Project.
Transportation/Traffic: Project transportation/traffic impacts would be cumulatively significant and unavoidable at the Study Area intersections listed at Table 5.3-1. All other transportation/traffic impacts would be less-than-significant.	**No new development would occur, and no additional traffic would be generated. Incremental contributions to cumulative impacts at Study Area facilities resulting from the Project would be avoided. Cumulatively significant traffic impacts would likely persist at the predominance Study Area intersections**.	**Traffic generation would be reduced as would the Project's contributions to cumulatively significant traffic impacts. The scope of mitigation and proportional fair share requirements of the Project may be reduced. Cumulatively significant traffic impacts would likely persist at the predominance of Study Area intersections.**
Air Quality: Construction-source air quality impacts would be less-than-significant as mitigated. Operational-source air quality impacts would be less-than-significant.	**No additional construction-source or operational-source air pollutant emissions would be generated under the No Build Alternative. Construction-source and operational-source air pollutant emissions otherwise generated by the Project would be avoided.**	**Less-than-significant air quality impacts otherwise resulting from the Project would be diminished.**
Greenhouse Gas Emissions (GHG)/Global Climate Change (GCC): GHG/GCC impacts of the Project would be less-than-significant.	**GHG emissions otherwise generated by the Project would be avoided.**	**Less-than-significant GHG/GCC impacts of the Project would be diminished.**
Noise: Project construction-source noise and construction-source vibration would exceed established standards for the duration of construction, resulting in a significant and unavoidable temporary and periodic increase in ambient noise levels in the Project vicinity. Operational-source noise and vibration impacts would be less-than-significant.	**Significant construction-source noise and vibration impacts otherwise resulting from the Project would be avoided.** **Operational source noise otherwise generated by the Project would be avoided.**	**The duration of construction-source noise and vibration impacts could potentially be reduced in duration. However, peak noise and vibration levels would be consistent with those occurring under the Project, and would remain significant.** **Vehicular-source noise levels may be perceptibly reduced when compared to the Project.** Area-source noise impacts would be similar to those of the Project.

Table 5.3-3
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

Topic of Analysis - Project Impacts	No Build Alternative	Reduced Intensity Alternative
Hydrology/Water Quality: Storm water management systems would be implemented to control and treat storm water runoff, ensuring that storm drain systems and water quality are not adversely affected. Potential impacts are less-than-significant.	**Potential hydrology/water quality impacts otherwise resulting from the Project would be avoided.**	Impacts would be similar to those of the Project.
Geology and Soils	**Potential geology and soils impacts otherwise resulting from the Project would be avoided.**	Impacts would be similar to those of the Project.
Public Services and Utilities: Demand for police and fire services would be increased when compared to existing service demands. Potential impacts would however be less-than-significant.	**Demands for public services and utilities otherwise occurring under the Project would be avoided.**	**Demand for public services and utilities would likely be reduced when compared to the Project.**
Population and Housing	**Potential population and housing impacts otherwise resulting from the Project would be avoided.**	Impacts would be similar to those of the Project.
Aesthetics/Light and Glare	**Potential aesthetics/light and glare impacts otherwise resulting from the Project would be avoided.**	Impacts would be similar to those of the Project.
Biological Resources: As mitigated, potential impacts to biological resources would be less-than-significant.	**Biological resources impacts otherwise occurring under the Project would be avoided.**	Impacts would be similar to those of the Project.
Cultural Resources/Tribal Cultural Resources: Project site disturbance activities could affect cultural resources/tribal cultural resources; with mitigation, no significant impacts would result.	**Potential cultural resources/tribal cultural resources impacts otherwise resulting from the Project would be avoided.**	Impacts would be similar to those of the Project.
Relative Attainment of Project Objectives	*None of the Project Objectives would be achieved.*	*The Reduced Intensity Alternative at approximately 50 percent of the Project scope would substantively diminish attainment of 4 (out of 6 total) Project Objectives.*

5.3.6 Environmentally Superior Alternative

No Build (No Project) Alternative Eliminated from Consideration

As indicated at Table 5.3-3, the No Build Alternative would avoid significant and unavoidable construction-source noise and construction-source vibration impacts otherwise resulting from the Project. The No Build Alternative would also incrementally reduce the extent and severity of traffic impacts, though cumulatively significant traffic impacts within the Study Area would likely persist. Other Project impacts, though less-than-significant, would be avoided under the No Build Alternative. Notwithstanding, as noted previously, the *CEQA Guidelines* require that the environmentally superior alternative (other than the No Build [No Project] Alternative) be identified among the Project and other Alternatives considered in an EIR. The No Build Alternative is therefore eliminated from consideration as the environmentally superior alternative.

