DRAFT
Environmental Impact Report
Villa Siena Residential Project
City of Wildomar, County of Riverside, California

State Clearinghouse Number 2014011081

Prepared for:

City of Wildomar
23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595
951.677.7751

Contact: Matthew C. Bassi, Planning Director

Prepared by:

FirstCarbon Solutions
621 E. Carnegie Drive, Suite 100
San Bernardino, CA 92408
909.884.2255

Contact: Frank Coyle, Project Director
Charles Holcombe, Project Manager

Date: April 27, 2015

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Acronyms and Abbreviations ix

Executive Summary ES-1
Purpose ES-1
Proposed Project ES-1
Areas of Controversy/Issues to be Resolved ES-2
Alternatives to the Proposed Project ES-2
Mitigation and Monitoring Reporting Program ES-4
Review of this Draft EIR ES-4
Summary of Impacts and Mitigation Measures ES-5

Section 1: Introduction 1-1
1.1 - Overview of the CEQA Process 1-1
1.2 - Scope of the EIR 1-2
1.3 - Organization of the Draft EIR 1-4
1.4 - Documents Incorporated by Reference 1-6
1.5 - Documents Prepared for the Project 1-6
1.6 - Lead Agency, Developer, and Consultant 1-7
1.7 - Review of this Draft EIR 1-7

Section 2: Project Description 2-1
2.1 - Project Location 2-1
2.2 - Existing Conditions 2-1
2.3 - Project Characteristics 2-13
2.4 - Intended Uses of this Draft EIR 2-27

Section 3: Environmental Impact Analysis 3-1
3.1 - Aesthetics, Light, and Glare 3.1-1
3.2 - Agricultural Resources and Forest Resources 3.2-1
3.3 - Air Quality 3.3-1
3.4 - Biological Resources 3.4-1
3.5 - Cultural Resources 3.5-1
3.6 - Geology, Soils, and Seismicity 3.6-1
3.7 - Hazards and Hazardous Materials 3.7-1
3.8 - Hydrology and Water Quality 3.8-1
3.9 - Land Use and Planning 3.9-1
3.10 - Mineral Resources 3.10-1
3.11 - Noise 3.11-1
3.12 - Population and Housing 3.12-1
3.13 - Public Services 3.13-1
3.14 - Recreation 3.14-1
3.15 - Transportation and Traffic 3.15-1
3.16 - Utilities and Service Systems 3.16-1
3.17 - Greenhouse Gases 3.17-1

Section 4: Cumulative Effects 4-1
4.1 - CEQA Requirements 4-1
4.2 - Cumulative Impact Setting 4-1
4.3 - Cumulative Impact Analysis 4-2

Section 5: Alternatives 5-1
5.1 - Introduction 5-1
5.2 - Alternative Considered and Withdrawn: Alternative Site 5-3
5.3 - Alternatives for Further Study 5-4
5.4 - Alternative 1: No Project Alternative 5-4
5.5 - Alternative 2: Reduced Density Alternative 5-9
5.6 - Alternative 3: Reduced Size Alternative 5-13
5.7 - Environmentally Superior Alternative 5-18

Section 6: Other CEQA Considerations 6-1
6.1 - Introduction 6-1
6.2 - Growth-Inducing Impacts 6-1
6.3 - Significant Irreversible Changes 6-2
6.4 - Significant and Unavoidable Impacts 6-3
6.5 - Energy Conservation 6-3

Section 7: Persons and Organizations Consulted/List of Preparers 7-1
7.1 - Persons and Organizations Consulted 7-1
7.2 - List of Preparers 7-2

Section 8: References 8-1

List of Appendices

Appendix A: Notice of Preparation/Responses
A.1 - Notice of Preparation
A.2 - Responses

Appendix B: Air Quality Supporting Information

Appendix C: Biological Resources Supporting Information
C.1 - Biological Resources Assessment Report
C.2 - DBESP for Riparian/Riverine Habitat

Appendix D: Cultural Resources Supporting Information
D.1 - Historical/Archaeological Resources Survey Update July 5, 2013
D.2 - Native American Consultation and Response

Appendix E: Geotechnical Investigation

Appendix F: Hydrology Supporting Information
F.1 - Preliminary Hydrology Study
F.2 - Preliminary Water Quality Management Plan

Appendix G: Noise Supporting Information
G.1 - Villa Siena Noise Impact Analysis
G.2 - HVAC Residential Noise Modeling

Appendix H: Transportation Impact Analysis

List of Tables

Table ES-1: Executive Summary of Impacts and Mitigation Measures ES-6
Table 1-1: IS-NOP Comment Letters 1-2
Table 2-1: Buildings (1–8) Unit Allocation 2-13
Table 2-2: Building 9 Unit Allocation 2-13
Table 2-3: Project Components 2-14
Table 3-1: Environmental Issue Abbreviations 3-3
Table 3.2-1: Description of Farmland Classifications 3.2-9
Table 3.3-1: Air Quality Monitoring Summary 3.3-1
Table 3.3-2: South Coast Air Basin Attainment Status 3.3-3
Table 3.3-3: Description of Air Pollutants 3.3-5
Table 3.3-4: Localized Significance Analysis (Construction) 3.3-21
Table 3.3-5: Construction Air Pollutant Emissions 3.3-24
Table 3.3-6: Operational Emissions 3.3-25
Table 3.5-1: Previously Recorded Cultural Resources 3.5-3
Table 3.7-1: Area Fire Stations 3.7-4
Table 3.8-1: Receiving Waters for Urban Runoff from the Project Site 3.8-2
Table 3.8-2: Potential Urban Runoff Pollutants 3.8-10
Table 3.8-3: Project Existing and Developed Flows 3.8-20
Table 3.9-1: Surrounding Land Use Designations 3.9-2
Table 3.9-2: Project Consistency with General Plan Land Use Policies 3.9-16
Table 3.9-3: SCAG 2008 Regional Comprehensive Plan (RCP) Consistency Analysis 3.9-21
Table 3.9-4: SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis 3.9-22
Table 3.11-1: Sound Level Standards (Db L_{max}) 3.11-7
Table 3.11-2: Noise and Land Use Compatibility Matrix 3.11-10
Table 3.11-3: Construction Equipment Vibration Source Levels 3.11-17
Table 3.11-4: Traffic Noise Model Results 3.11-20
Table 3.11-5: Typical Construction Noise Levels 3.11-22
Table 3.12-1: Forecast Populations- Western Riverside County and City of Wildomar 3.12-1
Table 3.12-2: Riverside County/City of Wildomar Population Growth 3.12-1
Table 3.12-3: Existing Regional and Local Housing Characteristics – Occupancy/Type (Year 2014) 3.12-2
Table 3.12-4: 2006–2014 Regional Housing Need 3.12-4

Table 3.12-5: 2014–2021 Regional Housing Need 3.12-5
Table 3.13-1: Lake Elsinore Unified School District Local School Facilities 3.13-2
Table 3.13-2: Impacted School Sites 3.13-4
Table 3.13-3: Historical Lake Elsinore Unified School District Enrollment 2004–2014 ..... 3.13-4
Table 3.13-4: Estimated Project Student Generation by Grade Level 3.13-11
Table 3.13-5: Local School Summary 3.13-12
Table 3.13-6: Nearby Park and Recreation Facilities 3.13-13
Table 3.14-1: Nearby Park and Open Space Facilities 3.14-1
Table 3.15-1: Intersection Analysis for Existing (2013) Conditions 3.15-1
Table 3.15-2: Level of Service 3.15-10
Table 3.15-3: Trip Generation Rates for Apartment Land Use 3.15-12
Table 3.15-4: Trip Generation Summary 3.15-12
Table 3.15-5: Intersection Analysis for Existing Plus Project Conditions 3.15-13
Table 3.15-6: Cumulative Projects Trip Generation 3.15-13
Table 3.15-7: Intersection Analysis for Cumulative 2015 without the Project 3.15-19
Table 3.15-8: Intersection Analysis for Cumulative 2015 with the Project 3.15-19
Table 3.16-1: Population, Employment, and Housing Forecasts for EVMWD's Service Area 3.16-1
Table 3.16-2: Total Potable and Recycled Water Demand 3.16-2
Table 3.16-3: Available Water Supply 3.16-3
Table 3.16-4: Water Supplies – Current and Projected 3.16-3
Table 3.16-5: Supply and Demand Comparison- Normal Year 3.16-4
Table 3.16-6: Supply and Demand Comparison- Single Dry Year 3.16-5
Table 3.16-7: Supply and Demand Comparison- Multiple Dry-Year Events 3.16-5
Table 3.16-8: Landfill Summary 3.16-6
Table 3.16-9: Estimated Construction and Demolition Waste Generation for the Proposed Project 3.16-16
Table 3.16-10: Projected Solid Waste Generation 3.16-17
Table 3.17-1: Description of Greenhouse Gases 3.17-3
Table 3.17-2: Project-Generated Greenhouse Gas Emissions 3.17-21
Table 3.17-3: Project Comparison to ARB's Scoping Plan Measures 3.17-23
Table 4-1: Cumulative Development 4-1
Table 5-1: Alternatives Comparison 5-4

List of Exhibits

Exhibit 2-1: Regional Location Map 2-3
Exhibit 2-2: Local Vicinity Map 2-5
Exhibit 2-3: Project Location Map and Surrounding Land Uses 2-7
Exhibit 2-4: Project Zoning 2-9
Exhibit 2-5: General Plan Land Use Map 2-11
Exhibit 2-6: Site Plan 2-15
Exhibit 2-7: Building Plan Sections 2-17
Exhibit 2-8: Building Type 1 Elevations 2-19
Exhibit 2-9: Building Type 2 Elevations 2-21
Exhibit 2-10: Plot Plan 2-23
Exhibit 3.1-1: Views of the Project Site Looking North and East 3.1-3
Exhibit 3.1-2: Views of the Project Site Looking West and South 3.1-5
Exhibit 3.1-3a: Architectural Plans 3.1-13
Exhibit 3.1-3b: Building Type 1 Floor Plans 3.1-15
Exhibit 3.1-3c: Building Type 1 Third Floor Plan/Roof Plan 3.1-17
Exhibit 3.1-3d: Building Type 2 Floor Plans 3.1-19
Exhibit 3.1-4: Landscaping Plan 3.1-21
Exhibit 3.2-1: Important Farmland Map 3.2-3
Exhibit 3.2-2: Williamson Act Map 3.2-5
Exhibit 3.2-3: Soils Map 3.2-7
Exhibit 3.4-1: Disturbed Grassland On-Site 3.4-3
Exhibit 3.4-2: On-Site Swale 3.4-5
Exhibit 3.6-1: Preliminary Grading Plan 3.6-9
Exhibit 3.9-1: Cumulative Projects 3.9-5
Exhibit 3.9-2: Existing Land Use Designations 3.9-7
Exhibit 3.9-3: Existing Zoning Designations 3.9-9
Exhibit 3.11-1: Noise Measurement Location 3.11-5
Exhibit 3.15-1: Existing Traffic Controls and Intersection Geometrics 3.15-3
Exhibit 3.15-2: Existing (2013) Average Daily Traffic 3.15-5
Exhibit 3.15-3: Project (Existing Plus Project) Trip Distribution 3.15-15
Exhibit 3.15-4: Cumulative Projects Location Map 3.15-17
Exhibit 3.15-5: Circulation Recommendations 3.15-21

Exhibit 3.17-1: Greenhouse Gas Emissions Trends 3.17-5
Exhibit 3.17-2: Greenhouse Gas Emission Trends by Sector in California..... 3.17-5
Exhibit 4-1: Cumulative Projects Location Map 4-3

ACRONYMS AND ABBREVIATIONS

ADA	Americans with Disabilities Act
ARB	California Air Resources Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BMP	Best Management Practices
BVOC	biogenic volatile organic compound
C	Celsius
CAAQS	California Ambient Air Quality Standards
Cal OSHA	California Occupational Health and Safety Administration
Cal/EPA	California Environmental Protection Agency
CalFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Clean Air Plan
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHL	California Historical Landmarks
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Code
CUPA	Certified Unified Program Agency
dB	decibel
DOT	United States Department of Transportation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report

EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
EVWD	Elsinore Valley Water District
F	Fahrenheit
FAR	floor area ratio
FCS	FirstCarbon Solutions
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	California Department of Conservation Farmland Mapping and Monitoring Program
GWh/y	gigawatt-hours per year
GWP	global warming potential
HCM	Highway Capacity Manual
HFC	hydrofluorocarbon
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HVAC	heating, ventilation, and air conditioning
I	Interstate
I-P	Industrial Park
L_{dn}	day/night average sound level
LED	light emitting diode
L_{eq}	equivalent sound level
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MHDR	Medium High Density Residential
MMI	Modified Mercalli Intensity
mph	miles per hour
MTS	Metropolitan Transportation System
MXD	mixed-use development
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOP	Notice of Preparation
NO_x	nitrogen oxides

NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
PCB	polychlorinated biphenyl
pCi/l	picocuries per liter
PFC	perfluorocarbon
Phase I ESA	Phase I Environmental Site Assessment
PM_x	particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PVC	polyvinyl chloride
RMP	Risk Management Plan
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SDWQCB	San Diego Water Quality Control Board
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids
Tg	teragram
therms/y	therms per year
TMA	Transportation Management Association
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
VHDR	Very High Density Residential
WDR	Waste Discharge Requirements

THIS PAGE INTENTIONALLY LEFT BLANK

EXECUTIVE SUMMARY

Purpose

The City of Wildomar has received a request to allow for the development of 170 units of rentable apartments contained within nine buildings on a 10.02-acre property. The project will also contain recreational areas, landscaping, roadway improvements, as well as additional amenities.

This Draft Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (Pub. Res. Code Section 21000, et seq. [CEQA]) to evaluate the potential environmental impacts associated with the implementation of the Villa Siena Residential Project (State Clearinghouse No. 201404107). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.). This Draft EIR is intended to serve as an informational document for public agency decision-makers and the public regarding the objectives and components of the project. Please refer to Section 2.3.6, Regulatory Authorities, for Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, which may be required to grant approvals or facilitate coordination with other agencies, as part of project implementation. This document will address the potentially significant adverse impacts related to construction and long-term operation of the project as well as identify feasible mitigation measures and alternatives that may be adopted to reduce or eliminate these impacts.

Proposed Project

The project site consists of 10.02 acres, and is generally bounded by Elizabeth Lane and vacant land to the west, Prielipp Road and multi-unit residential properties to the south, two residential properties to the north, and Jana Lane, residential properties, and vacant land to the east. The existing residence address located within the project site is 36485 Jana Lane, Wildomar, California 92595. The project proposes to develop 170 units of rentable apartments contained within nine separate buildings. Existing structures on-site, including a residence, would be removed as part of project demolition activities and disposed of in accordance with local solid waste standards. Eight buildings will total 235,904 square feet, and one building will total 14,553 square feet (total of 250,457 square feet). Eight of the nine buildings would utilize a similar design scheme (20 units per building) and would generally contain the same number of dwelling units per floor. The ninth building would utilize a similar design scheme and would contain half the number of dwelling units per floor (10 units). Additional components include a clubhouse with offices totaling 1,906 square feet, a pool and spa as well as open space, 368 parking spaces for residents and guests, landscaping, and sidewalks and minor roadways. The project would have total lot coverage of 400,752 square feet. The project site is designated Medium High Density Residential (MHDR) and is zoned Industrial Park (I-P).

The objectives of the project are to:

- **OBJ-1:** Provide housing for a growing population in a portion of the City of Wildomar where existing infrastructure is already in place.

- **OBJ-2:** Create an aesthetically pleasing living environment on the Project site.
- **OBJ-3:** Establish a viable, long-term and economically feasible use of the Project site.
- **OBJ-4:** Develop a very high-density residential development that is in keeping with the character of adjacent residences the south and east of the project site.
- **OBJ-5:** Provide a range of housing options to residents within the City of Wildomar by offering one, two, and three-bedroom units to accommodate a variety of family sizes and budgets.

The project will require the following actions:

- General Plan Amendment from Medium High Density Residential (MHDR) to Very High Density Residential (VHDR)
- A Change of Zone from Industrial Park (IP) to General Residential (VHDR)
- Final EIR certification
- Plot Plan Approval (No. 13-0089)
- Encroachment Permit on City right-of-way for utilities
- Approval of a Water Quality Management Plan (WQMP)
- Acquisition of various ministerial permits, including grading and building permits and infrastructure improvement plans

Areas of Controversy/Issues to be Resolved

Section 15123(b)(3) of the CEQA Guidelines requires that an EIR contain issues to be resolved, which includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved through the environmental and entitlement processes for the project include decisions by the Lead Agency as to whether:

- The Draft EIR adequately describes the environmental impacts of the project.
- • Change of Zone from Industrial Park (IP) to General Residential (VHDR)
- The recommended mitigation measures should be adopted or modified.
- Additional mitigation measures need to be applied to the project.

Table ES-1 summarizes the detailed discussion contained in Section 3 of this Draft EIR, Environmental Impact Analysis, of project impacts and mitigation measures. Table 1-1, located within Section 1, Introduction, contains a list of comment letters received in response to the Notice of Preparation (NOP). These letters are contained in Appendix A.

Alternatives to the Proposed Project

Section 5 of this Draft EIR reviews project alternatives, including the No Project Alternative as required by CEQA Guidelines Section 15126.6(e). Three alternatives are evaluated: (1) No Project

Alternative,(2) Reduced Density Alternative, and (3) Reduced Size Alternative. The No Project Alternative would avoid all environmental impacts without the need for mitigation measures that would be required under the project. The No Project Alternative would also avoid impacts to the intersection of Elizabeth Lane/Clinton Keith Road, which is determined to be significant and unavoidable for Cumulative 2015 with Project. Of the remaining alternatives, Alternative 2, the Reduced Density Alternative, would be the Environmentally Superior Alternative. See Table 5-1, located within Section 5, Alternatives, for a summary of each alternative's impacts related to the environmental issues evaluated in Section 3, Environmental Impact Analysis, of this Draft.

No Project Alternative

The No Project Alternative provides a comparison between the environmental impacts of the project and the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the project site would retain its Medium High Density Residential (MHDR) General Plan designation and its Industrial Park (I-P) Zoning designation. The existing buildings on-site (residence and garage) would continue to exist in their current state. The only traffic associated with the site would be from the existing structures on-site, which are currently vacant.

The No Project Alternative would further reduce and/or avoid all of the potential impacts that would occur under the proposed project, which are all less than significant or can be mitigated to less than significant. The project's impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for Cumulative 2015 with Project. However, the No Project Alternative would not achieve any of the project objectives.

Reduced Density Alternative

Under this alternative, fewer but larger dwelling units are proposed, and the building configurations would remain the same as the proposed project. The number of dwelling units would be reduced by 34 units from 170 to 136, for a 20 percent reduction in density. This would result in roughly the same lot coverage, but with a lower density and less required parking. As such, additional landscaped/open space area would be provided under this alternative.

The Reduced Density Alternative would result in equal or slightly reduced impacts compared with the project in all areas. However, the Alternatives impacts to the intersection of Elizabeth Lane/ Clinton Keith Road would remain significant and unavoidable for cumulative 2015 conditions, similar to the proposed project. The Reduced Density Alternative would meet the project objectives, but to a lesser degree than the project. Specifically, the Reduced Density Alternative would not fully meet Objective 4, which is to develop a very high-density residential development. In addition, Objectives 1, 3, and 5 would not be as fully met, thereby providing fewer housing opportunities to Wildomar residents, and a corresponding reduction in economic return on the investment in the project, due to the removal of 34 dwelling units.

Reduced Size Alternative

Under this alternative, the same number of dwelling units would be contained in fewer buildings, resulting in less lot coverage compared with the proposed project. Therefore, the buildings under

this alternative would be 4-5 stories in height, and additional landscaped/open space area would be provided under this alternative.

The Reduced Size Alternative would result in equal or slightly reduced impacts compared with the project in all areas. However, the Alternatives impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for cumulative 2015 conditions, similar to the proposed project. This alternative would meet the project objectives, but to a lesser degree than the proposed project. Specifically, because the same number of dwelling units would be contained in fewer, taller buildings, building heights of four to five stories under this Alternative would not meet Objective 4, which is to provide a residential development that is in keeping with the character of adjacent residences the south and east of the project site.

Mitigation and Monitoring Reporting Program

CEQA requires public agencies to establish a monitoring report program for the purpose of ensuring compliance with those mitigation measures adopted as conditions of approval in order to mitigate or avoid significant environmental impacts identified in an EIR. A mitigation and monitoring report program, incorporating the mitigation measures set forth in this document, will be adopted at the time of certification of the Final EIR.

Review of this Draft EIR

Upon completion of the Draft EIR, a Notice of Completion (NOC) will be filed with the State Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Draft EIR will be distributed to responsible and trustee agencies, other affected agencies, surrounding Cities, and interested parties, as well as all parties requesting a copy of the Draft EIR, in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, the Draft EIR, including the technical appendices, is available for review at the City of Wildomar Planning Department, located at 23873 Clinton Keith Road, Suite 201. Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on the Draft EIR during the public review period on the Draft EIR.

Written comments on this Draft EIR should be addressed to:

Matthew C. Bassi, Planning Director
City of Wildomar
23873 Clinton Keith Road, Suite 201
Email: mbassi@cityofwildomar.org

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review in the Final EIR at least 10 days prior to City of Wildomar Planning Department's action on the project and the EIR. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

Summary of Impacts and Mitigation Measures

Table ES-1 summarizes the detailed discussion contained in Section 3 of this Draft EIR, Environmental Impact Analysis, of project impacts and mitigation measures. In addition, the timing for mitigation is identified, based on the City of Wildomar's tracking system. Table ES-1 summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding sections of this EIR. Table ES-1 is included in the Draft EIR as required by CEQA Guidelines Section 15123(b)(1). If there are any inconsistencies between Table ES-1 and the information in Section 3 of this Draft EIR, Section 3 shall control.

California Public Resources Code Section 21081.6(a)(1)) also requires that a Mitigation Monitoring and Reporting Program (MMRP) be adopted at the time that the lead agency determines to carry out a project for which an EIR has been prepared, to ensure that mitigation measures identified in the EIR are fully implemented. A Mitigation Monitoring and Reporting Program (MMRP) will be included within the Final EIR for the project, and will include information such as the timing of mitigation, the monitoring schedule and reporting procedures, and designation of responsible parties for implementing the mitigation measures.