Reduced Intensity Alternative Considerations

As also indicated at Table 5.3-3, the Reduced Intensity Alternative would incrementally reduce the Project's contributions to cumulatively significant traffic impacts, cumulatively significant traffic impacts would however persist within the Study Area. The Reduced Intensity Alternative would also diminish the duration of peak construction-source noise/vibration impacts otherwise occurring under the Project, though significant construction-source peak noise/vibration impacts would persist. Other impacts would be similar to those of the Project. In limited manner, the Reduced Intensity Alternative would achieve the basic Project Objectives.

Based on the reduction in general environmental effects and likely attainment of the basic Project Objectives, the Reduced Intensity Alternative is identified as the Environmentally Superior Alternative.

5.4 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

5.4.1 Overview

The California Environmental Quality Act requires a discussion of the ways in which a project could be growth-inducing. (Pub. Resources Code, §21100, subd. (b)(5); *CEQA Guidelines*, § 15126, subd. (d), 15126.2, subd (d.).) The *CEQA Guidelines* identify a project as growth-inducing if it would foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of significance to the environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. However, a project's potential to induce growth does not automatically result in growth. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Development pressures are a result of economic investment in a particular locality. These pressures help to structure the local politics of growth and the local jurisdiction's posture on growth management and land use policy. The land use policies of local municipalities and counties regulate growth at the local level.

Impacts related to growth inducement would also be realized if a project provides infrastructure or service capacity which accommodates growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

5.4.2 Direct Growth-Inducing Effects

The Project would implement additional housing. However, because the Project land uses and development intensities are consistent with buildout of the City pursuant to the General Plan, additional residential development and population growth resulting from the Project would not exceed housing and population growth anticipated under the City General Plan.

The Project would also create additional temporary construction employment opportunities; as well as on-going employment opportunities associated with management and maintenance of the Project residential uses and supporting facilities. In context, temporary construction jobs resulting from the Project are not considered substantive growth-inducing effects, and would be accommodated within the scope of existing facilities and resources. Long-term employment opportunities created by the Project would not exceed job growth anticipated under the General Plan. Because the Project land uses and development intensities are consistent with buildout of the City pursuant to the General Plan, additional employment opportunities resulting from the Project would not exceed employment growth anticipated under the City General Plan.

Based on the preceding discussion, the Project would not directly result in unanticipated significant population growth or other direct growth-inducing effects.

5.4.3 Indirect Growth-Inducing Effects

Investment in the Project would have local and regional economic impacts which may result in indirect growth-inducing effects. The Project's potential economic benefits could indirectly result in employment growth in the region. This growth, in combination with other anticipated employment growth in the region, could indirectly result in population growth. Such growth has a variety of potential effects on the physical environment, including but not limited to, effects on air quality, ambient noise levels, traffic, and water quality. As discussed previously, additional housing and employment opportunities created by the Project would not result in unanticipated growth within the City. However, the Project, in combination with other planned or anticipated projects in the area, would contribute to employment and population growth of the region.

Development of the Project as envisioned would entail upgrades and improvements to proximate utilities and roadway systems. Improvements necessitated by the implementation of the Project could serve to facilitate and encourage development of nearby properties; however, certain of the properties adjacent to the Project site are already developed. Further, the characteristics and intensities of development that could occur on properties near the Project site are governed by the City's General Plan. Development of these properties within the context of the approved General Plan should not result in unforeseen growth or unanticipated impacts.

5.5 SIGNIFICANT ENVIRONMENTAL EFFECTS

An EIR must identify any significant environmental effects that would result from the Project. (Public Resources Code, §21100, subd. (b)(2)(B).) Significant environmental impacts of the Project are summarized below.

5.5.1 Significant Traffic Impacts

5.5.1.1 Intersection Impacts

Pending completion of required improvements, the Project's contributions to Existing (2015), Opening Year (2017) and Horizon Year (2040) cumulative traffic impacts at Study Area intersections listed below would be considered cumulatively significant and unavoidable.

Existing (2015) Conditions:

ID No.	Intersection
4	Sellers Rd. / Canyon Rd.
7	Walnut Creek Rd. / Bundy Canyon Rd.

Opening Year (2017) Conditions:

ID No.	Intersection
4	Sellers Rd. / Canyon Rd.
5	Monte Vista Dr. / Bundy Canyon Rd.
6	Canyon Ranch Rd. / Bundy Canyon Rd.
7	Walnut Creek Rd. / Bundy Canyon Rd.
9	Road "A" / Bundy Canyon Rd.

Horizon Year (2040) Conditions:

ID No.	Intersection
1	Orange St. / Bundy Canyon Rd.
3	I-15 NB Ramps / Bundy Canyon Rd.
4	Sellers Rd. / Canyon Rd.
5	Monte Vista Dr. / Bundy Canyon Rd.
8	Oak Canyon Dr. / Bundy Canyon Rd.
9	Road "A" / Bundy Canyon Rd.

Congestion Management Plan (CMP) Facilities Impacts

Study Area Intersection 3, I-15 - NB Ramps /Bundy Canyon Rd., is a CMP facility. Pending completion of required improvements, the Project's contributions to significant traffic impacts at or affecting Study Area Intersection No. 3, I-15 - NB Ramps /Bundy Canyon Rd., are considered cumulatively significant and unavoidable.

5.5.2 Significant Noise/Vibration Impacts

Construction-source noise and vibration levels received at proximate off-site land uses would be temporarily and periodically significant. These noise and vibration levels would tend to diminish as the use of heavy equipment in the early construction stages concludes, and would cease entirely at the end of construction activities. Nonetheless, Project construction-source noise/vibration would result in a substantial temporary and periodic increase in ambient conditions in the Project vicinity. For the duration of construction activities, Project construction-source noise/vibration would also be considered cumulatively significant.

5.6 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

The *CEQA Guidelines* sections 15126 (c), 15126.2 (c) & 15127 require that for certain types or categories of projects, an EIR must address significant irreversible environmental changes that would occur should the Project be implemented. As presented at *CEQA Guidelines* section 15127, the topic of Significant Irreversible Environmental Changes need be addressed in EIRs prepared in connection with any of the following activities:

> (a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;
>
> (b) The adoption by a local agency formation commission of a resolution making determinations; or
>
> (c) A project which would be subject to the requirements for preparing of an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. sections 4321-4347.

The Project qualifies under *CEQA Guidelines s*ection 15127 (a) in that a Zone Change is required in order to implement the Project. As such, this EIR analysis addresses any significant irreversible environmental changes which would be involved in the proposed action should it be implemented [*CEQA Guidelines*, §§ 15126(e) and 15127]. An impact would fall into this category if:

- A project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of a project would generally commit future generations to similar uses;
- A project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

With regard to the above considerations, various natural resources, in the form of construction materials and energy resources, would be consumed in the construction of the Project. Because of the limited scope of the Project, and the availability and of materials and energy employed in Project construction, their use would not result in shortfalls in the availability of these resources.

Development of the site with the Project residential uses would commit the property to such uses for the foreseeable future, and thereby limit the site's prospective alternative uses. Notwithstanding, given the current General Plan Land Use designation of the site, and the urbanization of surrounding properties, commitment of the site to residential development proposed by the Project is anticipated under local and regional plans, and is considered appropriate.

The Project presents no substantive possibility of irreversible environmental damage "from any potential environmental incidents associated with the project." The Project does not propose facilities or uses that would result in potentially significant environmental incidents. Moreover, the Project incorporates all feasible mitigation, acting to reduce its potential environmental effects.

Lastly, as discussed below, the Project would not result in or cause unwarranted or wasteful use of resources, including energy.

5.7 ENERGY CONSERVATION

5.7.1 Overview

Consistent with *CEQA Guidelines* Appendix F, this Section of the EIR addresses the potential for the Project to result in the inefficient, wasteful, or unnecessary consumption of energy. For new development such as that proposed by the Bundy Canyon Resort Apartment Project, compliance with California Title 24 energy efficiency requirements is considered demonstrable evidence of efficient use of energy. As discussed below, the Project would provide for, and promote, energy efficiencies consistent with those required under applicable state or federal standards and regulations, and in so doing would meet

incumbent Title 24 standards. Moreover, energy consumed by the Project would be comparable to, or less than, energy consumed by other development proposals of similar scale and intensity. On this basis, the Project would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards are less-than-significant. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems. The Project, therefore, would not create or result in a potentially significant impact on energy resources.

5.7.2 Background and Introduction

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs; license thermal power plants of 50 megawatts or larger; develop energy technologies and renewable energy resources; plan for and direct responses to energy emergencies; and, perhaps most importantly, to promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards.

Germane to the Project and this EIR, AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the potential for wasteful, inefficient, and/or unnecessary consumption of energy caused by or resulting from a project. Appendix F to the *CEQA Guidelines* assists EIR preparers in this regard. More specifically, Appendix F is an advisory document establishing parameters and context for determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy.