Table ES-1: Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Section 3.1 - Aesthetics, Light, and Glare		
Impact AES-1: The project would not have a substantial adverse effect on a scenic vista.	No mitigation measures are required.	Less than significant impact.
Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway.	No mitigation measures are required.	No impact.
Impact AES-3: The project would not substantially degrade the existing visual character or quality of the site and its surroundings.	No mitigation measures are required.	Less than significant impact.
Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	No mitigation measures are required.	Less than significant impact.
Section 3.2 - Agricultural Resources and Forest Resources		
Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.	No mitigation measures are required.	No mitigation measures are required.
Impact AG-2: T The project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract.	No mitigation measures are required.	No impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact AG-3: The project would potentially cause development of non-agricultural uses within 300 feet of agriculturally zoned property.	**MM AG-1:** Prospective residential tenants will be informed of the presence of adjacent and nearby lands with the potential for light agriculture and animal keeping, and that they may be exposed to conditions associated with these uses, including but not limited to dust, noise, odors, and pests, and that these property owners have the right to farm consistent with the zoning for their property, and further indicates that these activities would generally not be considered a legal nuisance. *Timing/Implementation:* After construction of the project. *Enforcement/Monitoring:* City of Wildomar Planning Department	Less than significant impact.
Impact AG-4: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.	No mitigation measures are required.	Less than significant impact.
Impact AG-5: The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)).	No mitigation measures are required.	No impact.
Impact AG-6: The project would not result in the loss of forest land or conversion of forest land to non-forest use.	No mitigation measures are required.	No impact.
Impact AG-7: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.	No mitigation measures are required.	No impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Section 3.3 - Air Quality		
Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan.	No mitigation measures are required.	Less than significant impact.
Impact AIR-2: The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	No mitigation measures are required.	Less than significant impact.
Impact AIR-3: The project would not 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).	No mitigation measures are required.	Less than significant impact.
Impact AIR-4: The project would not expose sensitive receptors to substantial pollutant concentrations.	No mitigation measures are required.	Less than significant impact.
Impact AIR-5: The project would not create objectionable odors affecting a substantial number of people.	No mitigation measures are required.	Less than significant impact.
Section 3.4 - Biological Resources		
Impact BIO-1: The project would potentially have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	**MM BIO-1:** Pre-construction surveys shall be performed for the burrowing owl as per CDFW survey protocols within 30 days prior to the start of site grading/clearing to verify the presence or absence of the species. A survey report will be prepared within seven days following completion of the survey and will be submitted to the City for review. If the species is observed during the pre-construction surveys, mitigation measures required by CDFW and the MSHCP will be implemented following consultations with CDFW and the City.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	Timing/Implementation: Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Planning Department **MM BIO-2:** If ground or vegetation disturbance occurs between February and August, a preconstruction nesting bird survey shall be conducted by a qualified biologist thirty (30) days prior to construction, ground disturbance, or vegetation removal. The survey area shall include the project site and a 250-foot buffer around the site. Any active nests identified shall have a buffer area established within a 100-foot radius (200 foot for birds of prey) of the active nest. Construction activities shall not occur within the buffer area until the biologist determines that the young have fledged.	
Impact BIO-2: The project would potentially have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	**MM BIO-3:** The applicant shall coordinate with CDFW in order to provide off-site mitigation for the on-site impacts. Mitigation shall be located off-site because of the limitations on the project site. Specifically, the applicant shall coordinate with the Elsinore Murrieta-Anza Resources Conservation District (EMARCD) to restore and enhance riparian/riverine habitat along existing drainages on a mitigation site owned by EMARCD. Mitigation shall be at a rate of 2:1 and approximately 10,000 square feet of riparian/riverine habitat shall be restored and enhanced. A detailed restoration plan shall be prepared for approval by the City and the resources agencies. The plan shall provide a schedule for site preparation and planting, and shall include a set of performance criteria for percent cover, density, and seed production within the mitigation area. This mitigation measure will ensure a no net loss of riparian/riverine habitat as required under the Multiple Species Habitat Conservation Plan. *Timing/Implementation:* Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Planning Department	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	MM BIO-4: The applicant shall implement the MSHCP Urban/Wildlife Interface Guidelines to ensure all indirect impacts to drainage features will be minimized. The guidelines are described in Section 6.1.4 of the MSHCP and include guidelines addressing drainage features, toxics, lighting, noise, invasive species, barriers, access, grading/land development, and fuels management. *Timing/Implementation:* Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Planning Department	
Impact BIO-3: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Impact BIO-4: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Impact BIO-5: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Participation in the MSHCP process and payment of the MSHCP and SKR-HCP fees are required under the City's General Plan and Municipal Code. The mitigation measures for these items are more appropriately included in the Section Impact BIO-6.	Less than significant impact.
Impact BIO-6: The project would potentially conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.	**MM BIO-5:** Prior to issuance of a grading permit for the proposed project, the project applicant shall pay all applicable MSHCP fees in full. *Timing/Implementation:* Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Planning Department	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	MM BIO-6: Prior to issuance of a grading permit for the proposed project, the project applicant shall pay all applicable SKR-HCP fees in full. *Timing/Implementation:* Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Planning Department	
Section 3.5 – Cultural Resources		
Impact CUL-1: The project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.	No mitigation measures are required.	No impact.
Impact CUL-2: The project would potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.	Mitigation Measures CUL-1 through CUL-6 are required. **MM CUL-1:** If during grading or construction activities, archaeological 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 a qualified archaeologist and the Pechanga Tribe. Any unanticipated archaeological resources that are discovered shall be evaluated and a final report prepared by the qualified archaeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. If the qualified archaeologist and the Pechanga Tribe determine the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Section 15064.5(c) and Public Resources Code Section 21083.2 and the Archaeological Resources Treatment and Monitoring Agreement required by Mitigation Measure CUL-2. This mitigation measure shall be incorporated into all construction contract documentation.	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Building and Planning Departments **MM CUL-2:** At least 30 days prior to seeking a grading permit, the project applicants shall contact the Pechanga Tribe to notify them of the proposed grading and shall coordinate with the City of Wildomar and the Pechanga Tribe to develop an Archaeological Resources Treatment and Monitoring Agreement. The agreement shall include but not be limited to outlining provisions and requirements for addressing the treatment of archaeological resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any archaeological resources, 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. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit. *Timing/Implementation:* Prior to the issuance of a grading permit *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments **MM CUL-3:** All archaeological resources, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Archaeological Resources Treatment and Monitoring Agreement required by Mitigation Measure CUL-2, that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility, which meets the standards set forth in 36 CFR Part 79 for federal repositories.	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments **MM CUL-4:** All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5. *Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments **MM CUL-5:** If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archaeologist, and the Pechanga Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Pechanga Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4. This mitigation measure shall be incorporated into all construction contract documentation. *Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments **MM CUL-6:** To address the possibility that archaeological resources may be encountered during grading or construction, a qualified professional archaeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources. *Timing/Implementation:* As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments	
Impact CUL-3: The project would potentially directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**MM CUL-7:** 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	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	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. *Timing/Implementation:* Prior to the issuance of a grading permit, pre-construction, and during ground-disturbing activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments	
Impact CUL-4: The project would potentially disturb any human remains, including those interred outside of formal cemeteries.	**MM CUL-8:** If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside 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 a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. This mitigation measure shall be incorporated into all construction contract documentation.	Less than significant impact with mitigation incorporated.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments	
Section 3.6 – Geology, Soils, and Seismicity		
Impact GEO-1: The project would potentially expose 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? Refer to Division of Mines and Geology Special Publication 42.	No mitigation measures are required.	Less than significant impact.
Impact GEO-2: The project would potentially expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	No mitigation measures are required.	Less than significant impact.
Impact GEO-3: The project would potentially expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.	No mitigation measures are required.	Less than significant impact.
Impact GEO-4: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact GEO-5: The project would not result in substantial soil erosion or the loss of topsoil.	No mitigation measures are required.	Less than significant impact.
Impact GEO-6: The project would potentially 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.	No mitigation measures are required.	Less than significant impact.
Impact GEO-7: The project would potentially be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	No mitigation measures are required.	Less than significant impact.
Impact GEO-8: The project would potentially have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	No mitigation measures are required.	No impact.
Section 3.7 - Hazards and Hazardous Materials		
Impact HAZ-1: The project would potentially create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	**MM HAZ-1:** Prior to demolition, an inspection shall be performed by an accredited building inspector for asbestos-containing materials (ACMs). All demolition that could result in the release of lead and/or asbestos must be conducted according to the California Occupational Safety and Health Administration (Cal/OSHA) standards. *Timing/Implementation:* As a condition of project approval, and implemented prior to demolition activities *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments	Less than significant impact with mitigation incorporated.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact HAZ-2: The project would potentially create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the hazardous materials into the environment.	No mitigation measures are required.	Less than significant impact.
Impact HAZ-3: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No mitigation measures are required.	No impact.
Impact HAZ-4: The project would not 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 not create a significant hazard to the public or the environment.	No mitigation measures are required.	No impact.
Impact HAZ-5: The project is not 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. The project would not result in a safety hazard for people residing or working in the project area.	No mitigation measures are required.	No impact.
Impact HAZ-6: The project is not within the vicinity of a private airstrip, and the project would not result in a safety hazard for the people residing or working in the project area.	No mitigation measures are required.	No impact.
Impact HAZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact HAZ-8: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Section 3.8 – Hydrology and Water Quality		
Impact HWQ-1: The project would potentially violate any water quality standards or waste discharge requirements.	**MM HWQ-1:** Prior to the issuance of grading permits for any portion or phase of the project, the developer shall prepare and submit a Preliminary Water Quality Management Plan and a Storm Water Pollution Prevention Plan (SWPPP) to the City of Wildomar for review and approval. (Note: a Draft WQMP, contained in Appendix F, has been submitted to the City for review and will be implemented in its final form once approved.) The WQMP and SWPPP shall contain specific Best Management Practices (BMPs) to limit stormwater pollution from construction and operational sources. These BMPs shall identify a practical sequence for site restoration, implementation, contingency measures, responsible parties, and agency contacts. The developer shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories: • Soil stabilization practices • Dewatering practices (if necessary) • Sediment and runoff control practices • Monitoring protocols • Waste management and disposal control practices Once approved by the City of Wildomar, contractors working on the site shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the WQMP and SWPPP.	Less than significant impact with mitigation incorporated.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	The WQMP and SWPPP shall identify pollutant sources that could affect the quality of stormwater discharges from the project site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project construction sites. To protect receiving water quality, the WQMP and SWPPP shall include but is not limited to the following elements: • Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas. • No disturbed surfaces will be left without erosion control measures in place during the winter and spring months (September 30–March 30). • Sediment shall be retained onsite by one or more basins, traps, or other appropriate improvements. Of critical importance is the protection of existing catch basins that eventually drain to the Santa Margarita River. • The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. • BMP performance and effectiveness shall be determined either by visual means where applicable (such as observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required to determine adequacy of the measure. • Native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance. *Timing/Implementation:* As a condition of project approval, and implemented prior to site grading. *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact HWQ-2: The project would not 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 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).	No mitigation measures are required.	Less than significant impact.
Impact HWQ-3: The project would potentially 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.	Mitigation Measure HWQ-1 is required.	Less than significant impact with mitigation incorporated.
Impact HWQ-4: The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	No mitigation measures are required.	Less than significant impact.
Impact HWQ-5: The project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact HWQ-6: The project would potentially otherwise substantially degrade water quality.	Mitigation Measure HWQ-1 is required.	Less than significant impact with mitigation incorporated.
Impact HWQ-7: The project would not place housing within a 100-year flood plain as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.	No mitigation measures are required.	No impact.
Impact HWQ-8: The project would not place within a 100-year flood plain structures which would impede or redirect flood flows.	No mitigation measures are required.	No impact.
Impact HWQ-9: The project would not 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.	No mitigation measures are required.	No impact.
Impact HWQ-10: The project would not be subject to or create inundation by seiche, tsunami, or mudflow.	No mitigation measures are required.	Less than significant impact.
Section 3.9 - Land Use and Planning		
Impact LUP-1: The project would not physically divide an established community.	No mitigation measures are required.	No impact.
Impact LUP-2: The project would potentially conflict with 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.	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact LUP-3: The project would potentially conflict with any applicable habitat conservation plan or natural communities conservation plan.	Implement MM BIO-1 through MM BIO-6 in Section 3.4, Biological Resources.	Less than significant impact.
Section 3.10 – Mineral Resources		
Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.	No mitigation measures are required.	Less than significant impact.
Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.	No mitigation measures are required.	Less than significant impact.
Impact MIN-3: The project will not contribute to the cumulative loss of known mineral resources that would be of value to the region and the residents of the state; nor will it contribute to the cumulative loss of availability of locally important mineral resource recovery sites delineated on local general plans, specific plans or other land use plans.	No mitigation measures are required.	Less than significant impact.
Section 3.11 - Noise		
Impact NOI-1: The project would potentially 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.	**MM NOI-1:** The developer shall implement all of the following mitigation measures as needed to achieve interior noise levels of 45 dBA CNEL at 1st and 2nd story units proposed adjacent to Prielipp Road: a. Air conditioning or mechanical ventilation. b. Double-paned glass. c. Solid core doors with weather stripping and seals. d. Stucco or brick veneer exterior walls or wood siding w/one-half inch thick fiberboard under-layer.	Less than significant impact with mitigation incorporated.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	e. Glass portions of windows/doors not to exceed 20 percent. f. Exterior vents facing noise source shall be baffled. **MM NOI-2:** The project applicant shall utilize noise attenuating shielding on all sides of the HVAC units in the three easternmost clusters of residential buildings and shall utilize HVAC units that are manufacture rated to not exceed 55 dBA Leq at 50 feet.	
Impact NOI-2: The project would potentially result in exposure of people to or generation of excessive groundborne vibration or groundborne noise levels.	**MM NOI-3:** During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site. *Timing/Implementation:* As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments **MM NOI-4: T**he contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction. *Timing/Implementation:* As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments **MM NOI-5:** The use of music or sound amplification on the project site during construction shall be prohibited.	Less than significant with mitigation incorporated.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	Timing/Implementation: As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments **MM NOI-6: T**he construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. *Timing/Implementation:* As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments **MM NOI-7:** Avoid the use of pavement breakers and vibratory rollers and packers near sensitive receptors. *Timing/Implementation:* As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments **MM NOI-8:** The construction contractor shall ensure that all on-site noise producing construction activities shall be limited to between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September or between the hours of 6:00 a.m. and 7:00 p.m. during the months of October through May. *Timing/Implementation:* As a condition of project approval, and implemented during construction *Enforcement/Monitoring:* City of Wildomar Building & Safety and Planning Departments	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact NOI-3: The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	No mitigation measures are required.	Less than significant impact.
Impact NOI-4: The project would potentially result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	MM NOI-3 through MM NOI-8 are required.	Less than significant impact with mitigation incorporated.
Impact NOI-5: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels.	No mitigation measures are required.	No impact.
Impact NOI-6: For a project within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels.	No mitigation measures are required.	No impact.
Section 3.12 - Population and Housing		
Impact POP-1: The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).	No mitigation measures are required.	Less than significant impact.
Impact POP-2: The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.	No mitigation measures are required.	

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact POP-3: The project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.	No mitigation measures are required.	Less than significant impact.
Section 3.13 - Public Services		
Impact PS-1: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?	No mitigation measures are required.	Less than significant impact.
Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for sheriff services?	No mitigation measures are required.	Less than significant impact.
Impact PS-3: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?		
Impact PS-4: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?	No mitigation measures are required.	Less than significant impact.
Impact PS-5: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?	No mitigation measures are required.	Less than significant impact.
Section 3.14 - Recreation		
Impact REC-1: The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact REC-2: The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.	No mitigation measures are required.	Less than significant impact.
Section 3.15 - Transportation and Traffic		
Impact TRANS-1: The project would potentially 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.	*Off-Site Mitigation* Based on the Traffic Impact Analysis for the project a traffic signal is warranted at the intersection of Elizabeth Lane/Clinton Keith Road prior to project opening (2015). Since the traffic signal is required for cumulative conditions without the project, the project shall be responsible for installing the improvement or contributing a pro-rata share. **MM TRANS-1:** Prior to the issuance of a certificate of occupancy for the project, the project applicant shall install or contribute toward the pro-rata share for the installation of a traffic signal at the intersection of Elizabeth Lane and Clinton Keith Road. *Timing/Implementation:* As a condition of project approval, and implemented prior to the issuance of a certificate of occupancy. *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments *On-site Mitigation* **MM TRANS-2:** Construction of on-site improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes. Prior to issuance of a certificate of occupancy, the project applicant shall do the following, consistent with Figure 6-1, Circulation Recommendations, in the project Traffic Impact Analysis by Trames Solutions, Inc. (2015) for the project: • Provide stop sign at the project driveways to control traffic leaving the project site.	Implementation of mitigation measures MM TRANS-1 and MM TRANS-2 will ensure that the intersection of Elizabeth Lane and Clinton Keith Road continues to operate at an acceptable level of service. However, the City cannot be certain that the other projects shown in Table 3.15 6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain, as Table 3.15 8 demonstrates. As shown in the table, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
	• Provide a dedicated eastbound left turn lane at the project's main driveway along Prielipp Road. • Construct the extension of Elizabeth Lane to its ultimate half-section width as a collector roadway from Prielipp Road to the project's northerly boundary. • Construct Jana Lane to its ultimate half-section width as a collector roadway from Prielipp Road to the Project's northerly boundary. • Construct Prielipp Road to its ultimate half-section width as a secondary roadway from Elizabeth Lane to the project's easterly boundary. • On-site traffic signing and striping shall be incorporated into construction plans for the project. • Verify that minimum sight distance is provided at the project driveways. *Timing/Implementation:* As a condition of project approval, and implemented prior to the issuance of a certificate of occupancy. *Enforcement/Monitoring:* City of Wildomar Engineering and Planning Departments	
Impact TRANS-2: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Impact TRANS-3: The project would not 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.	No mitigation measures are required.	No impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact TRANS-4: The project would potentially substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	Implement Mitigation Measures TRANS-1 and TRANS-2.	Less than significant impact.
Impact TRANS-5: The project would not result in inadequate emergency access.	No mitigation measures are required.	Less than significant impact.
Impact TRANS-6: The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.	No mitigation measures are required.	Less than significant impact.
Section 3.16 - Utilities and Service Systems		
Impact USS-1: The project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	No mitigation measures are required.	Less than significant impact.
Impact USS-2: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Impact USS-3: The project would not 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.	No mitigation measures are required.	Less than significant impact.

Table ES-1 (cont.): Executive Summary of Impacts and Mitigation Measures

Environmental Impact	Mitigation Measure	Level of Significance After Mitigation
Impact USS-4: The project would have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	No mitigation measures are required.	Less than significant impact.
Impact USS-5: The project would not 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.	No mitigation measures are required.	Less than significant impact.
Impact USS-6: The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.	No mitigation measures are required.	Less than significant impact.
Impact USS-7: The project would comply with federal, state, and local statutes and regulations related to solid waste.	No mitigation measures are required.	Less than significant impact.
Section 3.17 - Greenhouse Gases		
Impact GHG-1: Although the project would generate greenhouse gas emissions, either directly or indirectly, those emissions would not have a significant impact on the environment.	No mitigation measures are required.	Less than significant impact.
Impact GHG-2: The project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation measures are required.	Less than significant impact.

SECTION 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the Villa Siena Project (State Clearinghouse No. 2014041075). This document is prepared in conformance with CEQA (California Public Resources Code, Section 21000, et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000, et seq.), and city rules and regulations. This Draft EIR is intended to serve as an information document for the public agency decision-makers and the public regarding the Villa Siena Project (project).

The purpose of this Draft EIR is to disclose information to the public and to the decision-makers about the potential environmental effects of the project. An EIR does not recommend either approval or denial of a project; rather, it is intended to provide a source of independent and impartial analysis of the foreseeable environmental impacts of a proposed course of action. This Draft EIR describes the project, analyzes its environmental effects, and discusses reasonable mitigation measures and project alternatives that would avoid, reduce, or minimize environmental impacts.

1.1.1 - Overview

Historically, the project site has been used for residential purposes, and the current General Plan designates the project site as Medium High Density Residential (MHDR). The project proposes to develop 170 units of apartments contained within nine separate buildings. Eight buildings will total 235,904 square feet, and one building will total 14,553 square feet (totaling 250,457 square feet). Eight of the nine buildings would utilize a similar design scheme (20 units per buildings), and generally contain the same number of dwelling units per floor. The ninth building would utilize a similar design scheme and would contain half the number of dwelling units per floor (10 units). Additional components include a clubhouse with offices totaling 1,906 square feet; a pool and spa as well as open space; 368 parking spaces for residents and guests; landscaping; and minor roadways and sidewalks. The project would have a total lot coverage of 400,752 square feet. The project will require a General Plan Amendment from the current land use designation of MHDR to Very High Density Residential (VHDR). The project site consists of 10.02 acres, resulting in a gross density of approximately 17 units per acre, which is consistent with the proposed VHDR land use classification of 14-20 units per acre. Additionally, the project site is currently zoned Industrial Park (I-P) by the City of Wildomar Zoning Ordinance and will require a zone change to General Residential (R-3).

1.1.2 - Purpose and Authority

This Draft EIR provides a project-level analysis of the environmental effects of the project. The environmental impacts of the project are analyzed in this Draft EIR to the degree of specificity appropriate, in accordance with Section 15146 of the CEQA Guidelines. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning,

construction, and operation of the project. It also identifies the appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid potential impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Project Description
- Environmental Impact Analysis
- Cumulative Impacts
- Significant Unavoidable Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Environmental Issues Determined not to be Significant

1.1.3 - Lead Agency Determination

The City of Wildomar is designated as the lead agency for the project. CEQA Guidelines Section 15367 defines the lead agency as ". . . the public agency, which has the principal responsibility for carrying out or approving a project." Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

Lists of organizations and persons consulted, as well as report preparers are provided in Section 7, Persons and Organizations Consulted/List of Preparers of this Draft EIR.

1.2 - Scope of the EIR

The purpose of this EIR is to evaluate the potential environmental effects of the project and all actions related for the approval of the General Plan Amendment. A Notice of Preparation (NOP) was issued on April 21, 2014, pursuant to CEQA Guidelines, Sections 15082 (a), 15103, and 15375 (State Clearinghouse No. 2014041075). The NOP was circulated to responsible and trustee State agencies, local organizations, and interested individuals, to identify issues to be addressed in this Draft EIR. The 30-day circulation and review period required by CEQA concluded on May 20, 2014.

Pursuant to CEQA Guidelines Section 15082(c), the City of Wildomar held a public scoping meeting at 6:00 p.m., Monday, May 5, 2014 at 23873 Clinton Keith Road, Suite 111, Wildomar, California, 92595. Table 1-1 lists all NOP comment letters received, which are located in Appendix A.

Table 1-1: IS-NOP Comment Letters

Agency	Author	Date
State Agencies		
Department of Transportation (DOT)	Daniel Kopulsky, Office Chief, Community and Regional Planning	April 24, 2014

Table 1-1 (cont.): IS-NOP Comment Letters

Agency	Author	Date
South Coast Air Quality Management District (SCAQMD)	Ian MacMillan, Program Supervisor, CEQA-Intergovernmental Review Planning	May 1, 2014
Native American Heritage Commission (NAHC)	Dave Singleton, Program Analyst	May 1, 2014
California Department of Fish and Wildlife (CDFW) – Inland Deserts Region	Jeff Brandt, Senior Environmental Scientist	May 19, 2014
Local and Regional Agencies		
Penchanga Tribe Cultural Resources	Anna Hoover, Cultural Analyst	May 20, 2014
Southern California Edison (SCE)	Jeremy Goldman, Local Public Affairs Region Manager	May 20, 2014

1.2.1 - Environmental Issues Determined Not To Be Significant

CEQA Guidelines Section 15063 provides that if a lead agency determines that an EIR will clearly be required for a project, an Initial Study is not required. This Draft EIR is comprehensive in nature, evaluating all subject issues from the CEQA Appendix G Checklist. The following issues are addressed in this Draft EIR:

- Aesthetics, Light, and Glare
- Agricultural Resources and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology Soils, and Seismicity
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Greenhouse Gases

This Draft EIR addresses the short- and long-term effects of the project on the environment. It also evaluates the potential for the project to cause direct and indirect growth-inducing impacts, and includes a cumulative impact analysis. Alternatives to the project are also evaluated in this Draft EIR. Mitigation has been proposed for any potentially significant impacts. After the public comment period and finalization of this Draft EIR, a mitigation monitoring and reporting program will be developed as required by Section 15097 of the CEQA Guidelines.

This EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (Public Resources Code, Section 21000, et seq.), the Guidelines for Implementation of the California Environmental Quality Act published by the Resources Agency of the State of California (California Regulations Section 15000, et seq.), and the City's CEQA Guidelines.

1.2.2 - Potentially Significant Environmental Issues

The traffic analysis for the project contains recommended on-site and off-site improvements that have been incorporated as Mitigation Measures (MMs) TRANS-1 and MM TRANS-2. Table 3.15-8, evaluated in Section 3.15, Transportation and Traffic, shows that traffic resulting from regional growth will also impact the study area intersections and will cause the intersection of Elizabeth Lane/Clinton Keith Road to operate at an unacceptable level of service (LOS) without the proposed improvements. The required improvement is designed to address the proposed project's impacts and consequently reduces delay at the intersection of Elizabeth Lane/Clinton Keith Road caused by the project. As shown in Table 3.15-8, implementation of the proposed improvement reduces the delay at the Elizabeth Lane/Clinton Keith Road intersection to an acceptable LOS C (AM peak period), and LOS D (PM peak period). Table 3.15-8 shows that, with implementation of the intersection improvement discussed above, Cumulative 2015 with Project impacts to study area intersections would be less than significant.

However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain as shown in Table 3.15-8, that is, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable.

1.3 - Organization of the Draft EIR

This Draft EIR document is organized into the following main sections:

- **Executive Summary.** This section includes a summary of the Villa Siena Project and alternatives that are addressed in this Draft EIR. A brief description of the areas of controversy and a table summarizing the impacts, mitigation measures, and level of significance after mitigation are included in this section.
- **Section 1: Introduction.** This section provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Section 2: Project Description.** This section includes a detailed description of the project, including its location, site, and project characteristics. A discussion of the project objectives, intended uses of the EIR, responsible agencies, and approvals that are needed for the project are also provided.
- **Section 3: Environmental Impact Analysis.** This section analyzes the environmental impacts of the project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts,

mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Section 3 are as follows:

- **Section 3.1** – Aesthetics, Light, and Glare: Addresses the potential visual impacts of development of the project.
- **Section 3.2** – Agricultural Resources and Forestry Resources: Addresses the project's potential impacts on local agriculture/farmland and forest land.
- **Section 3.3** – Air Quality: Addresses the potential local and regional air quality impacts associated with the project implementation as well as consistency with the South Coast Air Quality Management District policies.
- **Section 3.4** – Biological Resources: Addresses the project's potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on the listed, proposed, and candidate threatened and endangered species.
- **Section 3.5** – Cultural Resources: Addresses the potential impacts of project development on known historical resources and potential archeological and paleontological resources.
- **Section 3.6** – Geology, Soils, and Seismicity: Addresses the potential impacts the project may have on soils, and assesses the potential effects of project development in relation to geologic and seismic conditions.
- **Section 3.7** – Hazards and Hazardous Materials: Addresses the likelihood of the presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
- **Section 3.8** – Hydrology and Water Quality: Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
- **Section 3.9** – Land Use and Planning: Addresses the potential related land use impacts associated with implementation of the project, including project compatibility with surrounding land uses and consistency with the City of Wildomar General Plan.
- **Section 3.10** – Mineral Resources: Addresses potential project impacts on known mineral resources and availability of locally important mineral resources.
- **Section 3.11** – Noise: Addresses the potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
- **Section 3.12** – Population and Housing: Addresses the potential impact of development in terms of population growth, employment opportunities, housing affordability, and the jobs-to-housing balance.
- **Section 3.13** – Public Services: Addresses the potential impacts upon service providers including fire, police, and schools.
- **Section 3.14** – Recreation: Addresses the potential impacts on the local and regional roadway system, public transportation, bicycle, and pedestrian access.
- **Section 3.15** – Transportation and Traffic: Addresses the potential impacts on the local and regional roadway system, as well as potential impacts related to emergency access, parking, and alternative transportation.
- **Section 3.16** – Utilities and Service Systems: Addresses the potential impacts upon service providers including water treatment, wastewater treatment, stormwater, and solid waste.
- **Section 3.17** – Greenhouse Gases: Addresses the potential impacts of the project regarding the generation of greenhouse gases.

- **Section 4: Cumulative Impacts Analysis.** This section discusses the cumulative impacts associated with the project, including cumulative impact setting and cumulative impact analysis.
- **Section 5: Alternatives to the Proposed Project.** This section compares the impacts of the project with project alternatives.
- **Section 6: Other CEQA Considerations.** This section provides a summary of significant environmental impacts, including growth-inducing impacts, and the project's significant and unavoidable impacts.
- **Section 7: Persons and Organizations Consulted.** This section contains a list of persons and organizations that were consulted with during the preparation of this Draft EIR as well as a list of persons who prepared this Draft EIR.
- **Section 8: References.** This section contains a full list of references that were used in the preparation of this Draft EIR.
- **Appendices:** The material in the appendices includes all notices and other procedural documents pertinent to this Draft EIR, as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by Section 15150 of the CEQA Guidelines, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and this Draft EIR has also been described.

These documents are specifically identified in Section 8, References, of this Draft EIR. In accordance with Section 15150 (b) of the CEQA Guidelines, these referenced documents and other sources used in the preparation of this Draft EIR are available for review at the City of Wildomar's address at 23873 Clinton Keith Road, Suite 201.

1.5 - Documents Prepared for the Project

The stand-alone technical studies prepared for the project are listed below:

- Air Quality and Global Climate Change Impact Analysis, dated June 23, 2014, Kunzman Associates, Inc.
- DBESP, dated January 27, 2015, RCA Associates, LLC.
- General Biological Resources Report, dated July 22, 2013, RCA Associates, LLC.
- Geotechnical Report, dated September 4, 2013, Earth-Strata, Inc.
- Noise Impact Analysis, dated June 25, 2014, Kunzman Associates Inc.

- Phase I Environmental Site Assessment (ESA), dated June 30, 2013, Earth-Strata, Inc.
- Phase I Historical/Archaeological Resources Survey, dated 2005, Jean A. Keller; and Updated Historical/Archaeological Resources Survey, dated July 5, 2013, CRM TECH
- Preliminary Water Quality Management Plan, dated September 4, 2014, Pacific Coast Land Consultants, Inc.
- Preliminary Hydrology Study, dated August 2, 2013 and revised September 11, 2014, Pacific Coast Land Consultants, Inc.
- Traffic Study, dated January 28, 2015, Trames Solutions, Inc.