5.7.3 Existing Conditions

5.7.3.1 Overview

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

- Excluding federal offshore areas, California ranked third in the nation in crude oil production in 2013, despite an overall decline in production rates since the mid-1980s.

- California also ranked third in the nation in refining capacity as of January 2014, with a combined capacity of almost 2 million barrels per calendar day from its 18 operable refineries.

- In 2012, California's per capita energy consumption ranked 49th in the nation; the state's low use of energy was due in part to its mild climate and its energy efficiency programs.

- In 2013, California ranked fourth in the nation in conventional hydroelectric generation, second in net electricity generation from other renewable energy resources, and first as a producer of electricity from geothermal energy.

- In 2013, California ranked 15th in net electricity generation from nuclear power after one of its two nuclear plants was taken out of service in January 2012; as of June 2013, operations permanently ceased at that plant, the San Onofre Nuclear Generating Station.

- Average site electricity consumption in California homes is among the lowest in the nation (6.9 megawatt hours per year), according to EIA's Residential Energy Consumption Survey. [7]

As indicated above, California is a leading energy-producing state, and California per capita energy use is among the most efficient nationally.

[7] U.S. Energy Information Administration. "California State Profile and Energy Estimates. California Energy Consumption by End-Use Sector." *U.S. Energy Information Administration.* Web. 17 Oct. 2015.

5.7.3.2 Electricity and Natural Gas Resources

Electricity

Electricity would be provided to the Project by Southern California Edison (SCE). SCE provides electric power to an estimated 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles.[8] SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California Independent Service Operator ("ISO") is a nonprofit public benefit corporation, and is the impartial operator of the State's wholesale power grid. The ISO is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California residential and commercial users.

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, transmission owners (investor-owned utilities such as SCE) file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

[8] Southern California Edison. "About Us. Who We Are." *Southern California Edison*. Web. 17 Oct. 2015.

Natural Gas

Natural gas would be provided to the Project by The Gas Company (Southern California Gas, SoCalGas). 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 (PUC).

> The California Public Utilities Commission (PUC) 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% 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% of the natural gas delivered by California utilities in 2012.
>
> Most of the natural gas used in California comes from out-of-state natural gas basins. In 2012, California customers received 35% of their natural gas supply from basins located in the Southwest, 16% from Canada, 40% from the Rocky Mountains, and 9% from basins located within California. California gas utilities may soon also begin receiving biogas into their pipeline systems.
>
> 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. The PUC has regulatory jurisdiction over 150,000 miles of utility-owned natural gas pipelines, which transported 82% 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).
>
> 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 [Federal Energy Regulatory Commission] FERC in the mid-1980's and is determined by "market forces." However, the PUC 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.[9]

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 PUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

[9] California Public Utilities Commission. "Natural Gas and California." *Natural Gas and California*. CPUC, 7 Sept. 2013. Web. 17 Oct. 2015.

5.7.3.3 Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline. Gasoline (and other vehicle fuels) are commercially-provided commodities, and would be available to the Project patrons and employees via commercial outlets.

There are more than 27 million registered vehicles in California, and those vehicles consume an estimated 18 billion gallons of fuel each year. Petroleum comprises approximately 92 percent of California's transportation energy sources. Notwithstanding, technology advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total by 2020.[10]

In these regards, at the federal and state levels various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled (VMT). Market forces have driven the price of petroleum products steadily upward, and technological advances have made use of other energy resources or alternative transportation modes increasingly feasible.

Largely because of, and in response to these multiple factors, gasoline consumption within the state has declined in recent years, while availability of other alternative fuels/energy sources has increased. In total, the quantity, availability, and reliability of transportation energy resources have increased in recent years, and this trend may likely continue and accelerate. Increasingly available and diversified transportation energy resources act to promote continuing reliable and affordable means to support vehicular transportation within the State.

[10] CEC. "2013 Integrated Energy Policy Report." *2013 Integrated Energy Policy Report*. CEC, n.d. Web. 17 Oct. 2015.

5.7.4 Regulatory Setting

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 are three federal agencies with substantial influence over energy policies and programs. On the state level, the PUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below. Project consistency with applicable federal and state regulations is also presented in *italicized* text.

5.7.4.1 Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 (Act) intends that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, the National Highway Traffic and Safety Administration, which is part of the United States Department of Transportation, is responsible for establishing additional vehicle standards and for revising existing standards. *Vehicles accessing the Project site are subject to the Federal Energy Policy and Conservation Act (Act). The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of the Act.*

5.7.4.2 Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions. *Access to the Project site is provided primarily by the local and regional roadway systems. The Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects realized pursuant to the ISTEA.*

5.7.4.3 The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety. *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access; takes advantage of existing infrastructure systems; and promotes land use compatibilities by implementing The City of Wildomar General Plan through the introduction of residential development at the subject site. In this manner, the Project supports the strong planning processes emphasized under TEA-21. The Project is therefore consistent with, and would not otherwise interfere with, nor obstruct implementation of TEA-21.*

5.7.4.4 State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. 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 and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access. *The Project site is located along major transportation corridors with proximate access to the Interstate freeway system. The site selected for the Project facilitates access; takes advantage of existing infrastructure systems; and promotes land use compatibilities by implementing The City of Wildomar General Plan through the introduction of residential development at the subject site. The Project therefore supports urban design and planning processes identified in the State of California Energy Plan, is consistent with,*

and would not otherwise interfere with, nor obstruct implementation of the State of California Energy Plan.

5.7.4.5 California Code Title 24, Part 6, Energy Efficiency Standards

California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, the Energy Commission's energy efficiency standards have saved Californians more than $74 billion in reduced electricity bills since 1977.[11]

California energy efficiency standards are updated on an approximately three-year cycle. The 2013 Standards improve upon previous iterations of energy efficiency standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2013 Standards went in effect on July 1, 2014, following approval of the California Building Standards Commission. CEC 2016 building energy efficiency standards will go in to effect January 1, 2017. The Project would comply with energy efficiency standards in effect at the time of building permit application(s).

The 2013 and 2016 Energy Efficiency Standards in their entirety can be reviewed at: http://www.energy.ca.gov/title24/. Energy Efficiency Standards can be obtained at the California Energy Commission, 1516 Ninth Street, MS-37, Sacramento, CA 95814-5512. *The Project would be designed, constructed and operated to meet or exceed incumbent Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with, nor otherwise obstruct implementation of Title 24 Energy Efficiency Standards.*

5.7.4.6 City of Wildomar

Measures adopted pursuant to Wildomar Municipal Code Title 15, *Buildings and Construction* include, but are not limited to mandatory compliance with energy

[11] CEC. "California's Energy Efficiency Standards Have Saved Billions." *California's Energy Efficiency Standards Have Saved Billions*. CEC, n.d. Web. 26 July 2016.

conservation measures, implementation of energy efficient and sustainable facilities designs, and conformance with energy consumption performance standards. *All new development within the Project site would be required as a matter of law to comply with applicable provisions of the Wildomar Municipal Code.*

5.7.5 Project Energy Demands and Energy Efficiency/Conservation Measures

Estimated energy demands of Project construction and Project operations are summarized in the following discussions. The Project in total would comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Energy Efficiency Standards). Moreover, given rising energy prices, contractors and owners have vested financial incentives to avoid wasteful, inefficient, and unnecessary consumption of energy during construction and operations. In summary, there is growing recognition among developers and retailers that efficient and sustainable construction and operational practices yield both environmental and economic benefits.

5.7.5.1 Construction Energy Demands and Energy Efficiency/Conservation Measures

Construction Energy Demands

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction. Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented at Table 5.7-1. Eight-hour daily use of all equipment is assumed. For the purposes of this analysis, it is assumed that all construction equipment would be diesel-powered. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal. [12] As presented at Table 5.6-1, Project construction activities would consume an estimated 49,223 gallons of diesel.

[12] *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects for Evaluating Motor Vehicle Registration Fee Projects and Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables* (California Air Resources Board) May 2013; Table D-24 Moyers Guidelines Fuel Consumption Rate Factors - All Engines < 750 hp = 18.5 hp-hr-gal.

Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

Table 5.7-1
Construction-Source Fuel Consumption Estimates

Activity/ Duration	Equipment	HP Rating	Quantity	Use Hours/Day	Load Factor	HP-hrs./day	Total Fuel Consumption (gal. diesel fuel)
Site Preparation (10 Days)	Rubber Tired Dozers	255	3	8	0.40	2,448	1,323
	Tractors/Loaders/ Backhoes	97	4	8	0.37	1,148	621
Grading (30 days)	Graders	174	2	8	0.41	1,141	1,851
	Rubber Tired Dozers	255	1	8	0.40	816	1,323
	Tractors/Loaders/ Backhoes	97	3	8	0.37	861	1,397
Building Construction (300 days)	Cranes	226	1	8	0.29	524	8,502
	Forklifts	89	3	8	0.20	427	6,928
	Generator Sets	84	1	8	0.74	497	8,064
	Tractors/Loaders/ Backhoes	97	3	8	0.37	861	13,962
	Welders	46	1	8	0.45	166	2,685
Paving (20 days)	Pavers	125	2	8	0.42	840	908
	Paving Equipment	130	2	8	0.36	749	809
	Rollers	80	2	8	0.38	486	526
Architectural Coating (20 days)	Air Compressors	78	1	8	0.48	300	324
TOTAL CONSTRUCTION FUEL DEMAND (gallons diesel fuel)							***49,223***

Notes: Construction equipment schedules, power ratings, load factors populated from CalEEMod data presented in *Wildomar Residential Air Quality Impact Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Construction Energy Efficiency/Conservation Measures

Equipment used for Project construction would conform to CARB regulations and CA emissions standards, and would evince related fuel efficiencies. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to incumbent emissions standards (and related fuel efficiencies).

Equipment employed in construction of the Project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations. More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. EIR Mitigation Measure 4.3.2 reinforces this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of recycled/recyclable materials and related procedures; and energy efficiencies realized from bulk purchase, transport and use of construction materials. In general, the use of materials and construction processes described herein promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing and refinement. Use of recycled and recyclable materials and use of materials in bulk as described below also reduces energy demands associated with preparation and transport of construction materials as transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

Construction Waste Management Plan

Consistent with § 5.408, *Construction Waste Reduction, Disposal, and Recycling* of the California Green Building Standards Code (CALGreen Code), as adopted by the City of Wildomar, the Project would recycle or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste. A Project Construction Waste Management Plan would be implemented pursuant to CALGreen Code § 5.408.1.1.

Summary

Construction equipment used by the Project would result in single event consumption of approximately 49,223 gallons of diesel fuel. Diesel fuel would be supplied by City and regional commercial vendors. Construction equipment use of fuel would not be atypical for the type of construction proposed, and Project construction equipment would conform to CARB emissions standards, acting to promote equipment fuel efficiencies. CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. EIR Mitigation Measure 4.3.2 reinforces State-mandated equipment idling restrictions. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of recycled/recyclable materials and related procedures; and energy efficiencies realized from bulk purchase, transport and use of construction materials. As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

5.7.5.2 Operational Energy Demands and Energy Efficiency/Conservation Measures

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total Vehicle Miles Traveled (VMT) and estimated vehicle fuel economies of vehicles accessing the Project site. With respect to estimated VMT, the Project would generate an estimated total 3.11 million annual VMT along area roadways.[13] For the purposes of estimating fuel

[13] Estimated VMT from: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar (*Urban Crossroads, Inc.) November 30, 2015.

consumption and establishing fuel economies, approximately 88 percent of the Project VMT area assumed to be generated by Light Duty Vehicles (LDVs); and approximately 12 percent of Project VMT would be attributable to Heavy Duty Vehicles (HDVs), or "other."[14] Gasoline is assumed to be the primary fuel for LDVs; and diesel fuel is assumed as the primary fuel for HDVs/other vehicles.

As presented in *Annual Energy Outlook 2015, with projections to 2040* (U.S. Energy Information Administration USEIA) April 2015, average fuel economies of LDVs are projected to improve from approximately 21.9 mpg in 2013, to approximately 37.0 mpg by 2040.[15] *Annual Energy Outlook 2015* also estimates that average fuel economies of HDVs are projected to improve from approximately 6.7 mpg in 2013, to approximately 7.8 mpg by 2040.[16] Fuel demands of all vehicles accessing the Project site would be met through commercial fuel providers. Estimated Project transportation energy demands resulting from vehicle fuel consumption (reflecting high and low average fuel economies) are summarized at Table 5.7-2.

Table 5.7-2
Project-Generated Traffic Annual Fuel Consumption

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Annual Fuel Consumption (gallons)
Light Duty Vehicles		
2.74 Million	21.9	125,100
2.74 Million	37.0	74,100
Heavy Duty Vehicles		
0.37 Million	6.7	55,200
0.37 Million	7.8	47,400

Notes: Estimated VMT from: *Wildomar Residential Air Quality Impact Analysis, City of Wildomar (*Urban Crossroads, Inc.) November 30, 2015; Average fuel economies from: *Annual Energy Outlook 2014, with projections to 2040* (U.S. Energy Information Administration, USEIA) April 2014, p. MT-14.