1.6 - Lead Agency, Developer, and Consultant

The City of Wildomar is the lead agency in the preparation of this Draft EIR. The applicant/owner is Golden Eagle Multi-Family Residential Properties LLC. FirstCarbon Solutions (formerly Michael Brandman Associates) is the environmental consultant for the project.

1.7 - Review of this Draft EIR

Upon completion of this Draft EIR, a Notice of Completion (NOC) will be filed with the State Office of Planning and Research to begin the public review period (Public Resources Code Section 21161). Concurrent with the NOC, this Draft EIR will be distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of this Draft EIR, in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, this Draft EIR, including the technical appendices, is available for review at the City of Wildomar Planning Department, located at 23873 Clinton Keith Road, Suite 201. Agencies, organizations, and interested parties not previously contacted, or who did not respond to the NOP, currently have the opportunity to comment on this Draft EIR during the public review period on this Draft EIR.

Written comments on this Draft EIR should be addressed to:

Matthew C. Bassi, Planning Director
City of Wildomar
23873 Clinton Keith Road, Suite 201
Email: mbassi@cityofwildomar.org

Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review in the Final EIR at least 10 days prior to City of Wildomar City Council action on the project and the EIR. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the project.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 2: PROJECT DESCRIPTION

2.1 - Project Location

The project site is located in the City of Wildomar, Riverside County, California. Specifically, the project site is located within the Murrieta, California, United States Geologic Survey 7.5-minute topographic quadrangle map, (Range 3 West, Township 7 South, Section 6 (Latitude 33° 35' 29" North; Longitude 117° 13' 37" West). The project Assessor's Parcel Number is 380-290-029.

The project site consists of one parcel totaling 10.02 acres, located on the northeast corner of Elizabeth Lane and Prielipp Road, between Jana and Elizabeth Lanes. The existing residence address located within the project site is 36485 Jana Lane, Wildomar, California 92595. Refer to Exhibit 2-1, which shows the project's location in the region and Exhibit 2-2, which is a local vicinity map.

2.2 - Existing Conditions

2.2.1 - Project Site

The project site contains primarily undeveloped land, with one residential structure and detached garage totaling approximately 1,478 square feet and 660 square feet, respectively. The structures are located in the southeast corner of the project site, and comprise approximately 5 percent of the total project site. A water well, a trailer, and an enclosed construction area are also present on site. The existing residence utilizes water service supplied by a well located within the southeastern portion of the project site.

There is a natural drainage course (approximately 5,000 square feet [0.1-acre]) in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site. No open creek or stream channels cross the site. The elevation of the project site is approximately 1,360 feet above mean sea level with gentle sloping to the southwest. The topography on site is rolling, with deeper areas that collect surface runoff. There is a large area north of the project that drains into an area that carries collected runoff across the northeast corner of the site onto adjacent property to the east. The property has been disturbed by past human activities, and the majority of the site supports a disturbed grassland community. There are mature trees located on site, predominantly in the southeast corner of the project site, associated with the residential structure.

2.2.2 - Surrounding Land Use

The project site is adjacent to vacant land with scattered residences. To the north is a self-storage business, and further south across Prielipp Road are higher density residential properties. Interstate 15 is located less than a mile west of the project site, and is accessible by Clinton Keith Road. Below is a description of land uses located in the vicinity of the project site. Exhibit 2-3 is an aerial showing the project's location in relation to existing land uses.

North: The project site is adjacent to two residential properties to the north. Beyond the two residential properties, a self-storage business is located to the north.

South: The project site is located north of Prielipp Road and multi-unit residential properties. A single-family residential subdivision is located to the southeast.

East: The project site is bounded to the east by Jana Lane, residential properties, and vacant land. Single-family residential subdivisions are located further to the east.

West: Elizabeth Lane (an unpaved road) and vacant land are located to the west of the project site. Apartments are located further west of the project site.

2.2.3 - Land Use Designations

The City of Wildomar was incorporated on July 1, 2008; at that time, the City adopted the County of Riverside General Plan (including the Elsinore Area Plan) as the Wildomar General Plan. The City of Wildomar is in the process of drafting and approving an update to the City of Wildomar General Plan. Land use designations are based on descriptions in the County of Riverside General Plan (2008), as adopted by the City. Until the City's updated General Plan is adopted, the County of Riverside General Plan is the governing General Plan document for the City of Wildomar. References in this DEIR to the Wildomar General Plan are to the County of Riverside General Plan as it existed upon its adoption by the City as the City's General Plan in July 2008, except as it has been subsequently amended by the City. The General Plan (October 2003) can be located within the City of Wildomar's website, http://www.cityofwildomar.org/planning.asp.

Project Site

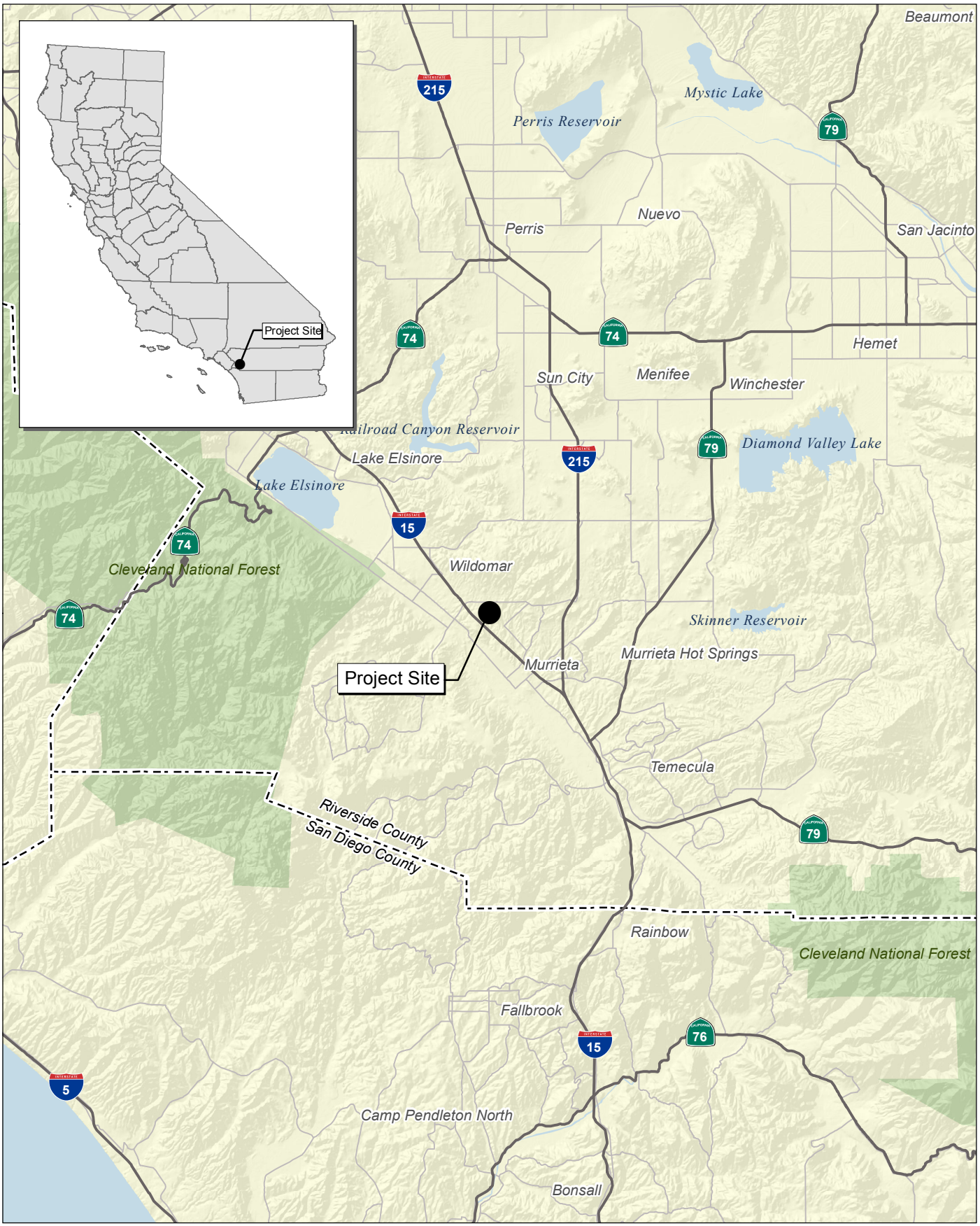
Historically, the project site has been used for residential purposes. The Wildomar General Plan designates the project site Medium High Density Residential (MHDR) (5 to 8 dwelling units per acre) and is currently zoned Industrial Park (I-P) by the City of Wildomar Zoning Ordinance. As a result, the project will require approval of a Zone Change to Residential (R-3) and a General Plan Amendment to permit Very High Density Residential (VHDR). Exhibit 2-4 depicts the zoning, and Exhibit 2-5 depicts the land use designations of the project site and adjacent land.

Surrounding Areas

The project site is bounded by predominately residential uses. The General Plan designates the areas to the north and southwest of the site as Medium High Density Residential (MHDR); to the west as Business Park (BP); and areas to the south are designated Very High Density Residential (VHDR).

2.2.4 - Project Applicant and Landowner

The project applicant and landowner is Golden Eagle Multi-Family Properties, LLC, located at 6201 Oak Canyon, Suite 200 Irvine, California.



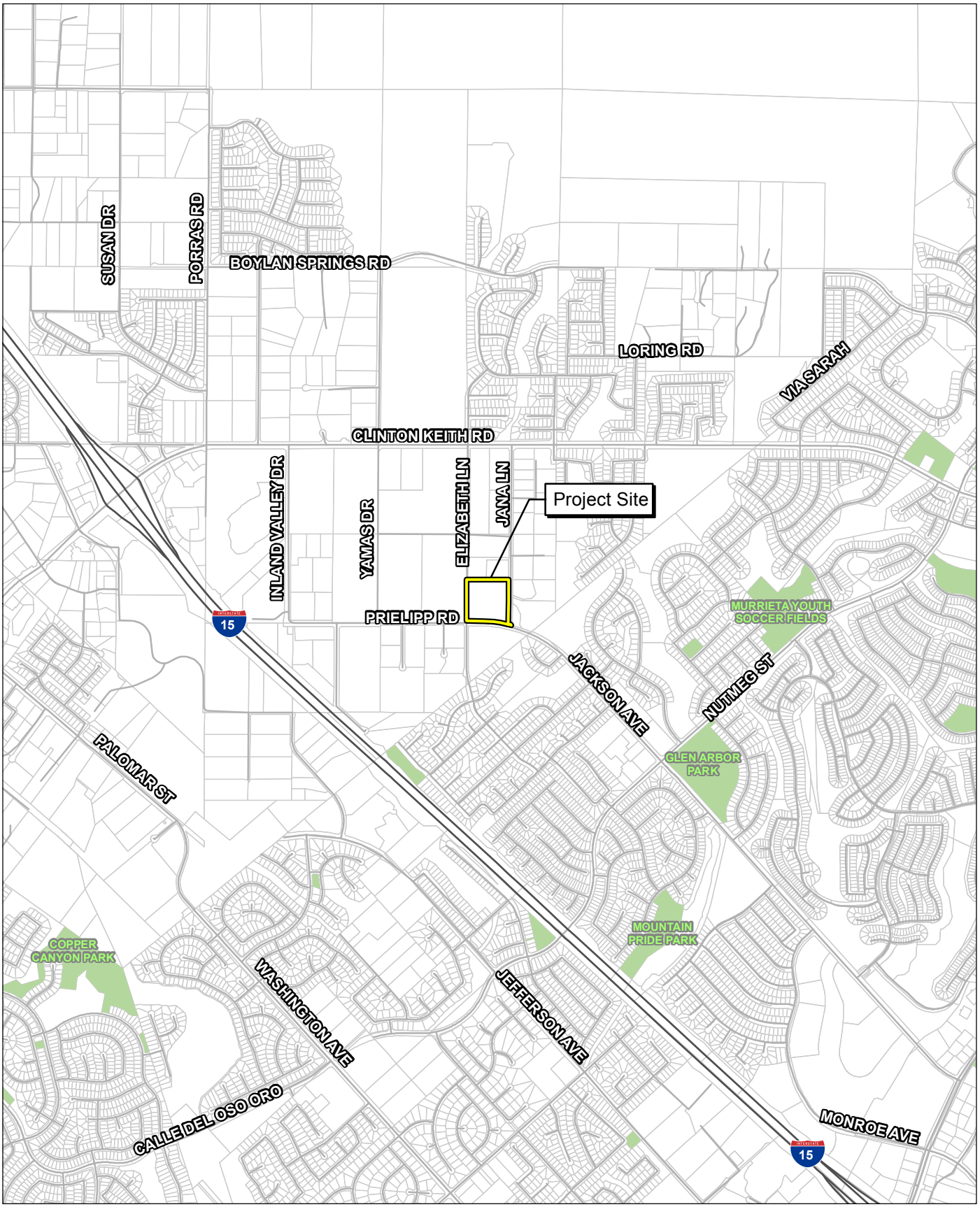
Source: Census 2000 Data, The CaSIL, FCS GIS 2014.

FirstCarbon® SOLUTIONS

5 2.5 0 5 Miles

Exhibit 2-1
Regional Location Map

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI and Riverside County GIS Data.

FirstCarbon® SOLUTIONS

2,000 1,000 0 2,000 Feet

Exhibit 2-2
Local Vicinity Map

THIS PAGE INTENTIONALLY LEFT BLANK

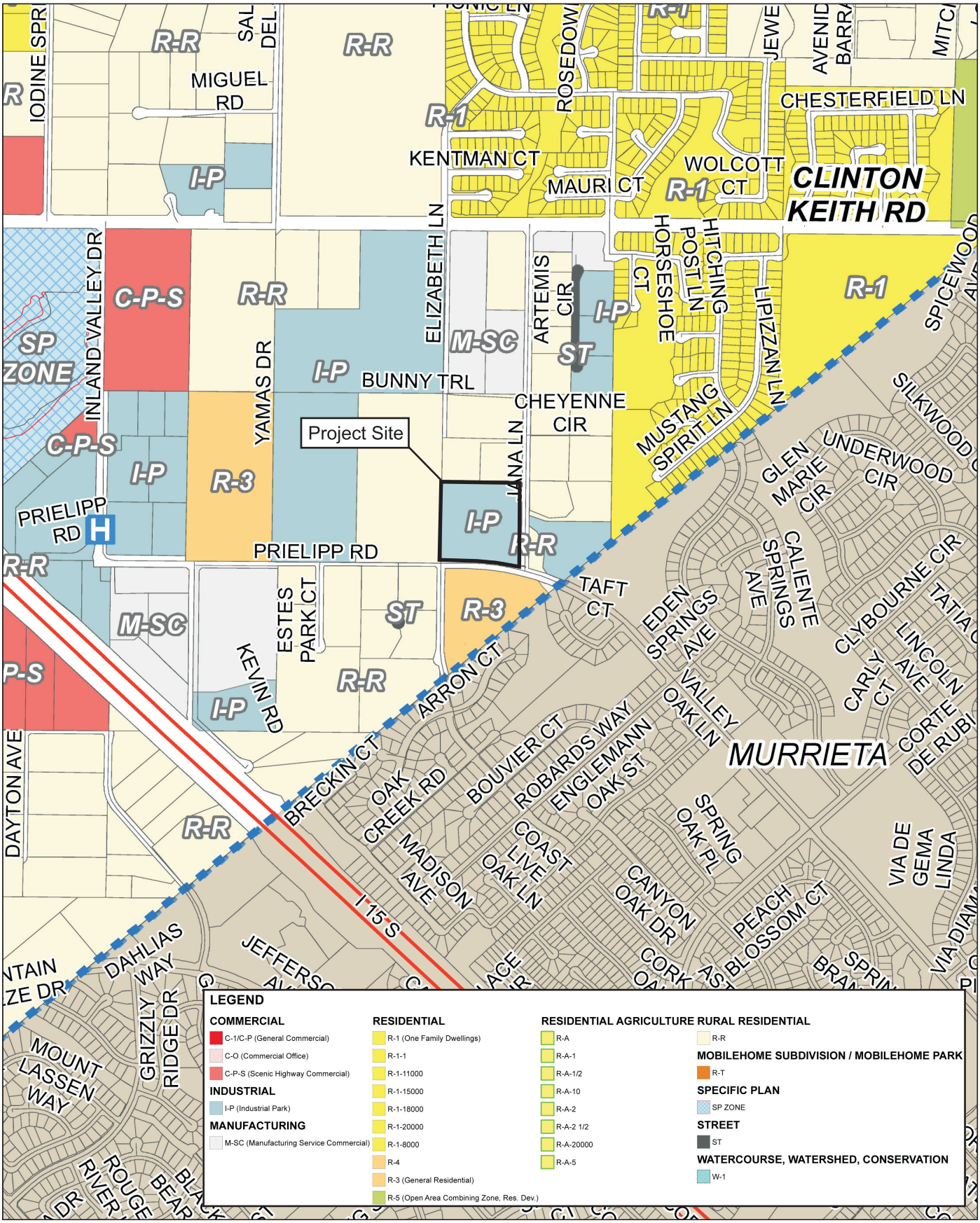
Source: ESRI Aerial Imagery.

FirstCarbon® SOLUTIONS

600 300 0 600 Feet

Exhibit 2-3
Project Location Map
and Surrounding Land Uses

THIS PAGE INTENTIONALLY LEFT BLANK

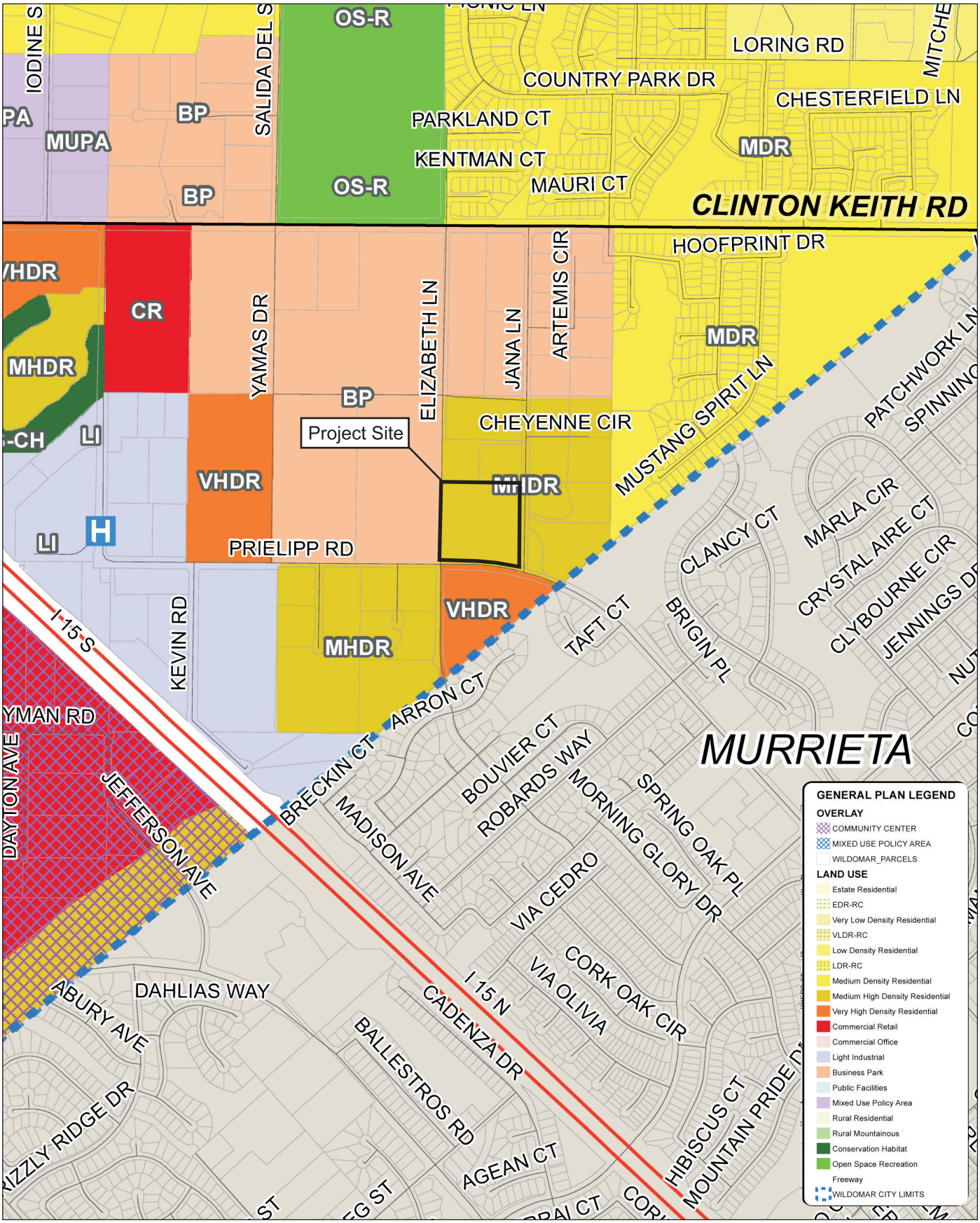


Source: City of Wildmar.

FirstCarbon® SOLUTIONS

Exhibit 2-4
Project Zoning

THIS PAGE INTENTIONALLY LEFT BLANK



Source: City of Wildmar.

FirstCarbon® SOLUTIONS

Exhibit 2-5
General Plan Land Use Map

THIS PAGE INTENTIONALLY LEFT BLANK

2.3 - Project Characteristics

2.3.1 - Description of the Project

Exhibit 2-6 depicts the project's site plan and building locations. The project proposes to develop 170 units of apartments contained within nine separate buildings. Existing structures on site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid waste standards.

Eight buildings will total 235,904 square feet, and one building will amount to 14,553 square feet (for a total of 250,457 square feet). Eight of the nine buildings would utilize a similar design scheme (20 units per building) and would generally contain the same number of dwelling units per floor. The ninth building would utilize a similar design scheme and would contain half the number of dwelling units per floor (10 units). Table 2-1 depicts the allocation of units per level of Buildings 1-8, which contain a total of 20 units each. Table 2-2 depicts the allocation of units per level of Building 9.

Table 2-1: Buildings (1–8) Unit Allocation

Floor/Level	Units	Area (S.F)
1	4	9,358
2	8	10,065
3	8	10,065
Total	**20**	**29,488**
Source: FCS 2014 and ADKVAS Group 2014.		

Table 2-2: Building 9 Unit Allocation

Floor/Level	Units	Area (S.F)
1	2	4,675
2	4	4,939
3	4	4,939
Total	**10**	**14,553**
Source: FCS 2014 and ADKVAS Group 2014.		

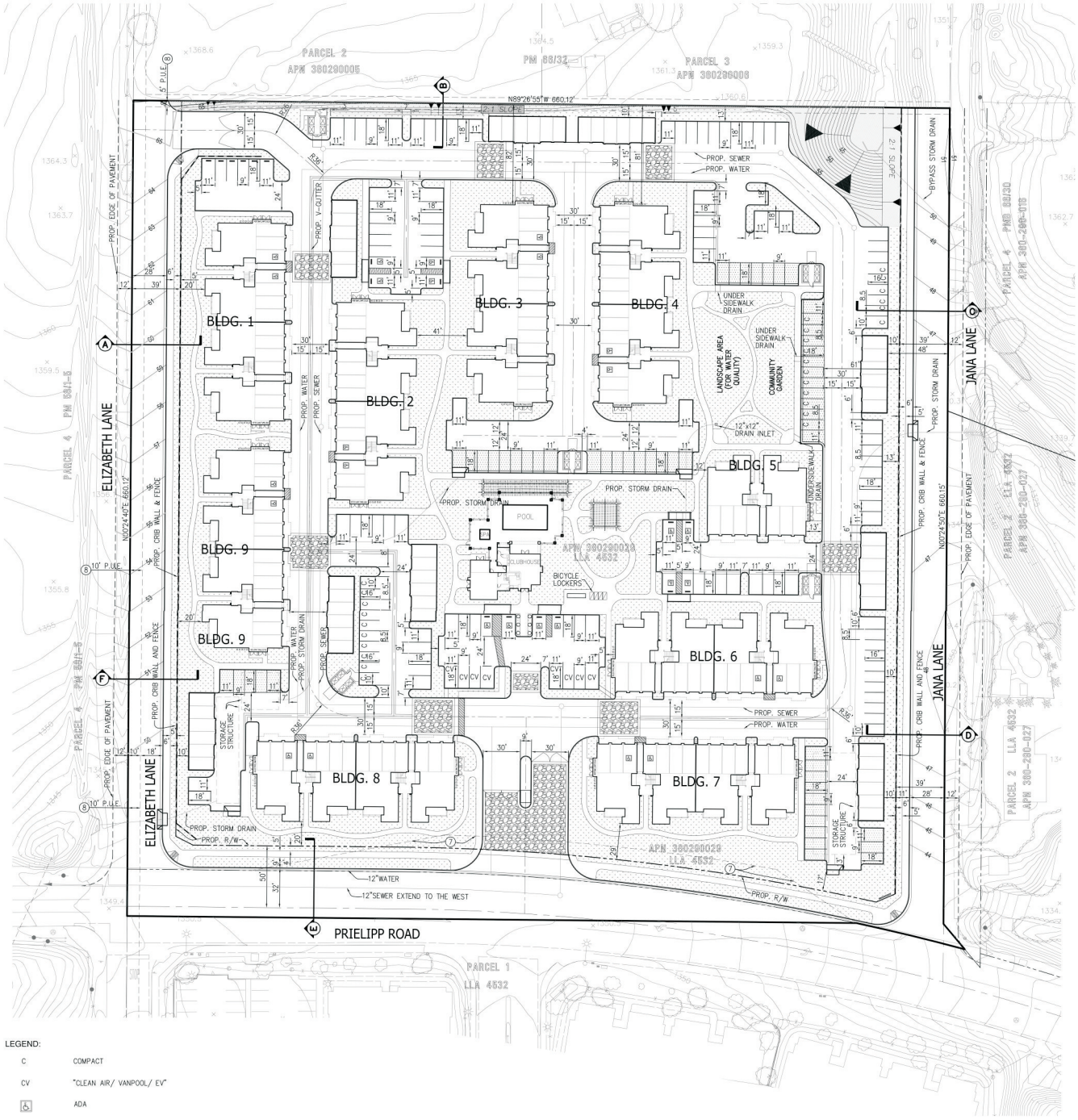
The project site consists of 10.02 acres, indicating that development of 170 units would yield a gross density of approximately 17 units per acre, which is consistent with the Very High Density Residential (VHDR) land use classification for 14-20 units per acre. Exhibit 2-7, Exhibit 2-8 and Exhibit 2-9 depict typical elevations for the nine residential buildings. Exhibit 2-10 provides the Plot Plan for the project. Table 2-3 summarizes project components.

Primary access to the project site would be from Prielipp Road near the center of the project site. Elizabeth Lane would also provide access to the project site from an entrance located in the northwestern corner of the site. Proposed roadway improvements are described in Section 2.3.2 below.

A total of 368 parking spaces would be provided for the project in accordance with the City's parking requirements, of which 306 would be assigned parking spaces, and 62 spaces would be unassigned guest parking spaces. Additionally, the project proposes 11,781 square feet of detached garages. The parking spaces alone which will be provided will meet the City's parking requirement and the garages provide additional parking to meet resident's needs.

Table 2-3: Project Components

Project Component	Characteristics
Dwelling Units	There are 170 apartments, with a total of 340 bedrooms including: • 34 one-bedroom/one-bath units • 102 two-bedroom/one-bath units • 34 three-bedroom/two-bath units
Roadways	Access to the project site is provided via Priellip Road, and along Elizabeth Lane.
Club House with Offices	The clubhouse is centrally located, totaling 1,906 square feet.
Recreation Center	Pool and spa with open space
Community Garden	A community garden is located northeast of the central pool area.
Landscaped Area	The site will incorporate landscaping percentage greater than the minimum required by the City Guidelines. Native/drought tolerant trees and shrubs will be a part of the site landscape concept.
Shade Structures	A shade structure is located immediately north of the pool with patio chairs below the structure. A shade structure is located immediately north of the tot lot.
Tot Lot	The tot lot is centrally located east of the clubhouse. The tot lot consists of a play structure for the 2-12 year old age group.
Mailboxes	Mailboxes are centrally located near the clubhouse.
Bike Storage Lockers	Bike storage lockers are located south of the tot lot and east of the mailboxes.
Parking	There are 368 parking spaces: 306 for residents and 62 guest spaces; and 11,781 square feet of detached garages.
Landscaping	The project contains 99,913 square feet of landscaping. Landscaping designs will comply with the City of Wildomar water efficient landscape ordinance for efficient use of water, water conservation, and water waste prevention.
Sidewalks/parking/alley	207,613 square feet.
Source: FCS, 2014.	



LEGEND:

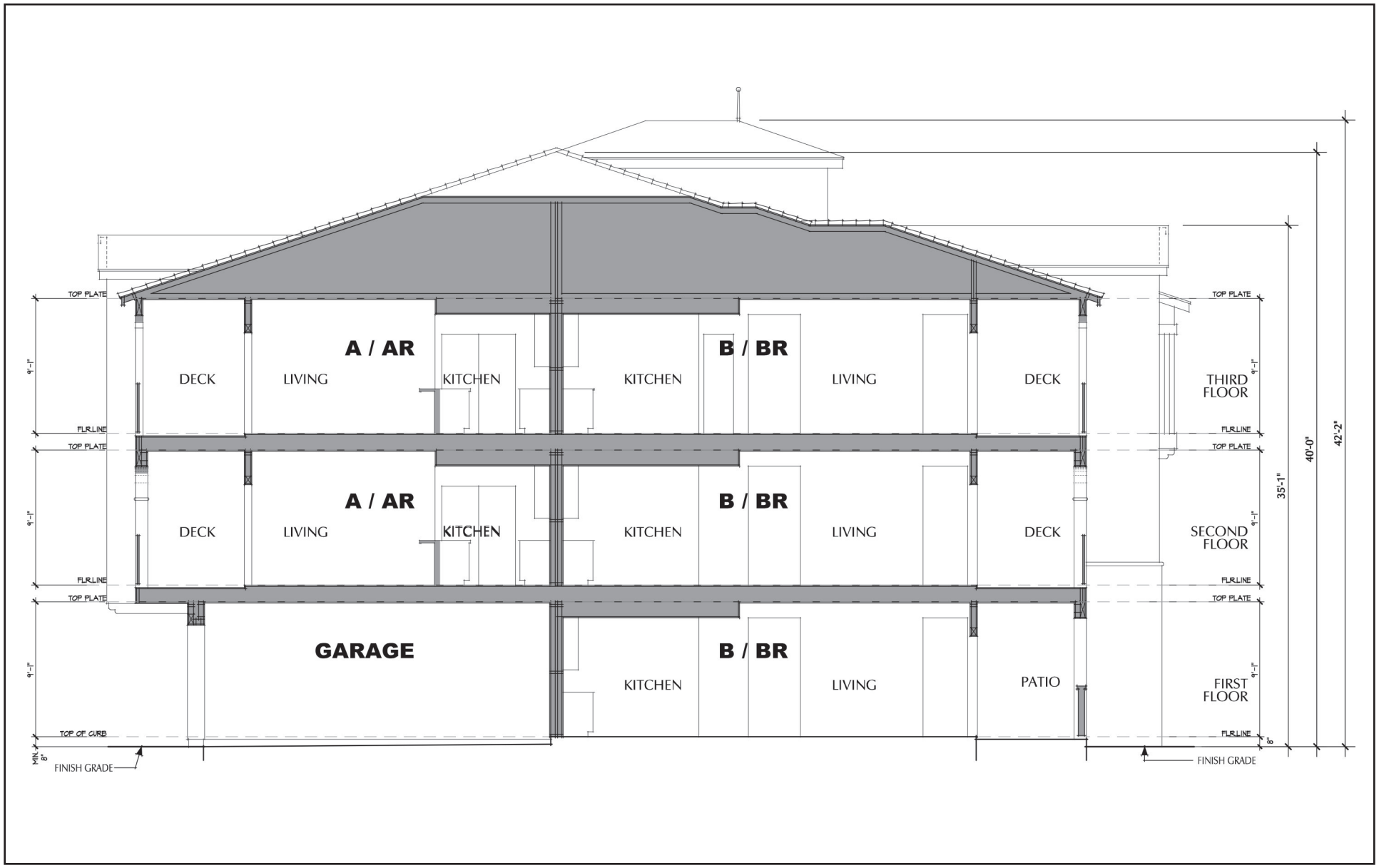
C	COMPACT
CV	"CLEAN AIR/ VANPOOL/ EV"
♿	ADA
▭	WHEEL STOP

Source: Pacific Coast Land Consultants, Inc., March 2014.

FirstCarbon® SOLUTIONS

Exhibit 2-6
Site Plan

THIS PAGE INTENTIONALLY LEFT BLANK

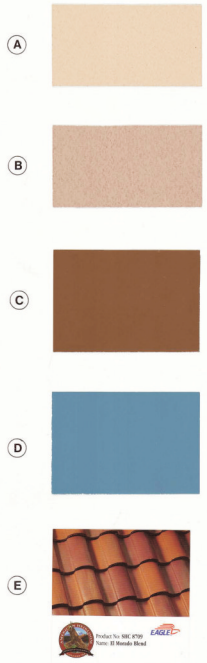


Source: ADKVAS Group, September 2014.

FirstCarbon® SOLUTIONS

Exhibit 2-7
Building Plan Sections

THIS PAGE INTENTIONALLY LEFT BLANK



FRONT ELEVATION

SCALE: 1/8" = 1'-0"

REAR ELEVATION

SCALE: 1/8" = 1'-0"

SIDE ELEVATION

SCALE: 1/8" = 1'-0"

BUILDING COLORS & FINISHES

ROOFING : (E) EAGLE CO. "S" MISSION STYLE "EL MORADO BLEND" SHC 8709 CONCRETE TILE ROOFING.

APARTMENT BUILDING :

EXTERIOR FINISH : MERLEX CO. SAND FINISH.

STUCCO COLORS : (A) MAIN BODY COLOR : MERLEX CO. P-225 INDIAN CLAY.
(B) ACCENT STUCCO : MERLEX CO. P-155 MESA BROWN.

PAINTED FINISHES : (C) SOFFIT BEAMS, IRON POOL ENCLOSURE, SECURITY GATE, BBQ & REFUSE TRELLIS BEAMS, REFUSE & GARAGE DOORS, DECK GUARDRAILS, STAIRWAY STRINGERS, WOOD POSTS & STUCCO OVER FOAM TRIMS. PAINT WITH PITTSBURGH PAINT OBELISK 415-7 LRV 11.

ENTRY DOORS : (D) PITTSBURGH PAINT AMERICAN ANTHEM 451-4 LRV 29.

REFUSE ENCLOSURES & GARAGE BUILDINGS (A) MERLEX CO. P-255 INDIAN CLAY.

WINDOWS & SLIDING DOORS : MILGUARD DUAL GLAZED WHITE VINYL UNITS.

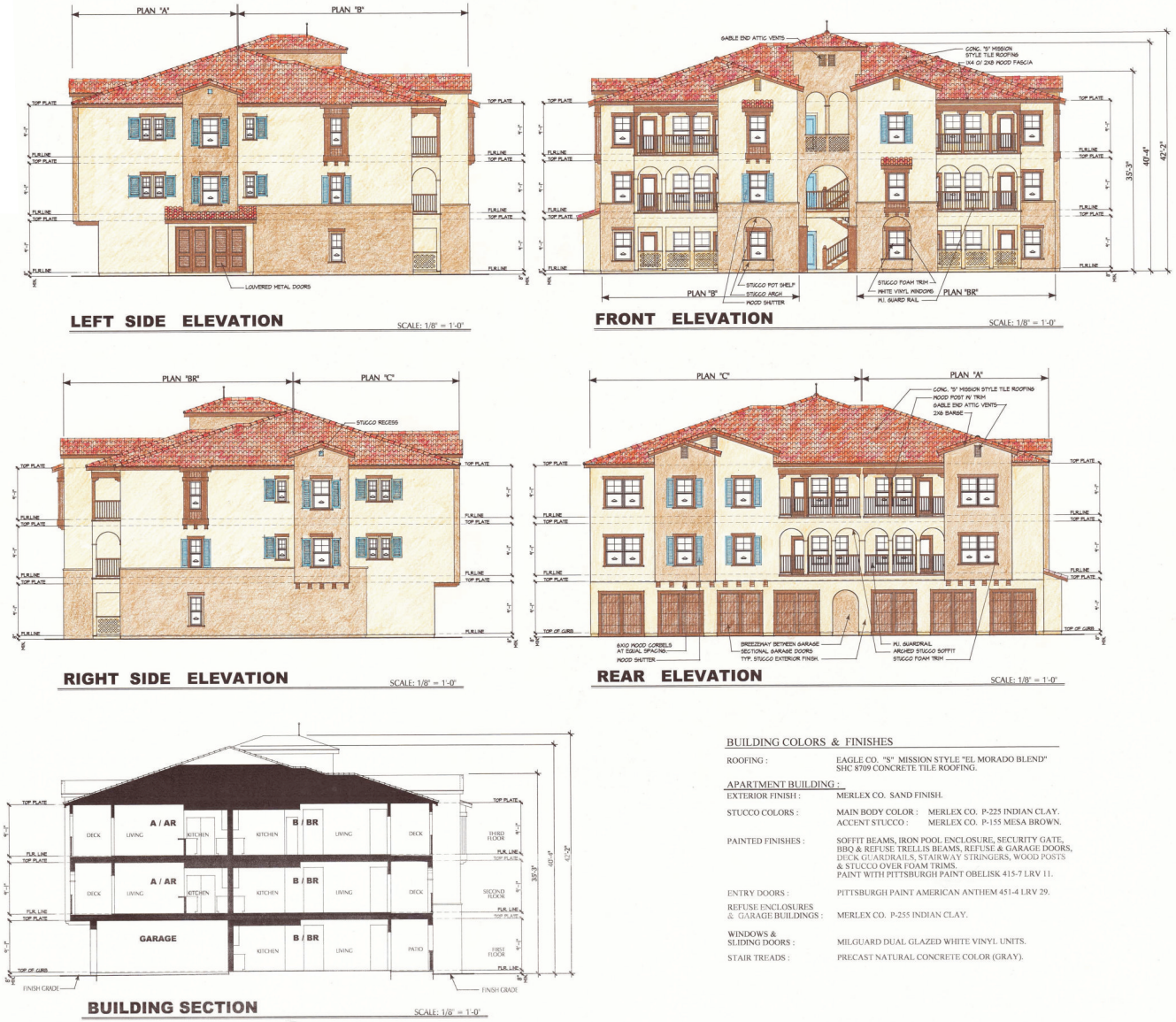
STAIR TREADS : PRECAST NATURAL CONCRETE COLOR (GRAY).

Source: ADKVAS Group, August 2013.

FirstCarbon® SOLUTIONS

Exhibit 2-8
Building Type 1 Elevations

THIS PAGE INTENTIONALLY LEFT BLANK



BUILDING COLORS & FINISHES

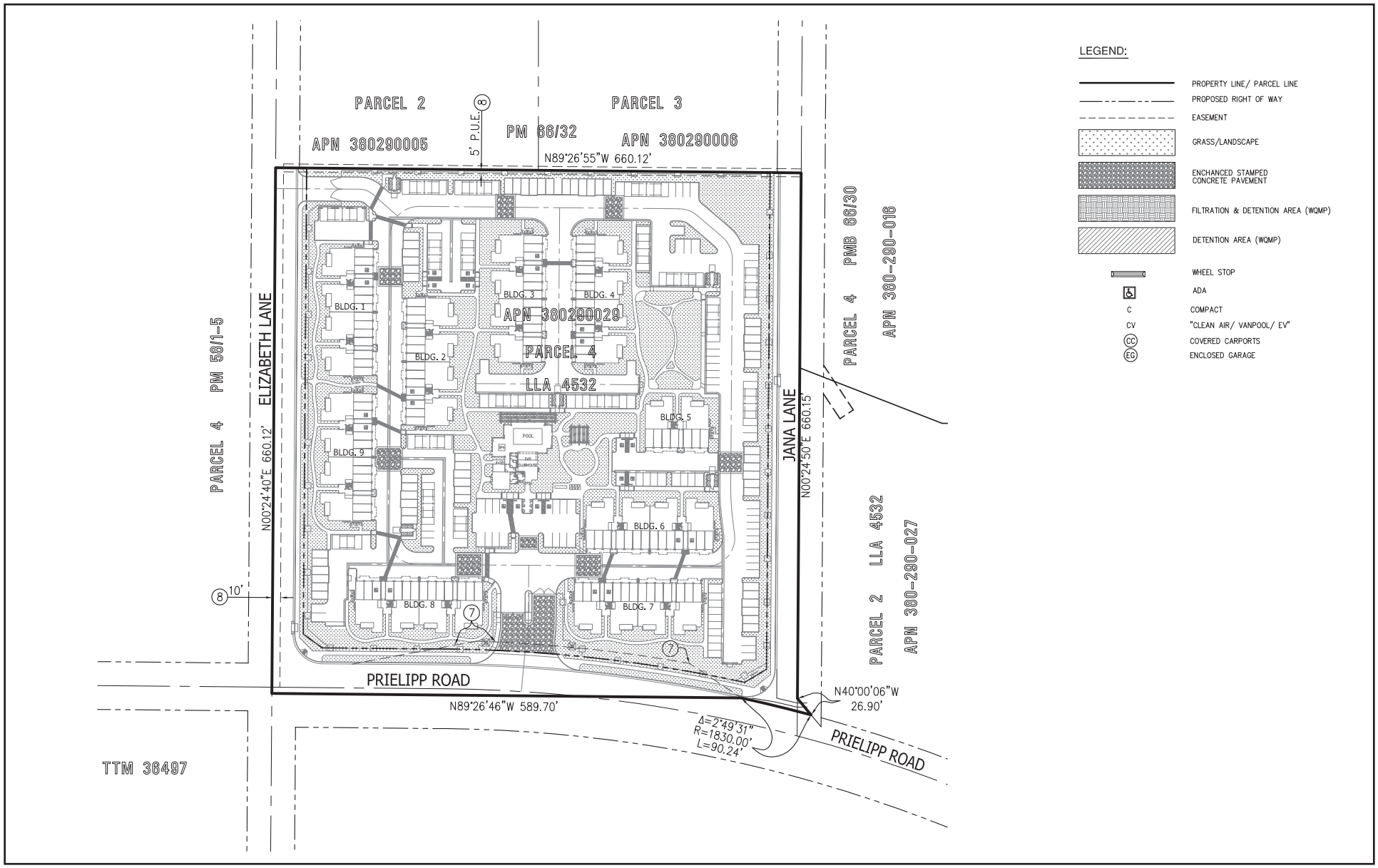
ROOFING :	EAGLE CO. "S" MISSION STYLE "EL MORADO BLEND" SHC 8709 CONCRETE TILE ROOFING.
APARTMENT BUILDING :	
EXTERIOR FINISH :	MERLEX CO. SAND FINISH.
STUCCO COLORS :	MAIN BODY COLOR : MERLEX CO. P-225 INDIAN CLAY. ACCENT STUCCO : MERLEX CO. P-155 MESA BROWN.
PAINTED FINISHES :	SOFFIT BEAMS, IRON POOL ENCLOSURE, SECURITY GATE, BBQ & REFUSE TRELLIS BEAMS, REFUSE & GARAGE DOORS, DECK GUARDRAILS, STAIRWAY STRINGERS, WOOD POSTS & STUCCO OVER FOAM TRIMS. PAINT WITH PITTSBURGH PAINT OBELISK 415-7 LRV 11.
ENTRY DOORS :	PITTSBURGH PAINT AMERICAN ANTHEM 451-4 LRV 29.
REFUSE ENCLOSURES & GARAGE BUILDINGS :	MERLEX CO. P-255 INDIAN CLAY.
WINDOWS & SLIDING DOORS :	MILGUARD DUAL GLAZED WHITE VINYL UNITS.
STAIR TREADS :	PRECAST NATURAL CONCRETE COLOR (GRAY).

Source: ADKVAS Group, March 2013.

FirstCarbon® SOLUTIONS

Exhibit 2-9
Building Type 2 Elevations

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Pacific Coast Land Consultants, Inc., November 2014.

FirstCarbon® SOLUTIONS

Exhibit 2-10
Plot Plan

THIS PAGE INTENTIONALLY LEFT BLANK

2.3.2 - Project Construction

The project is proposed to be completed in a single construction phase, and the analysis provided in this Draft EIR is based on the entire project being developed in a single phase.

The project's opening year is anticipated to be 2015. The project's mass grading activities would result in a balanced cut and fill ratio. The project would also construct half-width improvement to the following roadways along the project frontage in accordance with City Standards: Elizabeth Lane, Jana Lane, and Prielipp Road to the south.

2.3.3 - Master Utilities System

The following topics are discussed in detail within Section 3.16, Utilities and Service Systems.

Water and Sewer

The Elsinore Valley Water District will provide water and sewer service for the project, and have indicated that they have adequate capacity and infrastructure to support the multi-unit residential project. There is an existing 12-inch sewer gravity main line located along Prielipp Road that runs north along Jana Lane, and an 8-inch PVC sewer line located south of the project site, to which the project will tie. There is an existing 12-inch water line, as well as a parallel 36-inch water transmission line located in Prielipp Road.

Stormwater and Drainage

There is a large area north of the project site that drains in into an area that carries collected runoff across the northeast corner of the site, and onto an adjacent property to the east. The project will alter this flow pattern; thus, a pipe system is proposed to transmit the flow to an outlet point on the adjacent property within the current drainage course. Surface flows within the project site will be collected in catch basins and pipe systems to transmit flow into underground storage/filtration devices to meet regulatory treatment requirements. Proposed storm drains will be located near the central recreation area and west of Jana Lane. A proposed 12-inch-by-12-inch drain inlet will be located within the southern portion of the landscaped area. Drains will also be located under the sidewalk around the landscaped area and community garden.

Natural Gas

The Southern California Gas Company provides natural gas service to the project area, and would serve the project (Vargas, pers. comm.).

Solid Waste

Solid waste from the project site will be disposed of at the Badlands Sanitary Landfill, located 25 miles northeast of the project site, at 31125 Ironwood Avenue in Moreno Valley, California. The solid waste hauler may also have the ability to take the project-generated solid waste to other landfills. The estimated solid waste generation of the project is discussed in Section 3.16, Utilities and Service Systems, of this Draft EIR. This landfill has a remaining capacity of approximately 14,730,025 cubic yards and is not scheduled to close until 2024, after which other solid waste disposal sites will be used as necessary. (SWIS 2014).

Electricity

The Southern California Edison Company currently provides electricity for the project area, and will serve the project. There is a 12-kilovolt line running in the front of the project site that will provide adequate service to the site as confirmed by Southern California Edison (Judy, pers. comm.).

Telephone and Cable TV

Verizon and Time Warner currently provide telephone service as well as cable TV for the project area, and will serve the project.

2.3.4 - Project Objectives

A clear statement of project objectives will assist the City of Wildomar in developing a reasonable range of alternatives, and aid the decision-makers in their consideration of the project. The project objectives are listed below.

- **OBJ-1:** Provide housing for a growing population in a portion of the City of Wildomar where existing infrastructure is already in place.
- **OBJ-2:** Create an aesthetically pleasing living environment on the Project site.
- **OBJ-3:** Establish a viable, long-term and economically feasible use of the Project site.
- **OBJ-4:** Develop a very high-density residential development that is in keeping with the character of adjacent residences the south and east of the project site.
- **OBJ-5:** Provide a range of housing options to residents within the City of Wildomar by offering one, two, and three-bedroom units to accommodate a variety of family sizes and budgets.

2.3.5 - Required Approvals

The City of Wildomar has primary governmental authority for the approval and supervision of the project. Accordingly, the City is the Lead Agency for this project, as defined under CEQA, and is responsible for completing this Draft EIR, and to assess and disclose the environmental consequences associated with project implementation. Additional discretionary actions may also be required of other governmental entities. Other public agencies may use this Draft EIR in the decision-making or permit process and may consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

The project will require the following actions:

- General Plan Amendment from Medium High Density Residential (MHDR) to Very High Density Residential (VHDR)
- A Change of Zone from Industrial Park (IP) to General Residential (VHDR)
- Final EIR certification
- Plot Plan Approval (No. 13-0089)

- Encroachment Permit on City right-of-way for utilities
- Approval of a Water Quality Management Plan (WQMP)
- Acquisition of various ministerial permits, including grading and building permits and infrastructure improvement plans
- Any other approvals necessary to implement the project.

2.3.6 - Regulatory Authority

A number of other agencies in addition to the City of Wildomar will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR provides environmental information to these and other public agencies, which may be required to grant approvals or facilitate coordination with other agencies, as part of project implementation. These agencies may include but are not limited to the following:

- California Department of Fish and Wildlife (CDFW)
- U.S. Fish and Wildlife Service (USFWS)
- San Diego Water Quality Control Board (SDWQCB)
- South Coast Air Quality Management District (SCAQMD)
- Riverside County Flood Control and Water Conservation District (RCFCWCD)
- Southern California Association of Governments (SCAG)
- Elsinore Valley Municipal Water District (EVMWD)

2.4 - Intended Uses of this Draft EIR

This Draft EIR is being prepared by the City of Wildomar to assess the potential environmental impacts that may arise in connection with actions related to implementation of the project, including but not limited to necessary utility connections and onsite improvements such as streets and sidewalks to serve the project. Pursuant to CEQA Guidelines Section 15367, the City of Wildomar is the lead agency for the project and has discretionary authority over the project and project approvals. This Draft EIR is intended to be used by agencies listed in Section 2.3.6 in their decision-making process.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 3: ENVIRONMENTAL IMPACT ANALYSIS

Approach to Environmental Analysis

This Draft EIR provides analysis of impacts for 17 CEQA Guidelines topics. Sections 3.1 through 3.17 discuss the environmental impacts that may result with approval and implementation of the project.

Environmental Topics

The following environmental issues are addressed in Section 3, Environmental Impact Analysis:

3.1: Aesthetics, Light, and Glare
3.2: Agricultural and Forestry Resources
3.3: Air Quality
3.4: Biological Resources
3.5: Cultural Resources
3.6: Geology, Soils, and Seismicity
3.7: Hazards and Hazardous Materials
3.8: Hydrology and Water Quality
3.9: Land Use and Planning
3.10: Mineral Resources
3.11: Noise
3.12: Population and Housing
3.13: Public Services
3.14: Recreation
3.15: Transportation and Traffic
3.16: Utilities and Service Systems
3.17: Greenhouse Gases

Organization of Issue Areas

Each environmental issue addressed in Sections 3.1 through 3.17 contains the following information:

1. The environmental setting as it relates to the specific issue.
2. The regulatory framework governing that issue.
3. The impact significance criteria.
4. An evaluation of the project-specific impacts and identification of mitigation measures.
5. A determination of the level of significance after mitigation measures are implemented.

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of CEQA. CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds are developed using criteria from the CEQA Guidelines and checklist; state, federal, and local regulatory frameworks;

local/regional plans and ordinances; accepted practice; consultation with recognized experts; and professional opinions.

Format Used for Impact Analysis and Mitigation Measures

The format adopted in this EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AIR-1:	**An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact abbreviation identifies the section of the report (AIR for Air Quality in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.**

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to state and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AIR-1	Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact with which it is associated (**AIR-1** in this example).

Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

Abbreviations used in the impact and mitigation measure numbering are shown in Table 3-1:

Table 3-1: Environmental Issue Abbreviations

Code	Environmental Issue
AES	Aesthetics, Light, and Glare
AG	Agricultural Resources and Forest Resources
AIR	Air Quality
BIO	Biological Resources
CUL	Cultural Resources
GEO	Geology, Soils, and Seismicity
HAZ	Hazards and Hazardous Materials
HWQ	Hydrology and Water Quality
LUP	Land Use and Planning
MIN	Mineral Resources
NOI	Noise
POP	Population and Housing
PS	Public Services
REC	Recreation
TRANS	Transportation and Traffic
USS	Utilities and Service Systems
GHG	Greenhouse Gases

THIS PAGE INTENTIONALLY LEFT BLANK

3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing visual environment and potential effects from project implementation on the site and its surroundings. Descriptions and analysis in this section are based upon existing site conditions, review of the project site and setting on Google Earth, project site plans/exhibits, the City of Wildomar Municipal Code, and the Wildomar General Plan. The purpose of this section is to describe the existing aesthetic environment and to analyze any potential impacts that the project may have on aesthetics and visual resources.

3.1.2 - Environmental Setting

Visual Character

Existing Visual Characteristics of the Project Site

The site has a gentle slope to the southwest and is a rural residential developed, rectangular property that was previously used for agricultural activities (Earth-Strata, Inc. 2013). Mountain ranges are visible in the distance to the north, south, east, and west of the project site. The following is a brief discussion of the visual character of the area surrounding the project site.