[14] Per CalEEmod default parameters, approximately 88 percent of vehicles accessing the Project site would be classified as Light or Medium Duty Vehicles; the remaining 12 percent would comprise Light Heavy Duty, Medium Heavy Duty, Heavy Heavy Duty or "other" vehicles (buses, motorhomes, etc.).
[15] "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." *Annual Energy Outlook 2015*. USEIA, 14 Apr. 2015. Web. 18 Oct. 2015.
[16] Ibid.

Facilities Energy Demands

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized at Table 5.7-3.

Table 5.7-3
Project Annual Operational Energy Demand Summary

Land Use	Electricity Use (kWh/yr.)	Natural Gas Use (kBTU/yr.)
Apartments - Mid-Rise	521,426	1,624,780

Source: *Wildomar Residential Greenhouse Gas Analysis, City of Wildomar* (Urban Crossroads, Inc.) November 30, 2015.

Energy Efficiency/Sustainability

The Project in total would comply with or surpass incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Title 24 Energy Efficiency Standards).

Enhanced Vehicle Fuel Efficiencies

Estimated annual fuel consumption estimates presented previously at Table 5.7-2 represent likely potential maximums that would occur under Project Opening Year (2017) Conditions. Under future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older; less fuel-efficient vehicles are removed from circulation; and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Project Design and Access

The Project proposes clustered multi-family residential uses located proximate to and readily accessible from regional and local roadways. In these regards, clustered or compact development and collocation of uses acts to generally encourages use of transit, and

consolidates vehicle trips and reduces trip lengths when compared to traditional large-lot single-family residential development.[17]

Alternative Transportation

Pedestrian Access/Bicycle Access

City capital improvement plans include a Class I bike path, to be provided along the northerly side of Bundy Canyon Road adjacent to the Project site. The Project would accommodate and would not interfere with planned bicycle facilities, bicycle paths or bicycle amenities proposed by the City. The Project Site Plan Concept incorporates a pedestrian access network that internally links all uses. Pedestrian/bicycle access and improvements provided within the Project site and otherwise accommodated by the Project would encourage people to walk and bicycle rather than drive.

Transit

Bus transit services are currently provided to the Project area by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated Riverside County region near the City of Wildomar. Transit service is currently not provided to the Project site. However, transit services are periodically reviewed and updated by RTA to address evolving ridership demands, budget opportunities/constraints and community preferences. Changes in land use can affect these periodic adjustments, which may lead to enhanced or altered service.

Landscaping

Landscaping throughout the Project site would be provided consistent with City of Wildomar requirements, and recognizing competing demands for available water resources. Drought-tolerant plants would be used, where appropriate, reducing water consumption and power demand related to water delivery/irrigation systems. The Project would connect to the recycled water distribution system when available to the Project site,

[17] *Land Use and Driving, The Role Compact Development Can Play in Reducing Greenhouse Gas Emissions* (Urban Land Institute) 2010, p.17 et seq.

further reducing potable water demands of the Project. Reduced water consumption provides corollary energy conservation benefits by reducing related water/wastewater conveyance and treatment demands, and associated energy consumption.

Solid Waste Diversion/Recycling

The Project would comply with State of California, County of San Bernardino, and City of Wildomar requirements acting to reduce the amount of solid waste transported to, and disposed at area landfills, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

Summary

Transportation Energy Demands

Vehicular trips and related VMT generated by the Project would result in an estimated 74,100 – 125,100 gallons of gasoline consumption per year; and an estimated 47,400 – 55,200 gallons of diesel consumption per year. Fuel would be provided by current and future commercial vendors. Trip generation and VMT generated by the Project are consistent with other uses of similar scale and configuration. That is, the Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, bio fuels, hydrogen cells) would likely decrease future gasoline fuel demands per VMT.

The Project would also implement sidewalks and pedestrian paths, thereby encouraging pedestrian access. Bicycle facilities implemented and accommodated by the Project would facilitate and encourage use of bicycles.

The need for transit-related facilities, including but not limited to bus shelters and bicycle parking, would be coordinated between the City and the Project Applicant, with input

from transit providers as applicable, as part of the City's standard development review process.

Facilities Energy Demands

Project facility operational energy demands are estimated at 1,624,780 kBTU/year natural gas; and 521,426 kWh/year electricity. Natural gas would be supplied to the Project by The Gas Company; electricity would be supplied by SCE. The Project proposes conventional development types, reflecting contemporary energy efficient/energy conserving designs and operational programs. Uses proposed by the Project are not inherently energy intensive, and the Project energy demands in total would be comparable to, or less than, other similar projects of like scale and configuration.