- **North.** North of the project site are large lot single-family residences and the Clinton Keith Self Storage facility. Across Clinton Keith Road are single-family homes. A mountain range is present further north of the project site.
- **West.** Elizabeth Lane (an unpaved road), vacant land, and uneven terrain are located to the west of the project site. The Santa Rosa Apartment Homes are located further west across Yamas Drive.
- **East.** Jane Lane (an unpaved road), large lot residential properties, and vacant land/open space, and single-family subdivision bound the project site to the east.
- **South.** South of the project, across Prielipp Road, is the Gables Oak Creek Apartment Complex.

Views of the Project Site

Photographs showing the project site and adjoining areas are provided in Exhibit 3.1-1 and Exhibit 3.1-2. The majority of views to the project site are from vehicles driving along Prielipp Road, which runs along the southern boundary of the project site, as well as from the residential land uses in the project vicinity. From Prielipp Road, foreground views of the eastern portion of the project site are dominated by sandy slopes, telephone poles, and trees associated with the single-residence; middle ground views are dominated by trees, shrubs, residential structures, and other features associated with the residence (tanks, doghouse), etc.; background views include hills, sky, and more distant trees. Further west, the elevation of the site matches the road, allowing more expansive foreground, middle ground, and background views. In particular, fore-and middle ground views are dominated by dirt roads, grassy slopes, varied topography and telephone poles; background views are dominated by trees, mountains, and sky with interspersed developed features (tanks, buildings, etc.).

Foreground views from the project site to the north and east are similar to that of the residential portion of the site, dominated by trees, with residential structures and features; to the west by open grassy land and dirt roads; and to the south by a contemporary apartment complex. Middle ground views from the project site capture more recent residential development to the west, east, and south. While background views include these features, as well as mountains and sky.

The immediate setting of the site is rural; however, a conversion from a landscape of large-lot rural residential to suburban residential development (apartments and subdivisions) is emerging in the vicinity.

Light and Glare

The introduction of light from interior and outdoor uses can be a nuisance to adjacent residential areas and can diminish the view of the clear night sky. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into a light source. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated.

Existing light sources in the vicinity of the project site include streetlights, house lights, vehicle headlights from motor vehicles on local roadways, and parking lot and entrance lights at the apartment buildings located south of the project site. Light and glare currently produced onsite is negligible as most of the site is undeveloped, with the exception of the existing onsite structures.

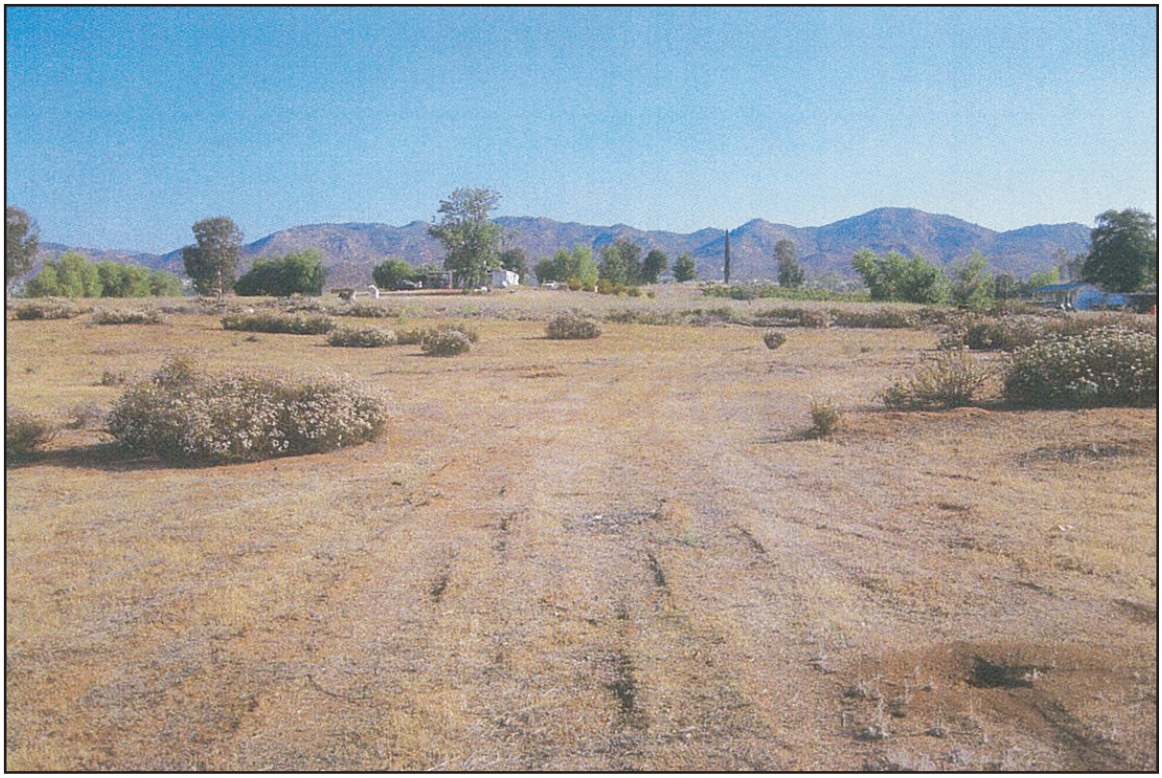
3.1.3 - Regulatory Framework

State

In 1963, the Legislature created the California Scenic Highway Program through Senate Bill 1467, the purpose of which is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are in the California Streets and Highways Code (Sections 260-263). Existing law provides Caltrans with full possession and control of all state highways. This legislation places the Scenic Highway Program under the stewardship of Caltrans. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways, or have been officially designated.

A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Regardless of landscape region, the highway should traverse an area of outstanding scenic quality, containing striking views, flora, geology, or other unique natural attributes. Adverse effects are characterized as minor, moderate, or major. Visual intrusions are evaluated by Caltrans in the following manner:

- The more pristine the natural landscape is and less affected by intrusions, the more likely the nominated highway will qualify as scenic.



View of the Project Site looking north.

View of the Project Site looking east.

Source: RCA Associates, LLC. July 2013 General Biological Resources Assessment.

FirstCarbon® SOLUTIONS

Exhibit 3.1-1
Views of the Project Site Looking North and East

THIS PAGE INTENTIONALLY LEFT BLANK

View of the Project Site looking west.

View of the Project Site looking south.

Source: RCA Associates, LLC. July 2013 General Biological Resources Assessment.

FirstCarbon® SOLUTIONS

Exhibit 3.1-2
Views of the Project Site Looking West and South

THIS PAGE INTENTIONALLY LEFT BLANK

- Where intrusions have occurred, the less impact they have on an area's natural beauty, the more likely the nominated highway will qualify as scenic.
- The extent to which intrusions dominate views from the highway will determine the significance of their impact on the scenic corridor.

Interstate 15 (I-15) from the City of Corona, south to the San Diego County line has been designated as an Eligible State Scenic Highway. State Route 74 has also been designated as an Eligible State Scenic Highway.

The status of a proposed state scenic highway changes from eligible to officially designated when the local governing body applies to the California Department of Transportation (Caltrans) for scenic highway approval, adopts a Corridor Protection Program, and receives notification that the highway has been officially designated a Scenic Highway (California Department of Transportation 2013b). The goal of a Corridor Protection Program is to ensure that activities within the scenic corridor are compatible with scenic resource protection and consistent with community values, while still allowing appropriate development. Where applicable, a Corridor Protection Program might include mitigation such as requiring minimum setbacks, landscaping and screening, and controlling outdoor advertising. Caltrans performs a compliance review of scenic highways every five years, or more often if appropriate. Caltrans is authorized by statute to revoke an official scenic highway designation if it determines that the Corridor Protection Program or the scenic quality of the corridor is no longer in compliance. [1.]

Local Regulations

Wildomar General Plan

Land Use Element

Policies within the Land Use Element of the General Plan determine how land is developed in the County. Policies within the Land Use Element, pertaining to project design, scenic corridors, and land use compatibility include the following:

Project design policies are intended to address the importance of detail at the parcel and project level in achieving the vision for Riverside County:

- Policy LU 4.1 requires that new developments be located and designed to visually enhance the character of the surrounding area through consideration of concepts such as compliance with the design standards of the appropriate area plan land use category, including consistent and well-designed signage that is integrated with the building's architectural character; and mitigating noise, odor, lighting, and other impacts on surrounding properties.
- Policy LU 4.2 requires property owners to maintain structures and landscaping to a high standard of design, health, and safety.

[1] Website http://www.dot.ca.gov/aboutcaltrans.htm. Accessed June 16, 2014.

Wildomar General Plan Multipurpose Open Space Element

Policies within the Multipurpose Open Space Element of the General Plan protect resources and ensure that future development enhances resources:

- **Policy OS 21.1:** Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.

The Elsinore Area Plan

The project site is located within The Elsinore Area Plan, which is a component of the Wildomar General Plan and provides information regarding scenic highways. I-15 from the City of Corona, south to the San Diego County line has been designated as an Eligible State Scenic Highway. State Route 74 has also been designated as an Eligible State Scenic Highway. The following Elsinore Area Plan policy is applicable to these highways:

- **Policy ELAP 13.1:** Protect Interstate 15 and State Route 74 from change that would diminish the aesthetic value of adjacent properties through adherence to the Scenic Corridors sections of the General Plan Land Use and Circulation Elements**.**

The western segment is a secondary County entrance road and will serve as a link to Orange County's system of scenic routes. The scenic highways designated within the Elsinore Area Plan are depicted on Figure 9, Scenic Highways of the Elsinore Area Plan. This exhibit indicates that there are no roads in the project vicinity (such as Clinton Keith Road, Elizabeth Lane, Prielipp Road or Jana Lane) designated as Scenic Highways.

Mt. Palomar Nighttime Lighting

The Mount Palomar Observatory, located in San Diego County, requires darkness so that the night sky can be viewed clearly. The presence of the observatory necessitates unique nighttime lighting standards in the area. The policy below is intended to limit light leakage and spillage that may obstruct or hinder the view. The project is located in Zone B, approximately 26 miles from Mt. Palomar Observatory. The applicable Elsinore Area Plan policy is as follows:

- **ELAP 10.1:** Adhere to the lighting requirements of Riverside County for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.

City of Wildomar Municipal Code and Zoning Ordinance

The City of Wildomar Municipal Code includes standards and regulations pertaining to the aesthetics of the City. Chapter 12.08.05, Tree Removal, of the Municipal Code contains provisions for the removal of trees within the City of Wildomar right-of-way of any City street. Additionally, Chapter 8.64, Light Pollution, provides regulations for outdoor lighting in order to preserve the access to the dark night sky, reduce light pollution, minimize adverse offsite impacts of lighting, conserve energy and resources, and ensure adequate lighting for the safety, security, and well-being of persons engaged in outdoor nighttime activities (City of Wildomar Municipal Code).

3.1.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

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

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

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

3.1.5 - Project Impact Analysis

Scenic Vista

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista.

Impact Analysis

A scenic vista is considered a view that has remarkable or unique scenery or resources that are indigenous to a specific area. While the project site does contain trees and generally maintains a rural aesthetic, it is not considered part of a scenic vista.

The project would convert open space, and a large-lot rural residential landscape to a high-density residential development. Thus, foreground and middle-views from adjacent properties would change from sandy slopes, trees, and residential structures to a more organized, developed landscape associated with the new development, and consistent with other recent development changes associated with development of apartments and subdivisions in the area. Background views of the mountains may be diminished from certain vantages, especially nearest to the project site, but would remain prominent from most vantage points as the maximum building height is 42 feet. In addition, the project site is not part of a designated scenic vista. Therefore, the project would result in a less than significant impacts related to substantial adverse effects on a scenic vista.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Scenic Resources within a State Scenic Highway

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway.

Impact Analysis

The I-15 Freeway, listed by the State as eligible for designation as a State Scenic Highway, is located approximately half a mile west of the project site[2]. The status of the I-15 Freeway as an eligible State Scenic Highway only means it is eligible to be designated when a local governing body applies to Caltrans for such an approval and adopts a Corridor Protection Plan. No roadways in the project vicinity are designated as a State or County Scenic Highway. In addition, the project site is not visible from I-15, and, therefore, the project would not have any impact on a state scenic highway. For these reasons, the project will not have a substantial effect upon a scenic highway corridor and no impacts would occur.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Visual Character

Impact AES-3: The project would not substantially degrade the existing visual character or quality of the site and its surroundings.

Impact Analysis

The existing visual character of the site is that of rural residential, dominated by expansive views of open space and unpaved roads, with clusters of residential features including trees, and housing structures and related features. Mainly residential developments and a vacant lot surround the project site, specifically a three-story apartment building to the south.

Development of the project site will create short-term aesthetic impacts during project construction, which includes construction equipment and machinery. However, these aesthetic impacts are anticipated to be less than significant because they are limited to the short-term construction phase of the project.

[2] http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm. Accessed June 16, 2014.

Development of the project will convert open space and a single rural residence into a formalized high-density residential land use, fundamentally changing the visual character of the site from rural to suburban. Photographs showing the project site and adjoining areas are provided in Exhibit 3.1-1 and Exhibit 3.1-2. Additionally, refer to Exhibit 3.1-3a through Exhibit 3.1-3d, and Exhibit 3.1-4 for Architectural Plans, Building Floor Plans, and Landscaping Plans. Building Elevations are contained in Exhibits 2-8 and 2-9 of the Project Description. The change in land use is consistent with recent development, including apartments to the south and subdivisions to the east and west, as well as consistent with the emerging development pattern for the area—which is trending from rural to suburban overall. The proposed development is consistent with the "Medium High Density Residential" General Plan designation of the site and will feature an attractive architectural design, landscaped/open space areas, and will have a unified aesthetic.

The project will remove existing vegetation and create a residential development in an area in which residential development currently exists. As proposed in the landscape plan, the project site will incorporate a variety of trees, shrubs, and other vegetation throughout the project site. The project will also include several monumental structures, which includes an entry monument with distinguishing features such as tile roof, manufactured stone veneers, and wood corbels. Because of the proposed project's similarity to existing land uses, the project would not substantially degrade existing visual character or quality of the site or surrounding areas. Thus, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Light or Glare

Impact AES-4:	**The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Impact Analysis

The development of the project would create additional sources of light and glare, both during construction and after project buildout. Glare during project construction would be from sun reflection on construction vehicles. Lighting associated with project construction is anticipated to be from security lighting for the construction site. After project development, sources of light and glare are anticipated to be from windows on buildings, residential lighting, security lighting, glare from vehicle windows, and light from vehicle headlights.

The existing project site does not produce glare, and light sources are limited to the residence, which is largely shielded by trees. The project would introduce new light sources in the vicinity at night.

Additionally, the windows of the structures may create a glare during the day. The lighting for buildings, nearby streets, and outdoor parking lots would be a potential source of glare and "sky glow" if not properly designed, creating a new source of light and glare to residences in the project vicinity.

The project is located approximately 28 miles northwest of the Mt. Palomar Observatory, within Zone B. City policy requires that lighting associated with new development projects be designed in a manner that prevents the direction or reflection of annoying light and glare onto nearby uses. In accordance with Section 8.64.150, Residential lighting provisions, of the City's Municipal Code, all outdoor luminaires shall be located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way. The project will comply with all applicable city requirements regarding lighting. Light fixtures would be installed on the building exteriors, at the main entrance, and in parking areas.

Based on the photometric plan, the proposed project would have 43 pole-mounted, single deco lights placed onsite in parking areas, and at building exteriors. Nine pole-mounted, back-to-back deco lights would be installed in areas near the entryway on Prielipp Road and the entry way entering the northwest portion of the site (Photometric Plan, Pacific Coast Land Consultants July 2013). With conformance to lighting requirements, the project would not adversely affect nighttime views in the area.

Potential sources of glare from the project include windows and vehicles. However, the proposed fencing and landscaping, including trees, would act as a visual barrier for some of the building features, including windows and light fixtures. These additional design features would help soften the visual impact of the buildings and reduce the incidence of glare from the proposed project. Based on the above considerations, impacts related to glare would be less than significant.

Level of Significance Before Mitigation

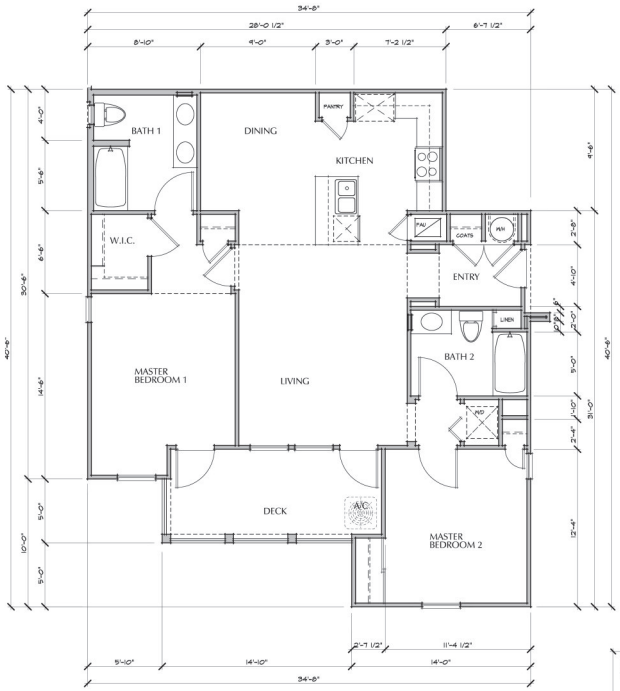
Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

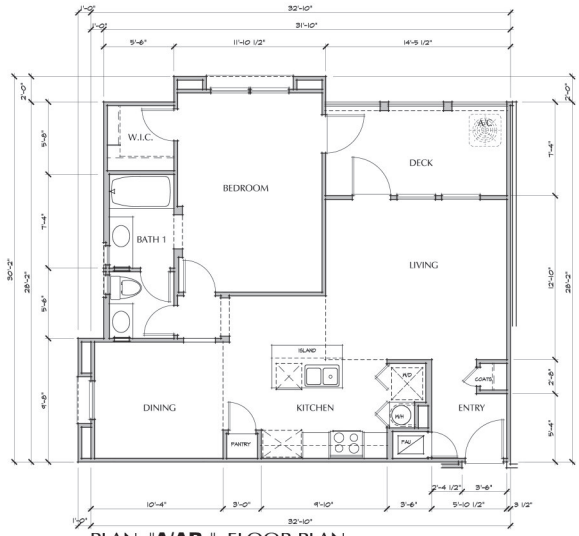
Less than significant impact.



PLAN "**B/BR**" FLOOR PLAN

SCALE: 1/4" = 1'-0"

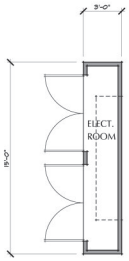
FLOOR : 1,083 SQ. FT.
DECK : 123 SQ. FT.



PLAN "**A/AR**" FLOOR PLAN

SCALE: 1/4" = 1'-0"

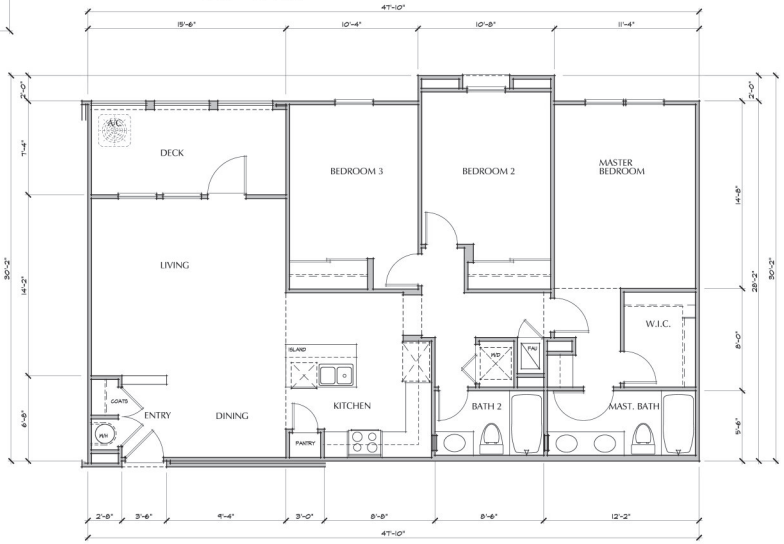
FLOOR : 812 SQ. FT.
DECK : 106 SQ. FT.



ELECT. ROOM

SCALE: 1/4" = 1'-0"

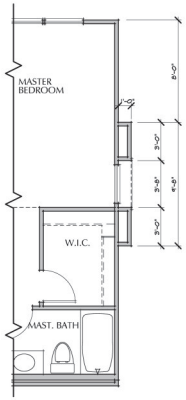
AREA 45 SQ. FT.



PLAN "**C/CR**" FLOOR PLAN

SCALE: 1/4" = 1'-0"

FLOOR : 1,243 SQ. FT.
DECK : 114 SQ. FT.



PLAN **"CX"**

BLDG. TYPE - II

Source: ADKVAS Group, September 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.1-3a
Architectural Plans

THIS PAGE INTENTIONALLY LEFT BLANK

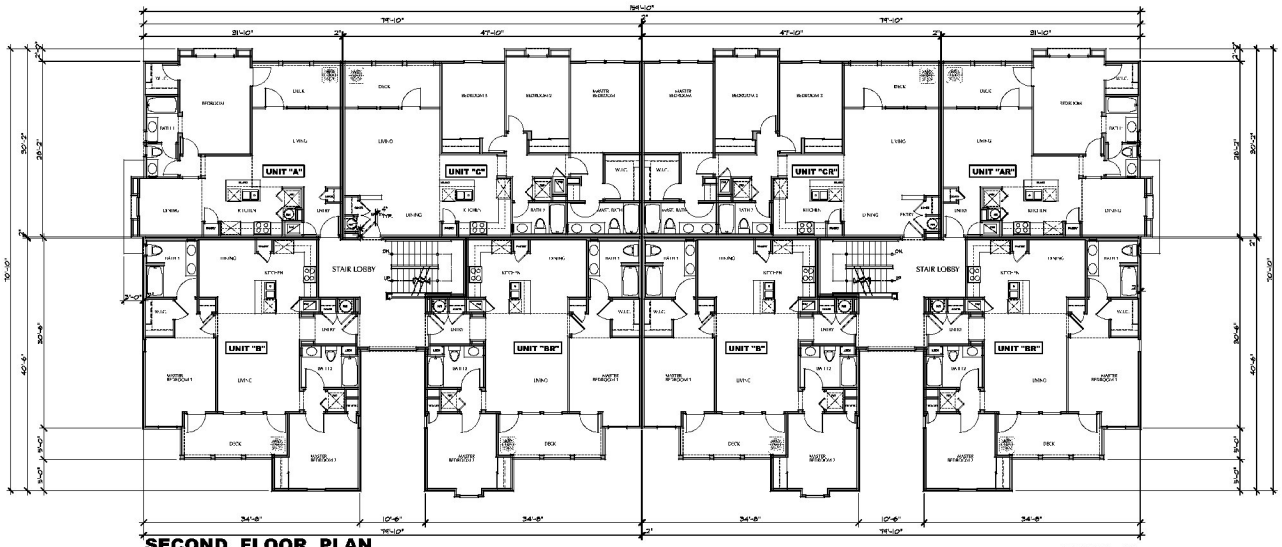
OCCUPANCY GROUP / BLD'G CLASSIFICATION

OCCUPANCY GROUP : R-2 DWELLINGS
U DETACHED GARAGES

CONSTRUCTION TYPE : VA

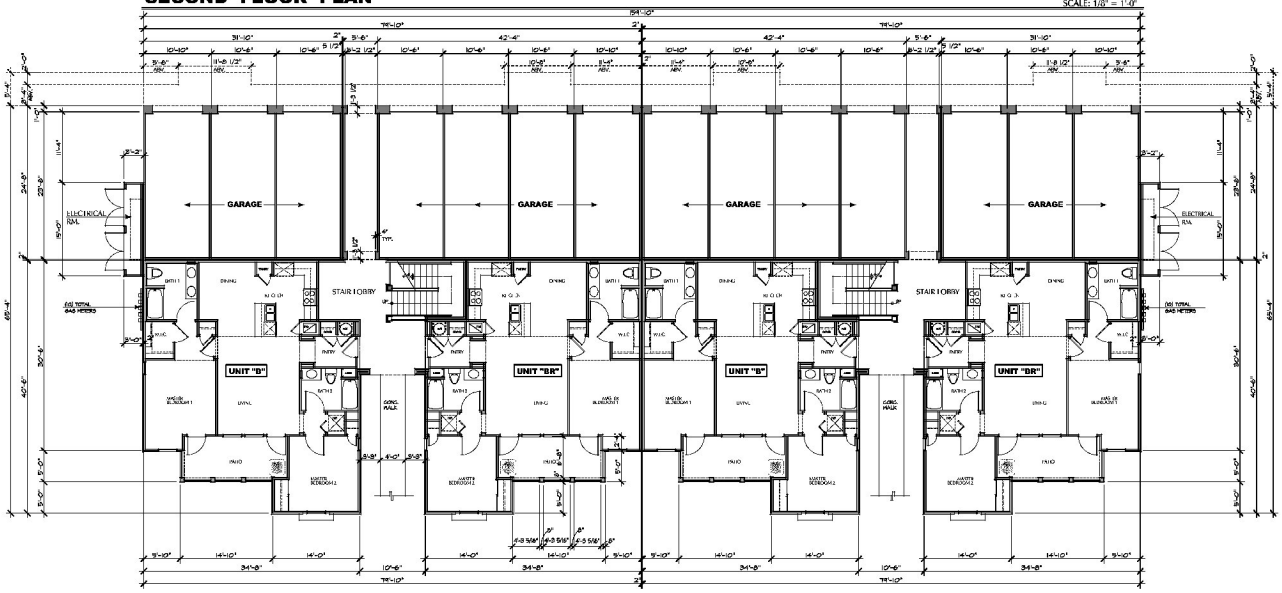
PLAN NOTES :

1. EACH RESIDENT GARAGE WILL BE OUTFITTED WITH A 220V OUTLET FOR ELECTRIC VEHICLE CHARGING.
2. FOR GUEST FAST CHARGING EV STATIONS, REFER TO CIVIL ENGINEER'S SITE PLAN.



SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"



FIRST FLOOR PLAN

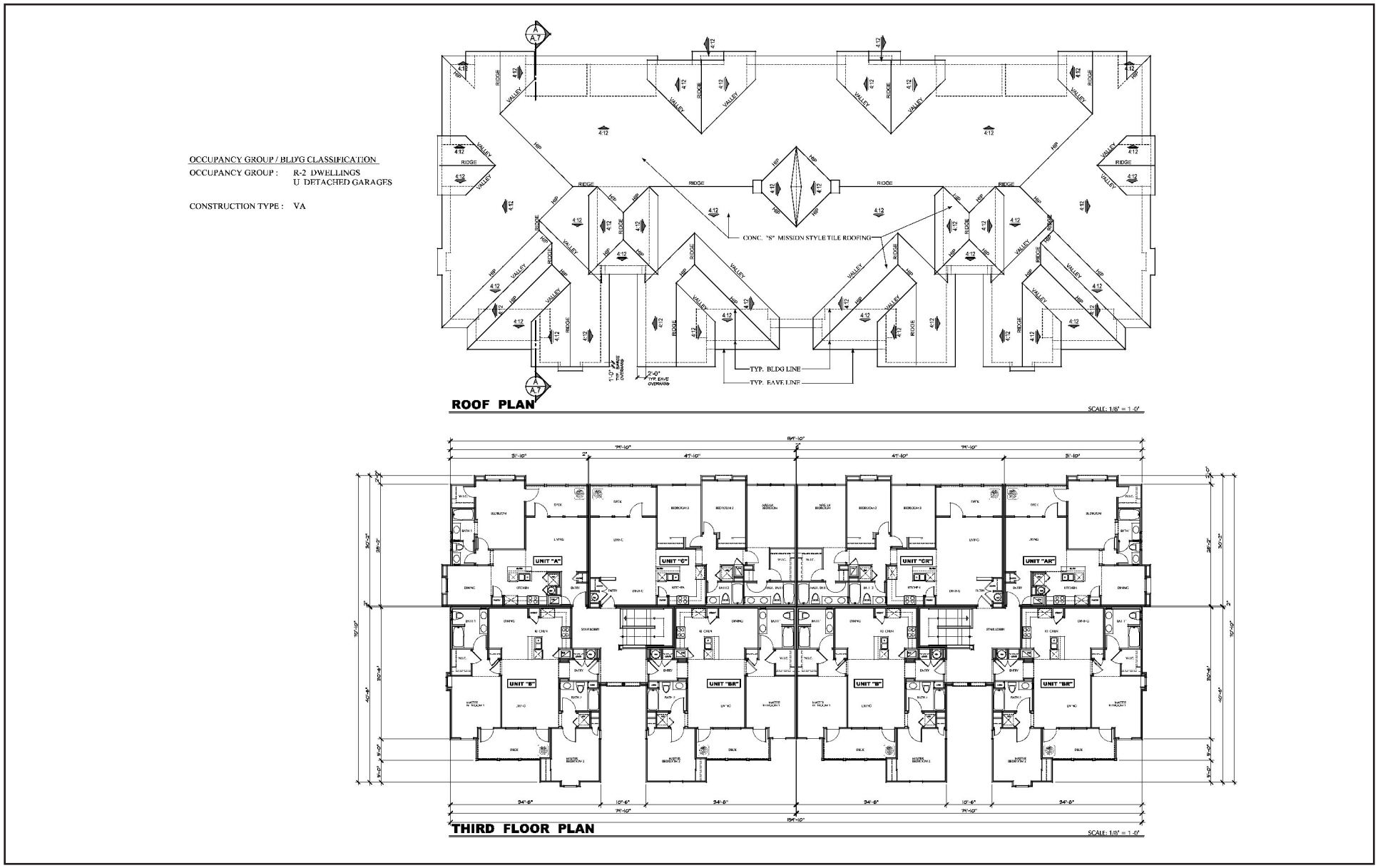
SCALE: 1/8" = 1'-0"

Source: ADKVAS Group, September 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.1-3b
Building Type 1 Floor Plans

THIS PAGE INTENTIONALLY LEFT BLANK

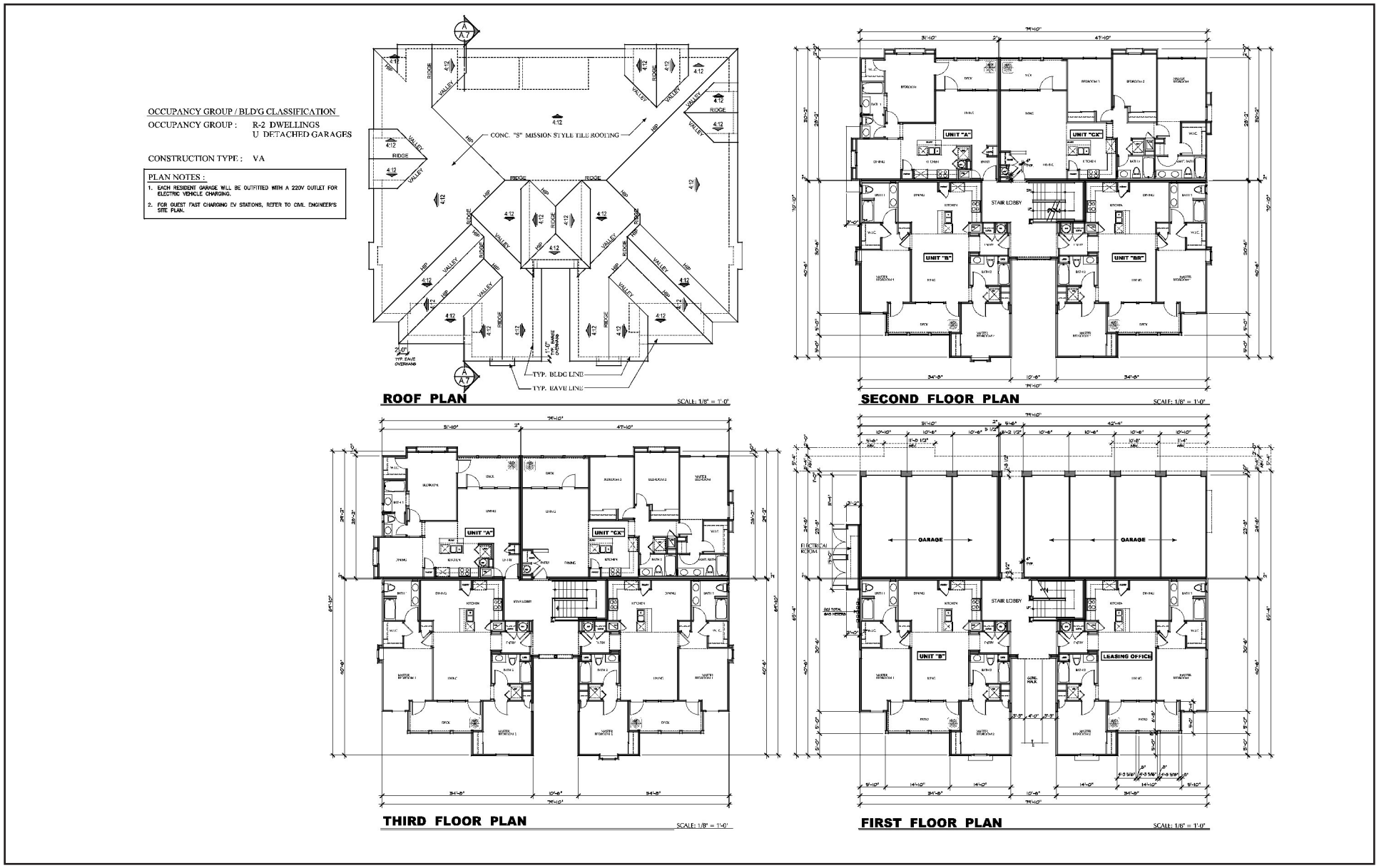


Source: ADKVAS Group, September 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.1-3c
Building Type 1 Third Floor Plan/Roof Plan

THIS PAGE INTENTIONALLY LEFT BLANK

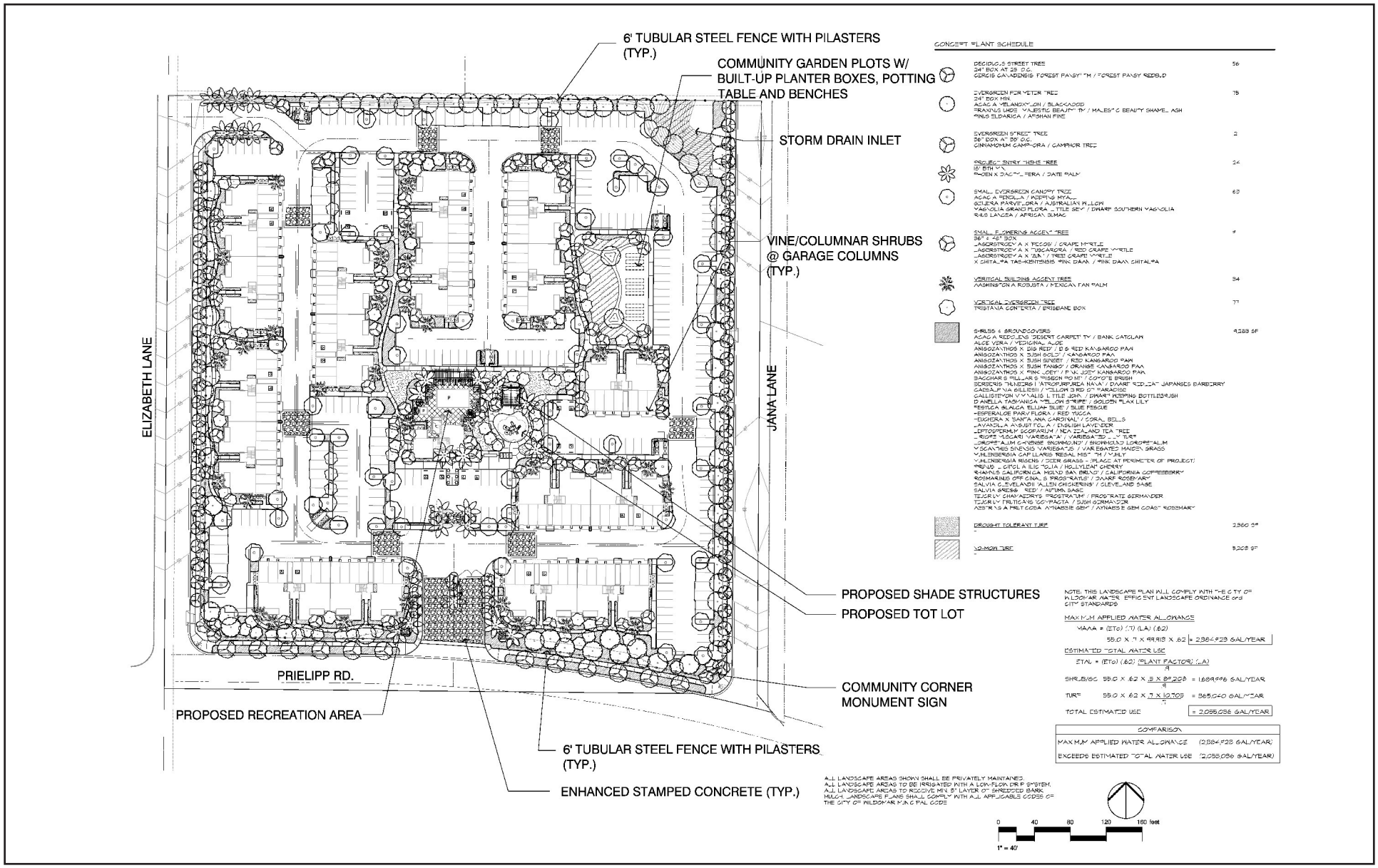


Source: ADKVAS Group, September 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.1-3d
Building Type 2 Floor Plans

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ADKVAS Group, March 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.1-4
Landscaping Plan

THIS PAGE INTENTIONALLY LEFT BLANK

3.2 - Agricultural Resources and Forest Resources

3.2.1 - Introduction

This section of the Draft EIR describes agricultural and forestry resources in relation to the project site and discusses the potential impacts to these resources that would occur with implementation of the proposed project. The following documents were used in the analysis:

- City of Wildomar General Plan (2008)
- California Department of Conservation Farmland Mapping and Monitoring Program (FMMP) maps

3.2.2 - Environmental Setting

According to the Land Use Element of the City of Wildomar General Plan, in terms of historic character and economic strength, one of Riverside County's most important land uses is its widespread and diverse agricultural lands. Within the County of Riverside, one of the largest industries (in terms of dollar value) is agriculture production. According to Table LU-1 in the Land Use Element of the General Plan, Western Riverside County—where the project is located—contains approximately 22,603 acres of agricultural land. The General Plan does not identify any forestry resources within the City.

Project Site Conditions

No areas located onsite are currently used for agriculture. Additionally, the project site is categorized as "Other Land" under the FMMP further described in Section 3.2.2 Regulatory Setting. "Other Land" is consistent with the low-density rural development of the project site; see category description in Table 3.2-1, and Exhibit 3.2-1 for the FMMP map for the site. The project site is located in an area identified as Non-Williamson Act Land and Non-Enrolled Land as illustrated in Exhibit 3.2-2 below.

Six different soil classifications are distributed on the project site; see Exhibit 3.2-3. The majority of the project site, approximately 4.0 acres, contains Arlington and Greenfield fine sandy loams. As detailed in the project specific Phase I Environmental Site Assessment (Earth-Strata Inc. 2013), a review of aerial photographs of the project site indicates that the site was used for agricultural purposes from 1938 (if not earlier, as this is the earliest aerial photograph that was taken) to approximately 1976, when a single-family structure was observed onsite. Thus, the project site has not been used for agricultural uses for more than 45 years.

The project site is zoned for Industrial Park (I-P) by the City of Wildomar Zoning Ordinance (Wildomar 2008), which permits industrial, manufacturing, service, and commercial uses. The project site is currently designated Medium High Density Residential (MHDR) (5 to 8 dwelling units per acre) under the City of Wildomar General Plan (2008), which allows for single-family attached and detached residential uses.

Surrounding Land Uses

According to the Phase 1 Environmental Site Assessment, none of the areas surrounding the project site are currently used for agriculture (Earth-Strata, Inc. 2013). However, a more recent aerial review indicates that former corral uses may have been converted to row crops or similar features associated with a large lot residence approximately 330 feet north of the project site. Land to the east, north, and west of the project site currently consists of residential uses and vacant land. The area south of the project site contains a multi-unit residential property.

Areas adjacent to the project site to the north, east, west, and southwest are zoned Rural Residential area (R-R) with a five-acre minimum lot size. This zoning allows for single-family residential and light agriculture, animal keeping, recreation, compatible resource development, and government and associated uses. The area south of the project site is zoned General Residential (R-3), 7,200 square feet minimum lot size, which allows for single-family and multi-family dwellings, and light animal keeping. Other nearby zoning includes Industrial Park (I-P).

Areas to north and south are designated as Medium High Density Residential (MHDR) under the General Plan. The City of Wildomar General Plan designates the area west of the project site as Business Park (B-P) and east of the project site as Medium High Density Residential (MHDR). Business Park (0.25–0.60 floor area ratio) may be utilized for employee intensive uses such as research and development, technology centers, corporate offices, “clean” industry, and supporting retail uses.

Similar to the project site, adjacent areas to the north, east, and west are categorized as “Other Land” under the FMMP; see category description in Table 3.2-1, and Exhibit 3.2-1 for the FMMP map for the site. The developed area to the south is categorized as “Urban and Built-up Land.” There is no Williamson Act land in the project vicinity (see Exhibit 3.2-2).

3.2.3 - Regulatory Framework

State Regulations

Farmland Mapping and Monitoring Program

The California Department of Conservation established the FMMP in 1982. The FMMP is a non-regulatory program that provides a consistent and impartial analysis of agricultural land use and land use changes throughout California. The FMMP produces maps and statistical data used for analyzing impacts on California’s agricultural resources. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance. The program rates agricultural lands according to physical characteristics and other factors such as irrigation status. The best quality farmland is land that contains a combination of physical and chemical features able to sustain long-term agricultural production and is classified as Prime Farmland. Additional classifications include Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance (Table 3.2-1).

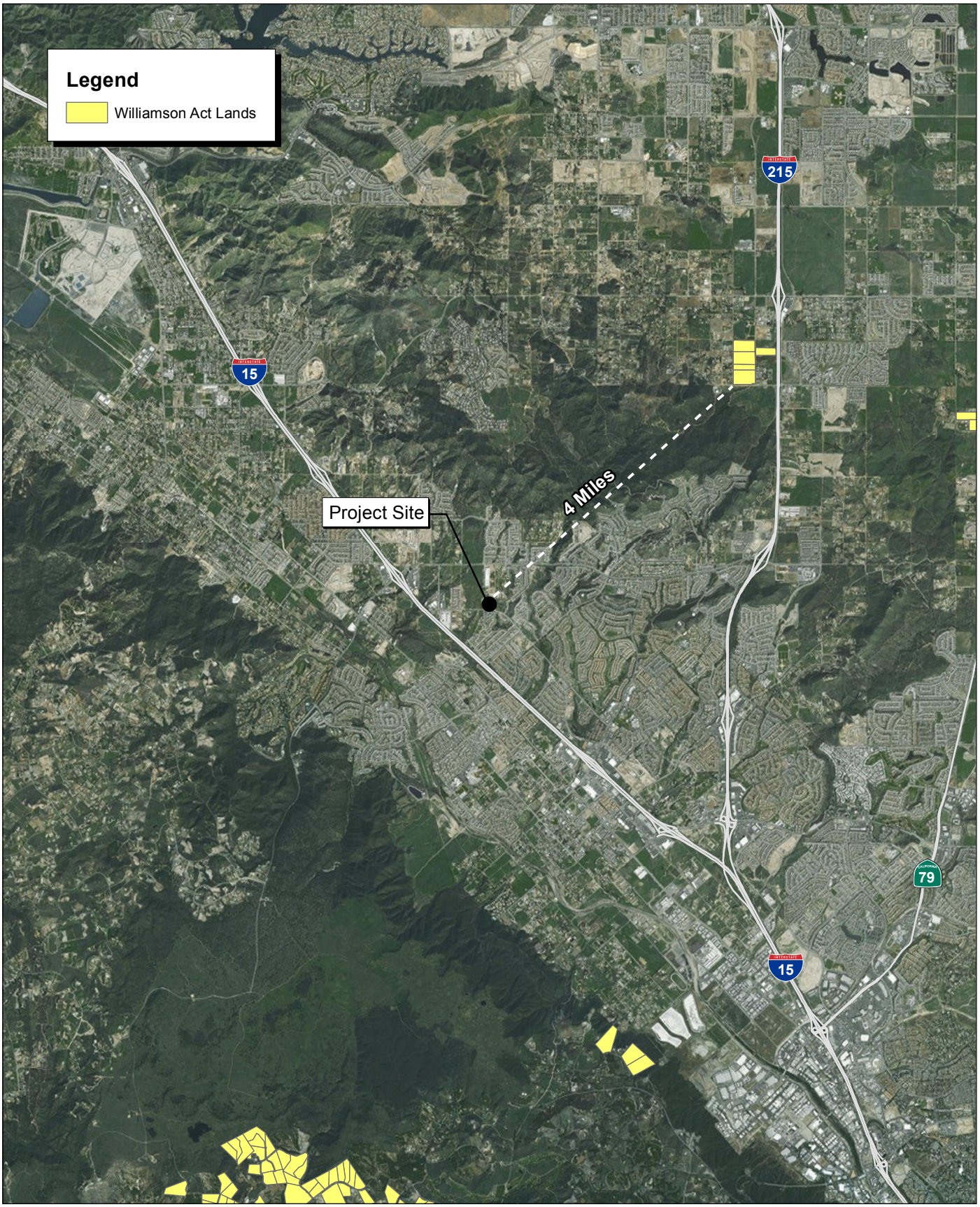
Source: ESRI Aerial Imagery. Farmland Mapping and Monitoring Program GIS Data, 2010.

FirstCarbon® SOLUTIONS

200 100 0 200 Feet

Exhibit 3.2-1
Important Farmland Map

THIS PAGE INTENTIONALLY LEFT BLANK



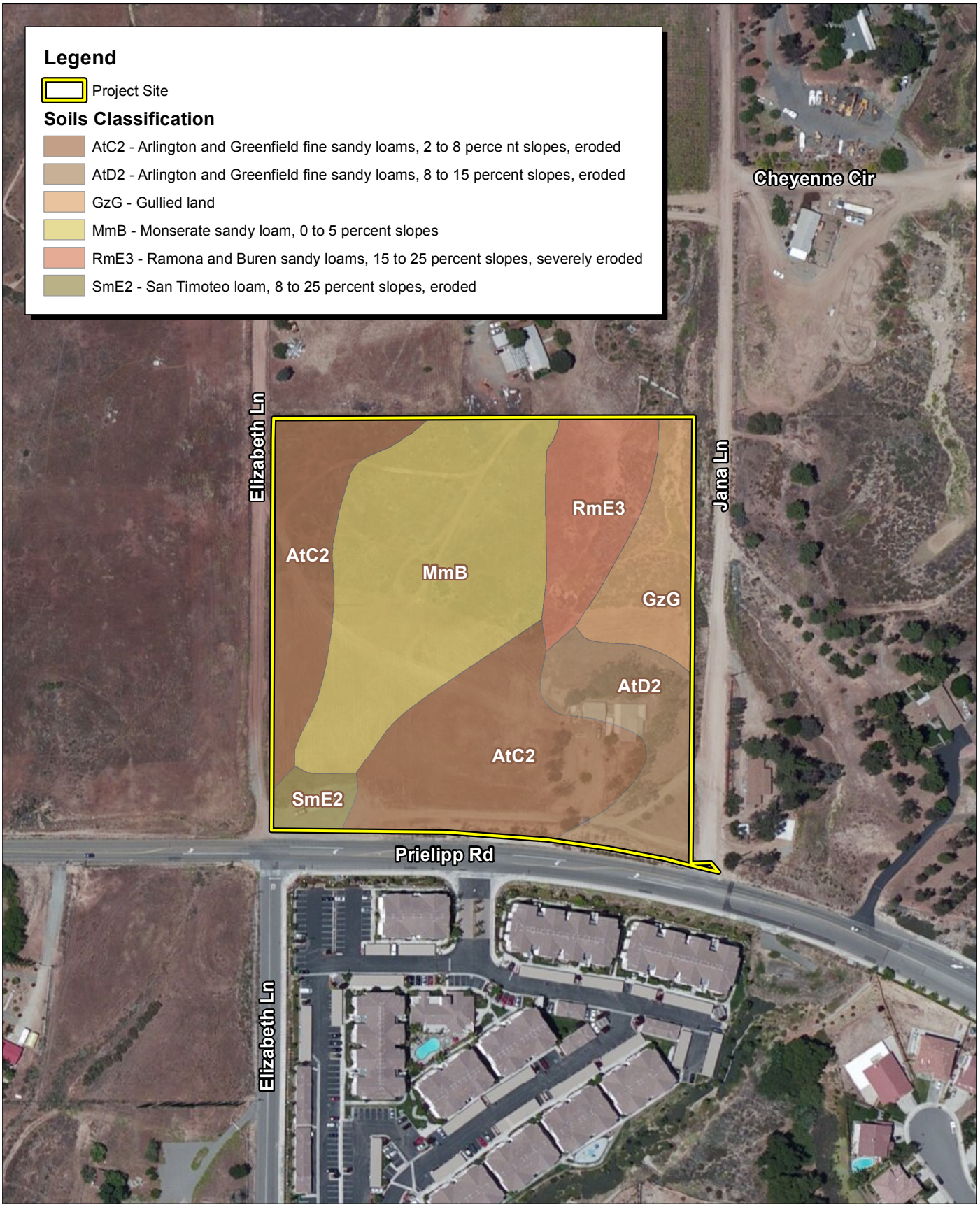
Source: ESRI Aerial Imagery. CA Department of Conservation Williamson Act GIS Data, 2008.

FirstCarbon® SOLUTIONS

1.5 0.75 0 1.5 Miles

Exhibit 3.2-2
Williamson Act Map

THIS PAGE INTENTIONALLY LEFT BLANK



Source: ESRI Aerial Imagery.

FirstCarbon® SOLUTIONS

200 100 0 200 Feet

Exhibit 3.2-3
Soils Map

THIS PAGE INTENTIONALLY LEFT BLANK

The FMMP also inventories and maps a variety of other land use categories. For purposes of determining a project's significance under CEQA, only Prime Farmland, Unique Farmland, and Farmland of Statewide Importance are used to determine impacts. Conversion to non-agricultural uses of lands falling under any of these classifications is considered a significant impact under CEQA.

Table 3.2-1 provides a description of the various farmland classifications, from the United States Department of Agriculture.

Table 3.2-1: Description of Farmland Classifications

Farmland Category	Description
Prime (P)	Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Statewide Importance (S)	Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
Unique (U)	Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
Local (L)	Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. In some counties, Confined Animal Agriculture facilities are part of Farmland of Local Importance, but they are shown separately.
Grazing (G)	Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.
Urban & Built Up Land (D)	Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.
Other (X)	Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.
Water (W)	Perennial water bodies with an extent of at least 40 acres.
Source: California Department of Conservation 2007.	

California Land Conservation Act

The California Land Conservation Act, better known as the Williamson Act, was enacted by the State Legislature in 1965 to encourage the preservation of agricultural lands. Under the provisions of the act, landowners agreeing to keep their lands under agricultural production for a minimum of 10 years receive property tax adjustments. Williamson Act contracts limit the use of the properties to agricultural, open space, and other compatible uses. Williamson Act lands are assessed based on their agricultural value, rather than their potential market value under nonagricultural uses.

3.2.4 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to aesthetics are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

b) Conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract?

c) Cause development of non-agricultural uses within 300 feet of agriculturally zoned property?

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

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

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

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

3.2.5 - Project Impact Analysis

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

Convert Farmland to Non-Agricultural Use

Impact AG-1:	**The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.**

Impact Analysis

The FMMP agricultural land categorized the project site as "Other Land," and is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, nor is the project site currently used for agriculture. Therefore, the project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use and no impacts would occur.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Conflict with Existing Zoning or Williamson Act Contract

Impact AG-2:	**The project would not conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract.**

Impact Analysis

The project site is currently used for residential purposes and not for agricultural use. The project is not under a Williamson Act contract (Riverside County GIS 2014). The project site is currently zoned I-P (Industrial Park Area) with allowed uses of industrial, manufacturing, service, and commercial uses, and does not directly support agricultural uses. Therefore, the project would not conflict with agricultural zoning, agricultural use, or with land subject to a Williamson Act contract and no impacts would occur.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Non-Agricultural Uses

Impact AG-3: The project would potentially cause development of non-agricultural uses within 300 feet of agriculturally zoned property.

Impact Analysis

Rural Residential zoning is adjacent to the project site to the north, east, west, and southwest, and allows for light agricultural and animal keeping. None of the adjacent lands are active agriculture, though they have surplus land with the potential to be developed in agricultural activities. The nearest active agricultural is associated with a large lot residential property approximately 330 feet north of the project site. Future agricultural activities may expose residents to dust, noise, and odors associated with light agricultural or animal keeping. Given the residential nature of the project, the project would cause development of non-agricultural uses within 300 feet of agriculturally zoned property.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AG-1 Prospective residential tenants will be informed of the presence of adjacent and nearby lands with the potential for light agriculture and animal keeping, and that they may be exposed to conditions associated with these uses, including but not limited to dust, noise, odors, and pests, and that these property owners have the right to farm consistent with the zoning for their property, and further indicates that these activities would generally not be considered a legal nuisance.

Timing/Implementation: After construction of the project.
Enforcement/Monitoring: City of Wildomar Planning Department

Level of Significance After Mitigation

Less than significant impact.

Conversion of Farmland

Impact AG-4: The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

Impact Analysis

The project site does not contain any agricultural uses. The land uses surrounding the project site are primarily residential and vacant land. Agricultural use is limited to one property approximately 330 feet north of the project site, also associated with a residence. Zoning allows for light agricultural and animal keeping on the adjacent property. However, there is nothing inherent in the project that would result in the conversion of the farmland to non-agricultural use. In addition, the location and configuration of the project will not cause other changes that ultimately result in the conversion of existing agricultural operations. The project will not impede the current use of such

operations in terms of access or limit the continued use of such properties for agriculture in any other ways. Thus, development of the project's residential buildings and associated components is not anticipated to have a significant impact involving other changes in the existing environment, which could result in conversion of farmland to non-agricultural use.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Existing Zoning - Forest Land

Impact AG-5:	**The project would not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)).**

Impact Analysis

The project site and surrounding area is not zoned for forestland. Therefore, the project would not conflict with existing zoning for forest land uses or timberland zoned Timberland Production, and no impacts would to occur.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Loss or Conversion of Forest Land

Impact AG-6:	**The project would not result in the loss of forest land or conversion of forest land to non-forest use.**

Impact Analysis

The project will not involve the conversion of forest land because the project site does not contain any forest land. Additionally, the use of the project site for residential uses will not cause any conversion of forest land to a non-forest use in another location. The project site will be used for residential activities, which will not have any direct or indirect impacts on forest lands. The project

site is not used for forest use and is not zoned for forest uses. Therefore, the project will have no impact on forestry resources.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Other Changes to Forest Land

Impact AG-7:	**The project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.**

Impact Analysis

The project would have no impact regarding the conversion of forest land to non-forest use (see Impact AG-6). Thus, the project will have no impact and no mitigation measures are required.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

3.3 - Air Quality

3.3.1 - Introduction

This section describes the existing air quality conditions and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Air Quality and Global Climate Change Impact Analysis prepared by Kunzman Associates, Inc. (2014), included in this Draft EIR as Appendix B, and other sources as cited throughout the section.

3.3.2 - Environmental Setting

The project is located in the County of Riverside and within the South Coast Air Basin (Air Basin). The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Air Basin on the west, north, and east. The southern limit of the Air Basin is the San Diego County line. The Air Basin consists of Orange County, Los Angeles County (except for the Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

Local Air Quality

Existing ambient air quality, historical trends, and future projections of air quality in the project area are best documented from measurements made near the project site. The South Coast Air Quality Management District (SCAQMD) maintains an extensive air-monitoring network that measures levels of several air pollutants throughout the Air Basin. The SCAQMD has subdivided the Air Basin into 36 Source-Receptor Areas (SRAs), many containing one or more monitoring stations. These SRAs are designated to provide a general representation of the local meteorology, terrain, and air quality conditions within the particular geographical area. The project is located within SRA 25, "Lake Elsinore."

SCAQMD operates an air monitoring station in Source Receptor Area 25, which is located at 506 W. Flint Street, Lake Elsinore, approximately 8.25 miles northwest of the project site. Table 3.3-1 summarizes the air monitoring data for the Lake Elsinore monitoring station for the 2010-2013 period, the most current published 3-year monitoring period.

The data shows that during the past few years, the project area has exceeded the standard for ozone, and although the highest recorded concentrations of PM_{10} exceed the state standard, the ARB indicates that insufficient data was available to determine the value.

Table 3.3-1: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	Year		
			2011	2012	2013
Ozone	1 Hour	Max 1 Hour (ppm)	0.133	0.111	0.102
		Days > State Standard (0.09 ppm)	19	10	6

Table 3.3-1 (cont.): Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	Year		
			2011	2012	2013
Ozone (*cont.*)	8 Hour	Max 8 Hour (ppm)	0.106	0.089	0.089
		Days > State Standard (0.07 ppm)	45	32	25
		Days > National Standard (0.075 ppm)	28	17	12
Carbon monoxide	8 Hour	Max 8 Hour (ppm)	0.67	0.52	ID
		Days > State Standard (9.0 ppm)	0	0	ID
		Days > National Standard (9 ppm)	0	0	ID
Nitrogen dioxide	Annual	Annual Average (ppm)	0.009	0.01	ID
	1 Hour	98th percentile (ppm)	0.04	0.04	0.04
	1 Hour	Max 1 Hour (ppm)	0.050	0.048	0.038
		Days > State Standard (0.18 ppm)	0	0	0
Inhalable coarse particles (PM_{10})	Annual	Annual Average (µg/m^3)	24.7	21.9	25.5
	24 hour	24 Hour (µg/m^3)	99.8	65.5	46.7
		Days > State Standard (50 µg/m^3)	ID	ID	ID
		Days > National Standard (150 µg/m^3)	0	0	0
Fine particulate matter ($PM_{2.5}$)	Annual	Annual Average (µg/m^3)	10.8	10.5	ID
	24 Hour	24 Hour (µg/m^3)	40.7	24.9	23.1
		Days > National Standard (35 µg/m^3)	ID	ID	ID

Notes and Abbreviations:
> = exceed ppm = parts per million µg/m^3 = micrograms per cubic meter
ID = insufficient data ND = no data max = maximum
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
Sources: California Air Resources Board 2014 (ARB Lake Elsinore-W Flint St monitoring station)

Local Sources of Air Pollutants

The project site is currently vacant except for the private use of unpaved drives and an existing mobile home residence. Emissions expected from the current site are occasional fugitive dust from exposed soil areas. Within a radius of about 1 mile from the project, there are numerous residential developments. Interstate 15 (I-15) is located approximately 0.5 mile southwest of the project boundary. Emissions from the surrounding residences include the following: space and water heating, landscape maintenance, consumer products, and motor vehicles.

Sensitive Receptors

Those who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive

receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (SCAQMD 2008a). Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

The nearest sensitive receptors to the project site are the residential uses located immediately north of the project boundary and approximately 65 feet (19 meters) east of the project boundary on the northeast corner of Prielipp Road and Jana Lane. Existing residences are also located approximately 85 feet (25 meters) south of the project boundary at the southeast corner of Prielipp Road and Elizabeth Lane.

Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. Section 107(d)(3)(E) of the CAA specifies that for an area to be redesignated as attainment, the EPA must approve a maintenance plan. The purpose of the maintenance plan is to provide for the maintenance of the NAAQS for at least 10 years after the redesignation.

The current attainment designations for the project area are shown in Table 3.3-2.

Table 3.3-2: South Coast Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment
Carbon monoxide	Attainment	Maintenance
Nitrogen dioxide (annual)	Nonattainment	Attainment
Nitrogen dioxide (1-hour)	Attainment	Maintenance
Sulfur dioxide	Attainment	Attainment
PM_{10}	Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment
Lead (Los Angeles County)	Nonattainment	Nonattainment
Lead (other parts of the Air Basin, including the project area)	Attainment	Attainment
Source of State status: California Air Resources Board 2014. Source of National status: U.S. Environmental Protection Agency 2014.		

3.3.3 - Regulatory Framework

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level. The California Air Resources Board (ARB) regulates at the state level. The SCAQMD regulates at the air basin level.

Federal and State

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIPs), provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards, also known as federal standards. There are federal standards for the following criteria air pollutants, which were identified from provisions of the Clean Air Act of 1970:

- Ozone
- Nitrogen dioxide
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide

The federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health (ARB 2013b).

A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts; the air district prepares its federal attainment plan, which is sent to ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

The ARB also administers California Ambient Air Quality Standards (state standards) for the 10 air pollutants designated in the California Clean Air Act. The 10 state air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride.

The federal and state ambient air quality standards, relevant effects, properties, and sources of the pollutants are summarized in Table 3.3-3.

Table 3.3-3: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO_X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.075 ppm			
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
Nitrogen dioxide[b] (NO_2)	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO_X emissions. NO2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Table 3.3-3 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfur dioxide[c] (SO_2)	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SOX) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	- Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. - Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical 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 are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3			
	Annual	12 µg/m^3	12.0 µg/m^3			
Visibility reducing particles	8 Hour	See note below[d]				

Table 3.3-3 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 µg/m^3	—	(a) Decrease in ventilatory function; (b) aggravation of asthmatic symptoms; (c) aggravation of cardio-pulmonary disease; (d) vegetation damage; (e) degradation of visibility; (f) property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO42−. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	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 include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3			
	Rolling 3-month average	—	0.15 µg/m^3			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.

Table 3.3-3 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).
Volatile organic compounds (VOC)		There are no state or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a "Group A" carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at one to two percent by volume. The primary route of human exposure is through inhalation.

Table 3.3-3 (cont.): Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard[a]	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	Diesel PM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Notes:
ppm = parts per million (concentration) $\mu g/m^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3-Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility reducing particles: In 1989, ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

[e] ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source of effects, properties, and sources: South Coast Air Quality Management District 2007a; California Environmental Protection Agency 2002; California Air Resources Board 2009; United States Environmental Protection Agency 2003, 2009a, 2009b, 2010, 2011a, and 2012; National Toxicology Program 2011a and 2011b. Source of standards: California Air Resources Board 2013c.

Several pollutants listed in Table 3.3-3 are not addressed in this analysis. Analysis of lead is not included in this report because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be exposed to vinyl chloride because the project uses do not involve the chemical processes that create this pollutant and there are no known uses in the project vicinity. The project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

Asbestos

Asbestos is listed as a toxic air contaminant by ARB and as a Hazardous Air Pollutant by the EPA. Asbestos occurs naturally in surface deposits of several types of rock formations. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Crushing or breaking these rocks, through construction or other means, can release asbestoform fibers into the air. Asbestos emissions can result from the sale or use of asbestos-containing materials, road surfacing with such materials, grading activities, and surface mining. The risk of disease is dependent upon the intensity and duration of exposure. When inhaled, asbestos fibers may remain in the lungs and with time may be linked to such diseases as asbestosis, lung cancer, and mesothelioma.

There is a closed asbestos mine located approximately 11 miles northwest of the project, and a recorded location of asbestos approximately 9 miles northeast of the project. Because of the distance to the known locations, naturally occurring asbestos is not of concern in the project area (USGS 2011). As discussed in Section 3.7 – Hazards, implementation of Mitigation Measure HAZ 1 would ensure that any impacts related to the potential release of asbestos during site clearing and demolitions are less than significant.

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air. However, their high toxicity or health risk may pose a threat to public health even at very low concentrations. For those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no threshold level below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined, and for which the state and federal governments have set ambient air quality standards. The majority of the estimated health risk from TACs can be attributed to a relatively few compounds, the most important being particulate matter (PM) from diesel-fueled engines, known as diesel particulate matter (DPM). In addition to DPM, benzene and 1, 3 butadiene are also significant contributors to overall ambient public health risk in California.

Both SCAQMD and ARB have monitoring networks within the Air Basin that measure ambient concentrations of certain TACs that are associated with important health-related effects, and are

present in appreciable concentrations in the Air Basin. The SCAQMD uses this information to determine health risks for a particular area. The ARB publishes annual Statewide, air basin, and location-specific summaries of the concentration levels of several TACs and their resulting cancer risks. The most recent summary is the ARB Air Quality Almanac for 2009. The Almanac presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are: acetaldehyde, benzene, 1, 3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. Diesel particulate matter is not directly measured, but is indirectly estimated based on fine particulate matter measurements and special studies on the chemical speciation of ambient fine particulate data, along with receptor modeling techniques. ARB estimates that 78 percent of the known statewide cancer risks are from the top 10 outdoor air toxics, in addition to DPM.

Estimates of total cancer risk statewide have shown a steady decline from the early 1990s, when the cancer risk from diesel PM was estimated to be 1,696 in one million. By the year 2000, the cancer risk was estimated to be 1,005 in one million, or a reduction of 41 percent. Reductions in cancer risk are expected to continue into the future as new emission controls are implemented that further reduce DPM emissions, which are the major component of the total airborne cancer risk.

In addition to the measurements presented in the ARB almanac, the SCAQMD conducted a detailed TAC emission inventory, air sampling, and dispersion modeling study called the Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES-II) and (MATES-III). Published in 2000 and 2008, respectively, the MATES Studies provided information on the importance of various TACs in terms of their relative health risks, as well as their spatial distribution across the Air Basin. The MATES-III information can be used to characterize the “background” health risks from both regional and local TAC emission sources. The MATES-III program results indicate that the cancer risk in the project area is estimated to be 320 in one million, of which DPM contributes approximately 80 percent of the total cancer risk. The MATES III study found that the population-weighted cancer risk in the entire Air Basin was estimated to be 853 in one million. While several variables may contribute to the cancer risk in the project area being lower than the Air Basin as a whole, the rural nature of the general project area could play a substantial role.

Odors

Odors can cause a variety of responses. The impact of an odor results from interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception.

Odor is typically a warning system that prevents animals and humans from consuming spoiled food or toxic materials. Odor-related symptoms reported in a number of studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomach ache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation (SCAQMD 2007b).

The SCAQMD’s role is to protect the public’s health from air pollution by overseeing and enforcing regulations (SCAQMD 2007b). The SCAQMD’s resolution activity for odor compliance is mandated

under California Health & Safety Code Section 41700, and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

South Coast Air Quality Management District

The agency for air pollution control for the Air Basin is the SCAQMD. The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the Air Basin. The SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the Air Basin, in coordination with the Southern California Association of Governments. The SCAQMD is also considered an expert agency and comments on the CEQA air quality analysis and impacts of projects within the Air Basin.

Air Quality Management Plans

An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

2003 AQMP

One of the purposes of the 2003 AQMP is to lead the Air Basin into compliance with the 1-hour ozone and PM_{10} federal standards (SCAQMD 2003).

The 2003 AQMP also replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future, and updated the maintenance plan for the federal nitrogen dioxide standard that the Air Basin has met since 1992 (2003 AQMP, page 1-1).

The 2003 AQMP also incorporated new scientific data in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2003 AQMP utilized complex modeling to show that with the control measures, the Air Basin would be in compliance with the federal and state standards for all pollutants by 2010, except for the state ozone and PM_{10} standards and the state ozone and PM_{10} standard after 2010 or by the earliest practicable date, as mandated by the California Health and Safety Code Section 40462. The ARB approved the 2003 AQMP on August 1, 2003. The EPA's adequacy finding on the emissions budgets for conformity determination in the Air Basin was published in the Federal Register (69 FR 15325-15326).

2007 AQMP

The 2007 AQMP was adopted by the SCAQMD on June 1, 2007 (SCAQMD 2007a). On July 13, 2007, the SCAQMD Board adopted the 2007 Final AQMP Transportation Conformity Budgets and directed the Executive Officer to forward them to ARB for its approval and subsequent submittal to the EPA. On September 27, 2007, ARB adopted the State Strategy for the 2007 SIP and the 2007 AQMP as part of the SIP. On January 15, 2009, the EPA's regional administrator signed a final rule to approve in part and disapprove in part the SCAQMD 2007 1-hour ozone plan and the nitrogen dioxide maintenance plan. The parts of the plan that were approved strengthen the SIP. The Clean Air Act does not require the disapproved portions of the plan, and the disapprovals do not start sanctions clocks.

One of the purposes of the 2007 AQMP is to lead the Air Basin into compliance of the federal 8-hour ozone and $PM_{2.5}$ standards. The 2007 AQMP outlines a detailed strategy for meeting the federal health-based standards for $PM_{2.5}$ by 2015 and 8-hour ozone by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporates significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions will be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate forming emissions. The 2007 AQMP includes 37 control measures, including measures to reduce emissions from new commercial and residential developments, more reductions from industrial facilities, and reductions from wood burning fireplaces and restaurant charbroilers.

2012 AQMP

The purpose of the 2012 AQMP for the Air Basin is to set forth a comprehensive and integrated program that will lead the Air Basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update of the Air Basin's projections in meeting the federal 8-hour ozone standards. The AQMP was approved by the SCAQMD Governing Board on December 7, 2012 and was adopted by the ARB on January 25, 2013. The 2012 AQMP was submitted to the EPA as the SIP on February 13, 2013. On September 3, 2014, EPA approved the portions of a SIP revision submitted by the State of California on February 13, 2013 that relate to attainment of the 1-hour and 1997 8-hour ozone national ambient air quality standards in the Los Angeles-South Coast area. Specifically, the EPA is approved the portions of the South Coast Air Quality Management District's Final 2012 Air Quality Management Plan that update the approved control strategy for the 1997 8-hour ozone standard and that provide a demonstration of attainment of the 1-hour ozone standard by December 31, 2022. In approving this SIP revision, the EPA found that an attainment date of December 31, 2022 is appropriate in light of the severity of the 1-hour ozone problem in the Los Angeles-South Coast area and the limited emissions remaining that can be regulated given the extent to which emissions sources in the South Coast have already been controlled. As part of this action, the EPA approved new commitments adopted by the SCAQMD to develop, adopt, submit, and implement certain near-term measures to achieve certain aggregate emission reduction targets, updated new technology provisions, and a new commitment by the ARB to submit contingency measures in 2019 as necessary to meet the emission reduction targets for 2022 from implementation of new technology measures. EPA action for 24-hour $PM_{2.5}$ portion of 2012 AQMP under Subpart 4 implementation is expected by June 2015.

The AQMP updated specific elements of the previously approved 8-hour ozone SIP: 1) an updated emissions inventory and, 2) new control measures and commitments for emissions reductions to help fulfill the Section 182(e)(5) portion of the 8-hour ozone SIP. The 2012 AQMP includes Air Basin-wide $PM_{2.5}$ measures that were expected to be implemented by the 2014 attainment date, episodic control measures to achieve air quality improvements (would only apply during high $PM_{2.5}$ days), Section 182(e)(5) implementation measures (to maintain progress towards meeting the 2023 8-hour ozone national standard), and transportation control measures. Most of the control measures focus on incentives, outreach, and education. The SCAQMD may adopt additional measures to carry out the SIP for $PM_{2.5}$ or ozone, or other pollutants if required, as deemed necessary to meet commitments and federal requirements.

Proposed $PM_{2.5}$ reduction measures in the 2012 AQMP include the following:

- Further NO_x reductions from RECLAIM
- Further reductions from residential wood burning devices
- Further reductions from open burning
- Emission reductions from under-fired charbroilers
- Further ammonia reductions from livestock waste
- Backstop measures for indirect sources of emissions from ports and port-related sources
- Further criteria pollutant reductions from education, outreach and incentives

There are multiple VOC and NO_x reductions in the 2012 AQMP to attempt to reduce ozone formation, including further VOC reductions from architectural coatings, miscellaneous coatings, adhesives, solvents, lubricants, mold release products, consumer products.

The 2012 also contains proposed mobile source implementation measures for the deployment of zero- and near-zero emission on-road heavy-duty vehicles, locomotives, and cargo handling equipment. There are measures for the deployment of cleaner commercial harborcraft, cleaner ocean-going marine vessels, cleaner off-road equipment, and cleaner aircraft engines.

The 2012 AQMP proposes the following mobile source implementation measures:

- On-road mobile sources:
  - Accelerated penetration of partial zero-emission and zero-emission vehicles and light-heavy and medium-heavy duty vehicles through funding assistance for purchasing the vehicles
  - Accelerated retirement of older light-, medium-, and heavy-duty vehicles through funding incentives
  - Further emission reductions from heavy-duty vehicles serving near-dock railyards through a proposed control measure that calls for a requirement that any cargo container moved between the Ports of Los Angeles and Long Beach to the nearby railyards by with zero-emission technologies

- Off-road mobile sources:
  - Extension of the SOON provision for construction/industrial equipment, which provides funding to repower or replace older Tier 0 and Tier 1 equipment

- Further emission reductions from freight and passenger locomotives calls for an accelerated use of Tier 4 locomotives in the Air Basin
- Further emission reductions from ocean-going marine vessels while at berth
- Emission reductions from ocean-going marine vessels

The 2012 AQMP also relies upon the Southern California Association of Governments regional transportation strategy, which is in its adopted 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and 2011 Federal Transportation Improvement Program, which contains the following sections:

1. Linking regional transportation planning to air quality planning: making sure that the regional transportation plan supports the goals and objectives of the AQMP/SIP.
2. Regional transportation strategy and transportation control measures: the RTP/SCS contains improvements to the regional multimodal transportation system including the following: active transportation (non-motorized transportation - biking and walking); transportation demand management; transportation system management; transit; passenger and high-speed rail; goods movement; aviation and airport ground access; highways; arterials; and operations and maintenance.
3. Reasonably available control measure analysis.

SCAQMD Rules

The AQMP for the Air Basin establishes a program of rules and regulations administered by SCAQMD to obtain attainment of the state and federal standards. The rules and regulations that apply to this project include, but are not limited to, the rules listed in the Standard Conditions section of this report.

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression

techniques can reduce the fugitive dust generation (and thus the PM10 component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 measures may include but are not limited to the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).
- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code section 23114.
- Reduce traffic speeds on all unpaved roads to 15 miles per hour (mph) or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar best management practices shall be provided where vehicles enter and exit the construction site onto paved roads or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep onsite and offsite streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 445 prohibits permanently installed wood burning devices into any new development. A wood burning device means any fireplace, wood burning heater, or pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of less than one million British thermal units per hour.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the South Coast Air Basin. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

Local

The Wildomar General Plan contains the following greenhouse gas related goals and policies that are applicable to the project.

- **General Plan Air Quality Policy 2.3:** Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.
- **General Plan Air Quality Policy 4.1:** Encourage the use of building materials/methods which reduce emissions.
- **General Plan Air Quality Policy 4.2:** Encourage the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.
- **General Plan Air Quality Policy 4.4:** Require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code.
- **General Plan Air Quality Policy 4.7:** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.
- **General Plan Air Quality Policy 4.9:** Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.
- **General Plan Air Quality Policy 4.10:** Coordinate with the SCAQMD and MDAQMD to create a communications plan to alert those conducting grading operations in the County of first, second, and third stage smog alerts, and when wind speeds exceed 25 miles per hour. During these instances all grading operations should be suspended.
- **General Plan Air Quality Policy 5.1:** Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- **General Plan Air Quality Policy 5.2:** Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.
- **General Plan Air Quality Policy 5.4:** Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

3.3.4 - Methodology

The analysis and methodology in this section are based on information contained in the Air Quality and Global Climate Change Impact Analysis prepared by Kunzman Associates, Inc. (2014), included in this Draft EIR as Appendix B.

3.3.5 - Thresholds of Significance

Air Quality

Based on the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts to air quality are significant environmental effects. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:

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

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c) 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)?

d) Expose sensitive receptors to substantial pollutant concentrations?

e) Create objectionable odors affecting a substantial number of people?

3.3.6 - Project Impact Analysis

Air Quality Plan

Impact AIR-1:	**The project would not conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

The regional plan that applies to the project is the SCAQMD AQMP. Therefore, this section discusses potential inconsistencies of the project with the AQMP. The purpose of this discussion is to set forth the issues regarding consistency with the assumptions and objectives of the AQMP and discuss whether the project would interfere with the region's ability to comply with federal and state air quality standards.

The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A project should be considered to be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies. The SCAQMD CEQA Handbook identifies two key indicators of consistency:

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. Whether the project will exceed the assumptions in the AQMP in 2012 or increments based on the year of project buildout and phase.

Both of these criteria are evaluated below.

Criterion 1 - Increase in the Frequency or Severity of Violations

Based on the air quality modeling analysis contained in the Air Quality and Global Climate Change Impact Analysis Report (Appendix B), and summarized in Impacts AIR-2 and AIR-3 below, project construction and project operations would not result in significant impacts based on the SCAQMD regional and local thresholds of significance.

Therefore, the project is not projected to contribute to the exceedance of any air pollutant concentration standards and is found to be consistent with the AQMP for the first criterion.

Criterion 2 - Exceed Assumptions in the AQMP?

Consistency with the AQMP assumptions is determined by comparing the proposed project with the assumptions in the AQMP. The emphasis of this criterion is to insure that the analyses conducted for the proposed project are based on the same forecasts as the AQMP. For this project, the City of Wildomar General Plan land use designations define the assumptions that are represented in the AQMP.

The existing General Plan land use designation is Medium High Density Residential (MHDR). The project involves a General Plan Amendment (GPA) to change the current land use from MHDR to very high density residential (VHDR). The proposed project would be consistent with the VHDR designation with a density of 18.4 dwelling units per acre. With the GPA approved, the proposed project would not result in an inconsistency with the land use designation in the City's General Plan.

Although the project would result in construction of residential units at a slightly higher density than would occur under the existing General Plan land use designation, the total project operational emissions would be less than half of the SCAQMD's thresholds of significance (as detailed in Impact AIR-3, below). In addition, increased residential density is linked to improvements in air quality, as higher densities expand transportation options and reduces distances between destinations. Therefore, the proposed project is not anticipated to exceed the AQMP assumptions for the project site, and is found to be consistent with the AQMP for the second criterion.

Summary

Based on the above, the project will not result in an inconsistency with the SCAQMD AQMP. Therefore, a less than significant impact will occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Air Quality Standards/Violations

Impact AIR-2: The project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Impact Analysis

Two criteria are used to assess the significance of this impact: (1) the Local Significance Threshold analysis and (2) the CO hot spot analysis.

Localized Significance Threshold Analysis

The SCAQMD Governing Board adopted a methodology for calculating localized air quality impacts through localized significance thresholds (also referred to as an LST analysis). Localized significance thresholds represent the maximum emissions from a project that would not cause or contribute to an exceedance of the most stringent applicable state or federal ambient air quality standard. Localized significance thresholds were developed in recognition of the fact that criteria pollutants such as CO, NO_x, and PM_{10} and $PM_{2.5}$ in particular, can have local impacts at nearby sensitive receptors as well as regional impacts. The localized significance thresholds are developed for each source receptor area and are applicable to NO_x, CO, PM_{10}, and $PM_{2.5}$. The project is located in Source Receptor Area 25 (Lake Elsinore).