Energy demands of the Project are reduced through design features and operational programs that in aggregate would ensure that Project energy efficiencies comply with incumbent Title 24 energy efficiency requirements.

Based on the preceding, Project facilities energy demands and energy consumption would not be inefficient, wasteful, or otherwise unnecessary.

5.7.6 Conclusion

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards are less-than-significant. Further, energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy producing or energy transmission facilities and would not create or result in a potentially significant impact affecting energy resources or energy delivery systems.

6.0 ACRONYMS AND ABBREVIATIONS

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ACMs	Asbestos Containing Materials
ADT	Average Daily Traffic
APE	Area of Potential Effect
APN	Assessors Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AVO	Average Vehicle Occupancy
BAT	best available technology
BCT	best conventional pollutant control technology
BMP	Best Management Practice
BOE	Board of Equalization
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CALINE4	California Line Source Dispersion Model
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCAR	California Climate Action Registry

CCR	California Code of Regulations
CC&Rs	Covenants, Conditions and Restrictions
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	Methane
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO_2	Carbon dioxide
CPUC	California Public Utilities Commission
CRA	Community Redevelopment Agency
CRWQCB	California Regional Water Quality Control Board
CTP	Comprehensive Transportation Plan
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	Draft Environmental Impact Report
DHS	California Department of Health Services
DIF	Development Impact Fees
DOT	U. S. Department of Transportation
DPM	Diesel Particulate Matter
DPW	Department of Public Works
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report

EMS	Energy Management System
EPA	Environmental Protection Agency
EVMWD	Elsinore Valley Municipal Water District
EWD	Elsinore Water District
FCAA	Federal Clean Air Act
Fed/OSHA	Federal Occupational Safety and Health Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rating Map
fpm	feet per minute
GHG	Greenhouse Gas
GLA	Gross Leasable Area
GMP	Growth Management Plan
GPA	General Plan Amendment
gpd	gallons per day
HCM	Highway Capacity Manual
HOV	High Occupancy Vehicle
HPLV	High Pressure Low Volume
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Amendments Act
HUD	U. S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, & Air Conditioning
ICU	Intersection Capacity Utilization
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
IWA	Integrated Waste Management Act
JRMP	Jurisdictional Runoff Management Program
kV	kilovolt
kVA	kilovolt-ampere
Ldn	day/night average sound level
LEA	Local Enforcement Agency

LED	light-emitting diodes
Leq	equivalent sound level
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
LST	Localized Significance Threshold
M	Richter Magnitude
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MOE	Measure of Effectiveness
MPE	maximum probable earthquake
mph	miles per hour
MPO	Metropolitan Planning Organization
MRF	Materials Recycling Facility
MSDS	Material Safety Data Sheets
MSHCP	Multiple Species Habitat Conservation Plan
msl	mean sea level
MSW	Municipal Solid Waste
MTA	Metropolitan Transit Authority
MUTCD	Manual of Uniform Traffic Control Devices
$\mu g/m^3$	micrograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NDFE	Non-Disposal Facility Element
NIH	National Institutes of Health
NO_2	Nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
O_3	Ozone
OAP	Ozone Attainment Plan

OEHHA	California Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OIMP	Odor Impact Minimization Plan
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
Pb	Lead
PCE	passenger car equivalency
PD	Planned Development
$PM_{2.5}$	Particulate Matter Less Than 2.5 Microns in Diameter
PM_{10}	Particulate Matter Less Than 10 Microns in Diameter
PPE	Personal Protection Equipment
ppm	parts per million
PV	Photovoltaic
RCFD	Riverside County Fire Department
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Conditions
REMEL	Reference Energy Mean Emission Level
RFPA	Regional Fire Protection Authority
RMP	Risk Management Plan
ROG	Reactive Organic Gases
RTA	Retail Trade Area
RUWMP	Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments & Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	State Clearinghouse
SDRWQCB	San Diego Regional Water Quality Control Board
SIP	State Implementation Plan

SLM	Sound Level Meter
SO_x	Oxides of sulfur
SRRE	Source Reduction and Recycling Element
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TEA-21	Transportation Equity Act for the 21st Century
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TPD	tons per day
UBC	Uniform Building Code
UFC	Uniform Fire Code
USEPA	United States Environmental Protection Agency
USFS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
V/C	Volume to Capacity
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	Volatile Organic Compound
WQMP	Water Quality Management Plan

7.0 REFERENCES

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APPENDICES

Please refer to accompanying CD-ROM