The localized assessment methodology limits the emissions in the analysis to those generated from onsite activities. LSTs may apply to project construction and project operation. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources (such as heavy-duty trucks) that may spend long periods queuing and idling at the site; such as industrial warehouse/transfer facilities. The project does not include such uses. Therefore, due the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted. This analysis, therefore, focuses on localized construction impacts.

The onsite emissions during construction are compared with the localized significance thresholds and are summarized in Table 3.3-4. The LST values used are for SRA 25, a construction area of 5 acres, with a sensitive receptor located within 25 meters of construction activity. The onsite emissions were generated as discussed in the regional analysis. Onsite emissions are from fugitive dust during grading and off-road diesel emissions. As shown in Table 3.3-4, unmitigated emissions during construction do not exceed the localized significance thresholds.

Table 3.3-4: Localized Significance Analysis (Construction)

Activity	Onsite Emissions (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Grading	80.72	52.58	6.34	4.87
Building Construction	31.25	18.93	2.23	2.10
Paving	25.18	14.98	1.41	1.30
Architectural Coating	2.57	1.90	0.22	0.22
Subtotal of Overlapping Phases[1]	*59.00*	*35.81*	*3.86*	*3.62*
Maximum Daily Emissions	80.72	52.58	6.34	4.87
Localized Significance Threshold	371	1,965	13	8
Exceed Threshold?	No	No	No	No

Notes:
1. Each of the above activities does not necessarily occur at the same time. The Building Construction, Paving, and Architectural Coatings phases are assumed to potentially overlap. Grading would not overlap any other construction phase.
Source of emissions: Kunzman 2014 (Appendix B)
Source of thresholds: South Coast Air Quality Management District 2009, for Source Receptor Area 25, 5-acre area of disturbance, with a receptor at a distance of 25 meters.

As shown with the information above, the SCAQMD localized thresholds would be not exceeded during construction for any criteria pollutant emissions. Therefore, the short-term localized emissions are considered to have a less than significant local impact.

The localized construction analysis uses thresholds that represent the maximum project emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (South Coast Air Quality Management District 2008a). If the project results in emissions that do not exceed the localized significance thresholds, it follows that those emissions would not cause or contribute to a local exceedance of the appropriate ambient air quality standard. The localized construction analysis demonstrates that the project would not exceed the localized significance thresholds for CO, nitrogen dioxide, PM_{10}, or $PM_{2.5}$. Therefore, the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.

Carbon Monoxide Hot Spot Analysis

A carbon monoxide (CO) hot spot is a localized concentration of CO that is above the state or federal 1-hour or 8-hour CO ambient air standards. Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. To provide a worst-case scenario, CO concentrations are estimated at project-impacted intersections, where the concentrations would be the greatest.

Carbon monoxide (CO) hot spot thresholds ensure that emissions of CO associated with traffic impacts from a project in combination with CO emissions from existing and forecasted regional traffic do not exceed state or federal standards for CO at any traffic intersection impacted by the project. Project concentrations may be considered significant if a CO hot spot intersection analysis determines that project generated CO concentrations cause a localized violation of the state CO

1-hour standard of 20 ppm, state CO 8-hour standard of 9 ppm, federal CO 1-hour standard of 35 ppm, or federal CO 8-hour standard of 9 ppm.

This analysis follows guidelines recommended by the CO Protocol and the SCAQMD. According to the CO Protocol, intersections with Level of Service (LOS) E or F may require detailed analysis. In addition, intersections that operate under LOS D conditions in areas that experience meteorological conditions favorable to CO accumulation may require a detailed analysis. The SCAQMD recommends that a local CO hot spot analysis be conducted if the intersection meets one of the following criteria:

1. The intersection is at LOS D or worse and where the project increases the volume to capacity ratio by 2 percent, or
2. The project decreases LOS at an intersection from C to D.

According to the Air Quality and Global Climate Change Impact Analysis (Kunzman 2014), the project would not violate state or federal CO standards. Specifically, the analysis explains:

> The Traffic Analysis showed that the project would only generate a maximum of 1,197 trips per day. Within the project vicinity, the intersection of Inland Valley Drive and Clinton Keith Road is subject to the highest volume of daily traffic. The number of vehicles through that intersection would be 33,100 for the existing plus ambient plus project plus cumulative scenario. The 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan) showed that an intersection which has a daily traffic volume of approximately 100,000 vehicles per day would not violate the CO standard. As the highest traffic volume in the project vicinity is approximately 66,900 daily trips shy of the 100,000 vehicles mentioned above, no CO "hot spot" modeling was performed and no significant long-term air quality impact is anticipated to local air quality with the ongoing use of the proposed project. As such, project would not affect the LOS of intersections in the project area. Therefore, the project would not significantly contribute to a CO hotspot.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Criteria Pollutant

Impact AIR-3:	**The project would not 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

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

1. Regional analysis: emissions of nonattainment pollutants must be below the regional significance thresholds. This is an approach recommended by the SCAQMD in its comment letters.
2. Summary of projections: the project must be consistent with current air quality attainment plans including control measures and regulations. This is an approach consistent with Section 15130(b) of the CEQA Guidelines.
3. Cumulative health impacts: the project must result in less than significant cumulative health effects from the nonattainment pollutants. This approach correlates the significance of the regional analysis with health effects, consistent with the court decision, *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1219-20.

Note that the voluntary approaches in the SCAQMD's 1993 Handbook are not used in this analysis for the following reasons. The first approach in the 1993 Handbook is a 1-percent-per-year reduction (or 18 percent over 18 years to the year 2010) in project emissions of VOC, NO_x, CO, PM_{10}, and SO_x. This approach is not straightforward and operational reductions are not easy to quantify. The second approach is not applicable because it relies on SCAQMD Regulation XV, which was repealed in 1995 and therefore is not applicable. The third approach is to reduce the rate of growth in vehicle miles traveled and trips. In this approach, the rate of growth in vehicle miles traveled and trips "should be held to the rate of population or household growth." Data that was used by Southern California Association of Governments in the AQMP should be used in this approach; however, that data is not available. Therefore, the approaches in the 1993 SCAQMD Handbook pertaining to cumulative impacts are not used.

Step 1: Regional Analysis

If an area is in nonattainment for a criteria pollutant, then the background concentration of that pollutant has historically exceeded the ambient air quality standard. It follows that if a project exceeds the regional threshold for that nonattainment pollutant, then it would result in a cumulatively considerable net increase of that pollutant and result in a significant cumulative impact.

The Air Basin is in nonattainment for PM_{10}, $PM_{2.5}$, nitrogen dioxide, and ozone. Therefore, if the project exceeds the regional thresholds for PM_{10}, or $PM_{2.5}$, then it contributes to a cumulatively considerable impact for those pollutants. If the project exceeds the regional threshold for NO_x or VOC, then it follows that the project would contribute to a cumulatively considerable impact for ozone. If the project exceeds the NO_x threshold, it could contribute cumulatively to nitrogen dioxide concentrations.

Regional emissions include those generated from all onsite and offsite activities. Regional significance thresholds have been established by the SCAQMD because emissions from projects in the Air Basin can potentially contribute to the existing emission burden and possibly affect the attainment and maintenance of ambient air quality standards. Projects within the Air Basin with regional emissions in excess of any of the thresholds presented in Table 3.3-5 (for construction) and Table 3.3-6 (for operation) are considered to have a significant regional air quality impact.

Construction Regional Emissions

Table 3.3-5 summarizes construction-related emissions (without mitigation). For the assumptions used in generating the emissions, please refer to Appendix B of this report. The information shown in Table 3.3-5 indicates that the SCAQMD regional emission thresholds would not be exceeded during the project's construction. Therefore, without mitigation, the short-term construction emissions are considered to have a less than significant regional impact.

Table 3.3-5: Construction Air Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$
Grading						
On-Site[2]	6.85	80.72	51.58	0.06	6.34	4.87
On-Site[3]	0.09	0.12	1.23	0.00	0.23	0.06
Subtotal	6.94	80.84	52.81	0.06	6.56	4.93
Building Construction						
On-Site	3.87	31.25	18.93	0.03	2.23	2.10
On-Site	0.81	2.84	11.17	0.02	1.63	0.47
Subtotal	4.68	34.09	30.10	0.05	3.86	2.57
Paving						
On-Site	2.32	25.18	14.98	0.02	1.41	1.30
On-Site	0.06	0.08	0.95	0.00	0.17	0.05
Subtotal	2.38	25.26	15.92	0.02	1.58	1.35
Architectural Coating						
On-Site	38.84	2.57	1.90	0.00	0.22	0.22
On-Site	0.11	0.13	1.64	0.00	0.29	0.08
Subtotal	38.95	2.70	3.54	0.00	0.51	0.30
Total of Overlapping Phases	46.02	62.05	49.57	0.07	5.95	4.22
SCAQMD Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Table 3.3-5 (cont.): Construction Air Pollutant Emissions

Activity	Pollutant Emissions (pounds/day)					
	VOC	NOx	CO	SO_2	PM_{10}	$PM_{2.5}$

Notes:
The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the grading activities do not occur at the same time as the other construction activities; therefore, maximum daily emissions is equal to the sum of the construction, paving, and painting phases.
VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide
SO_X = sulfur oxides PM_{10} and $PM_{2.5}$ = particulate matter
Source of emissions: Kunzman 2014 (Appendix B)
Source of thresholds: South Coast Air Quality Management District 2011a.

Operational Regional Emissions

Emissions were estimated using the California Emissions Estimator Model (CalEEMod). Emissions would be from motor vehicles and area sources (natural gas, hearth, landscape, consumer products, and architectural coating).

Operational emissions from emission sources generated both onsite and offsite as derived from CalEEMod are shown in Table 3.3-6 for the summer season. As shown in Table 3.3-6, the project's emissions do not exceed the SCAQMD's regional thresholds and are considered less than significant.

Table 3.3-6: Operational Emissions

Source	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area Sources	6.59	0.18	15.15	0.00	0.30	0.30
Energy Usage	0.05	0.43	0.18	0.00	0.03	0.03
Mobile Sources	5.03	16.79	56.85	0.13	8.91	2.53
Total	11.97	17.40	72.18	0.13	9.24	2.86
Significance Threshold	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Notes:
VOC = volatile organic compounds NO_X = nitrogen oxides CO = carbon monoxide
SO_2 = sulfur dioxide PM_{10} and $PM_{2.5}$ = particulate matter
Source of emissions: Kunzman 2014 (Appendix B)
Source of thresholds: South Coast Air Quality Management District 2011a.

Effective April 12, 2010, the EPA promulgated a new lower federal ambient air quality standard for nitrogen dioxide. The federal standard of 0.100 ppm is based on the 3-year average of the 98th percentile of the daily maximum 1-hour average. The state standard is 0.18 ppm, which is not to be exceeded at all. Therefore, the two cannot be easily compared. As shown in Table 3.3-1, the average of the three most recent years of 1-hour nitrogen dioxide concentration in the Air Basin is 0.04 ppm.

There is currently no SCAQMD threshold corresponding to the new federal standard. This analysis uses the current SCAQMD thresholds to determine significance for nitrogen dioxide and NO_X.

The regional significance analysis of construction and operational emissions demonstrates that emissions are below the SCAQMD regional significance thresholds. Therefore, the project does not contribute to a cumulative impact according to this criterion.

Step 2: Plan Approach

Section 15130(b) of the CEQA Guidelines states the following:

> The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

In accordance with CEQA Guidelines 15130(b), this analysis of cumulative impacts is based on a summary of projections analysis. . This analysis is based on the 2003 and 2007 AQMPs until the 2012 AQMP is approved by EPA. The Air Basin is in nonattainment for ozone, particulate matter (PM_{10} and $PM_{2.5}$), and nitrogen dioxide, which means that concentrations of those pollutants currently exceed the ambient air quality standards for those pollutants. When concentrations of ozone, PM_{10}, $PM_{2.5}$, and nitrogen dioxide exceed the ambient air quality standard, then those sensitive to air pollution (children, the elderly, the infirm) could experience health effects such as decrease of pulmonary function and localized lung edema in humans and animals, increased mortality risk, and risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans.

Under the CEQA Guidelines, cumulative impacts may be analyzed using other plans that evaluate relevant cumulative effects. The AQMPs describe and evaluate the future projected emissions sources in the Air Basin and sets forth a strategy to meet both state and federal Clear Air Act planning requirements and federal ambient air quality standards. Therefore, the AQMPs are relevant plans for a CEQA cumulative impacts analysis. The 2003 AQMP updates the attainment demonstration for the federal standards for ozone and PM_{10}; replaces the 1997 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal nitrogen dioxide standard that the Air Basin has met since 1992. The 2007 AQMP focuses on ozone and $PM_{2.5}$. The AQMP also incorporates significant new scientific data, emission inventories, ambient measurements, control strategies, and air quality modeling. Once approved by EPA, the 2012 AQMP becomes the applicable SIP and will supersede the previously approved AQMPs.

The geographic scope for cumulative criteria pollution from air quality impacts is the Air Basin, because that is the area in which the air pollutants generated by the sources within the Air Basin

circulate and are often trapped. The SCAQMD is required to prepare and maintain an AQMP and a SIP to document the strategies and measures to be undertaken to reach attainment of ambient air quality standards. While the SCAQMD does not have direct authority over land use decisions, it is recognized that changes in land use and circulation planning are necessary to maintain clean air. The SCAQMD evaluated the entire Air Basin when it developed the AQMP.

In accordance with CEQA Guidelines Section 15064, subdivision (h)(3), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously approved plan or mitigation program. As identified in Impact AIR-1, the project complies with the control measures in the 2003 and the 2007 AQMP and all of the SCAQMD's applicable rules and regulations. As identified in Impact AIR-1, the project complies with the control measures in the 2003 and the 2007 AQMP and all of the SCAQMD's applicable rules and regulations. Because the project does not exceed the SCAQMD's CEQA significance thresholds, the analysis contained in Impact AIR-1 demonstrates that the project is consistent with the most recent EPA approved AQMP and SIP without mitigation. Therefore, the project would result in a less than significant impact according to this criterion.

Step 3: Cumulative Health Impacts

The Air Basin is in nonattainment for ozone, nitrogen dioxide, PM_{10}, and $PM_{2.5}$, which means that the background levels of those pollutants are at times higher than the ambient air quality standards. The air quality standards were set to protect public health, including the health of sensitive individuals (such as the elderly, children, and the sick). Therefore, when the concentration of those pollutants exceeds the standard, it is likely that some sensitive individuals in the population would experience health effects that were described in Table 3.3-3. However, the health effects are a factor of the dose-response curve. Concentration of the pollutant in the air (dose), the length of time exposed, and the response of the individual are factors involved in the severity and nature of health impacts. If a significant health impact results from project emissions, it does not mean that 100 percent of the population would experience health effects.

The regional analysis of construction and operational emissions indicates that the project would not exceed the SCAQMD regional significance thresholds. The project would not result in cumulative health impacts.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Sensitive Receptors

Impact AIR-4: The project would not expose sensitive receptors to substantial pollutant concentrations.

Impact Analysis

Those who are sensitive to air pollution include children, the elderly, and persons with pre-existing respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities (SCAQMD 2008a). Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

The nearest sensitive receptors to the project site are the residential uses located immediately north of the project boundary and approximately 19 meters east of the project boundary.

Localized Significance Threshold Analysis

The localized construction analysis uses thresholds that represent the maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard (SCAQMD 2008a). The thresholds are developed based on the ambient concentrations of that pollutant for each source receptor area and on the location of the sensitive receptors. If the project results in emissions under those thresholds, it follows that the project would not cause or contribute to an exceedance of the standard. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded at the sensitive receptor locations, it follows that the receptors would not be exposed to substantial pollutant concentrations.

As identified in Impact AIR-2, the localized construction analysis demonstrated that the project would not exceed the localized thresholds for CO, nitrogen dioxide, PM_{10}, or $PM_{2.5}$. In addition, a localized impact analysis for operational analysis is not warranted, as the land use does not include stationary sources or attract mobile sources (such as heavy-duty trucks) that would spend long periods queuing or idling onsite. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations of CO, nitrogen dioxide, PM_{10}, or $PM_{2.5}$ from construction or operational activities.

Cumulative Criteria Pollutant Analysis

Emissions of NO_x and VOC (ozone precursors) during construction and operation from only the project would not expose sensitive receptors to substantial pollutant concentrations. (See the Cumulative Impact analysis for an assessment of the cumulative contribution of ozone precursors.)

Operational CO Impact

A CO hot spot analysis is the appropriate tool to determine if project emissions of CO during operation would exceed ambient air quality standards. The main source of air pollutant emissions

during operation are from offsite motor vehicles traveling on the roads surrounding the project. The CO hot spot analysis in Impact AIR-2 demonstrated that emissions of CO during operation would not result in an exceedance of the most stringent ambient air quality standards for CO. The standards are set to protect the health of sensitive individuals. If the standards are not exceeded, then the sensitive individuals would not be significantly impacted. Therefore, according to this criterion, air pollutant emissions during operation would result in a less than significant impact.

Toxic Air Pollutants

Toxic Air Contaminants - Construction

The construction equipment would emit diesel particulate matter, which is a carcinogen. However, the diesel particulate matter emissions are short-term in nature. Determination of risk from diesel particulate matter is considered over a 70-year exposure time. Guidance published by the CAPCOA (2009), Health Risk Assessments for Proposed Land Use Projects, does not include guidance for health risks from construction projects addressed in CEQA; risks near construction projects are expected to be included later when the toxic emissions from construction activities are better understood. Therefore, considering the dispersion of the emissions and the short time frame, exposure to diesel particulate matter is anticipated to be less than significant.

Operational Toxic Air Contaminants

The ARB Air Quality and Land Use Handbook contains recommendations that will "help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution" (ARB 2005), including recommendations for distances between sensitive receptors and certain land uses. These recommendations are assessed as follows.

- Heavily traveled roads. ARB recommends avoiding new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. Epidemiological studies indicate that the distance from the roadway and truck traffic densities were key factors in the correlation of health effects, particularly in children. The project is 1,900 feet from Clinton Keith Road, which is estimated to have 11,355 vehicles per day. In addition, the project site is approximately 0.5 mile from I-15, which is estimated to have 128,000 vehicles per day (California Environmental Health Tracking Program 2011). Therefore, the project would not expose receptors to substantial pollution from heavily traveled roads.
- Distribution centers. ARB also recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center. Land uses within 1 mile of the project site were reviewed, and no distribution centers were found. Therefore, the project would not expose receptors to substantial pollution from distribution centers.
- Fueling stations. ARB recommends avoiding new sensitive land uses within 300 feet of a large fueling station (a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities. The nearest fueling stations are located at the intersection of Clinton Keith Road and I-15, approxiately 0.9 mile northwest of the project. Therefore, the project would not expose receptors to substantial pollution from fueling stations.

- Dry cleaning operations. ARB recommends avoiding siting new sensitive land uses within 300 feet of any dry cleaning operation that uses perchloroethylene. For operations with two or more machines, ARB recommends a buffer of 500 feet. For operations with three or more machines, ARB recommends consultation with the local air district. The nearest dry cleanign operations are located at the intersection of Clinton Keith Road and I-15, approxiately 0.9 mile northwest of the project. Therefore, the project would not expose receptors to substantial pollution from dry cleaning operations.

Therefore, the project would result in a less than significant impact to sensitive receptors during project operations.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Odors

Impact AIR-5:	**The project would not create objectionable odors affecting a substantial number of people.**

Impact Analysis

The SCAQMD recommends that odor impacts be addressed in a qualitative manner. Such an analysis shall determine whether the project would result in excessive nuisance odors, as defined under the California Code of Regulations and Section 41700 of the California Health and Safety Code, and thus would constitute a public nuisance related to air quality.

Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project does not contain land uses typically associated with emitting objectionable odors.

Diesel exhaust and VOCs would be emitted during construction of the project, which are objectionable to some; however, emissions would disperse rapidly from the project site and therefore should not reach an objectionable level at the nearest sensitive receptors.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

3.4 - Biological Resources

This section describes the existing biological resources and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based on information contained in the Riverside County Geographic Information System (GIS), Determination of Biological Equivalent or Superior Preservation (DBESP) (RCA Associates LLC 2015, included in this EIR as Appendix C), and the General Biological Resources Assessment (RCA Associates LLC 2013, included in this EIR as Appendix C).

3.4.1 - Existing Conditions

Past human activities over the last several decades have disturbed much of the site, which is currently supporting a disturbed grassland community. There are a single-family residence, trees, and other associated features on the southeast portion of the project site; the remainder of the site is vacant. Existing residences and single-family residences are adjacent to the site to the north and east, while an apartment complex is to the south and vacant land is to the west. Elevations on-site range from 1,351 to 1,358 feet above mean sea level with a gentle topographic gradient to the southwest. Overall, site drainage is to the west. Soils on-site are primarily Arlington and Greenfield fine sandy loams.

Vegetation Communities and Land Use

According to the General Biological Resources Assessment (2013), the project site contains disturbed grassland. The project is within the Western Riverside County Multiple Species Habitat Conservation Plan's (MSHCP's) Narrow Endemic Plant Species Survey Area (NEPSSA) for Navarretia (*Navarretia fossalis*). Rare plant surveys were performed for this species, and no sensitive plant species were observed on the project site. Exhibit 3.4-1 shows the vegetation communities on-site. The land uses in the area primarily consist of residential, and vacant/open space composed of disturbed habitats and native vegetation.

Grassland

Grasslands are naturally occurring areas dominated mainly by grasses (*paean*). Grasslands typically occur in areas with low nutrient levels or areas that are constantly disturbed by grazing or fires, all of which prevent the growth of woody species.

Disturbed Habitat

Disturbed habitat includes unvegetated or sparsely vegetated areas, particularly where the soil has been heavily compacted by either vehicles (roads) or prior development, or where agricultural lands have been abandoned. Disturbed habitat is generally dominated by non-native weedy species that adapt to frequent disturbance or consists of dirt trails and roads, as is the case on-site.

Jurisdictional Areas

United States Army Corps of Engineers Jurisdictional Areas

Exhibit 3.4-2 shows the location of an existing on-site swale. There are no areas that meet the criteria for United States Army Corps of Engineers (USACE) jurisdiction. There is no nexus with any off-site streams, rivers, or other areas that have been designated "Jurisdictional Waters of the U.S."

According to the General Biological Resources Assessment conducted for the proposed project, the Murrieta, California 7.5-minute USGS topographic quadrangle map does not show any blueline stream channels present on the site or in immediate adjacent areas, nor were any wetlands, vernal pools, or riparian areas present on the site.

Water sheet flows onto the project site from the north and enters a drainage swale in the eastern part of the site, just west of Jana Lane (see Exhibit 3.4-2). A small, eroded feature originates north of the project site, which originates from sheet flows from Jana Lane. Water enters the swale from the north, but also receives natural run-off from all directions. The drainage swale does not have any noticeable inlets or outlets (such as culverts); consequently, water which flows into the swale via Jana Lane remains in the swale, eventually permeating into the sandy loam soils and eventually passing through a buried culvert beneath Jana Lane and continues downstream within an incised channel.

The swale does not directly connect with any off-site channels; therefore, the swale is not considered a Jurisdictional Waters of the U.S., nor will USACE (404 permit) regulations apply. This conclusion is based on the following:

- There is no nexus with any off-site streams, rivers, or other areas that have been designated as Jurisdictional Waters of the U.S. (Note that USACE Guidelines suggest that a significant nexus must exist with a jurisdictional area in order for a channel to be considered a Jurisdictional Water of the U.S.)
- There is no continuous flow through the swale given the absence of any inlet or outlet, which would allow off-site flows.
- The swale does not support any waterfowl use and no federal or state listed species occur on the property or within the drainage swale.
- The swale is approximately 0.1 acre in size and does not drain any large watershed habitat areas in the surrounding area.

CDFW Jurisdictional Areas

There are no areas, which meet the criteria to be under California Department of Wildlife (CDFW) jurisdiction within the project site. The swale does not support any waterfowl use and no federal or state listed species occur on the property or within the drainage swale. Additionally, the swale is about 0.1 acre and does not drain into any large watershed habitat areas in the surrounding area.

Source: RCA Associates, LLC, July 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.4-1
Disturbed Grassland On-Site

THIS PAGE INTENTIONALLY LEFT BLANK

Source: RCA Associates, LLC, July 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.4-2
On-Site Swale

THIS PAGE INTENTIONALLY LEFT BLANK

Riparian/Riverine Areas

Based on a site visit with USFWS and CDFW representatives, the resource agency representatives determined that the drainage swale should be considered riparian/riverine under the MSHCP. No blueline streams dissect the property, and the small drainage swale located along the eastern boundary does not support any riparian vegetation or habitats. Since the regulatory agencies consider the feature to be riverine, a Determination of Biological Equivalent or Superior Preservation (DBESP) was prepared for potential impacts to 0.10 acre of riparian/riverine areas.

Vernal Pools and Vernal Pool Guidelines

Soils on the project site are not categorized as soils that are known to support vernal pools. The topography of the site does not permit the pooling or ponding of waters sufficiently to form vernal pools. There were no vernal pools identified on the project site during the field investigations.

Plant and Animal Species

A total of 24 plant species were observed during the surveys conducted by RCA Associates LLC. A list of plant species observed is included in the General Biological Resources Assessment (2013) (Appendix C).

A total of 34 animal species were observed during the surveys conducted by RCA Associates. A list of animals observed or detected is included in the General Biological Resources Assessment (2013) (Appendix C).

Sensitive Resources

Sensitive resources are those defined as (1) habitat areas or vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife; and (2) species that have been given special recognition by federal, state, or local government agencies and organizations as a result of limited, declining, or threatened populations.

Sensitive Vegetation Communities and Plant Species

No sensitive habitats (coastal sage scrub, vernal pools, etc.) were identified during the surveys. One sensitive plant species, Navarretia (*Navarretia fossalis*) was observed 2.5 miles northeast of the site. No listed plant species were observed on the project site.

Navarretia is a rare annual plant species in Southern California and is listed federally as a threatened species as well as a California Native Plant Society (CNPS) 1B plant. This plant species occurs mainly in moist areas such as vernal pools, marshes, and along the edge of ponds. No vernal pools, marshes, or other suitable habitats (ponds or streams, etc.) occur on the site, and the plant was not observed during any of the field investigations conducted in May, June, and July 2013. Based on the site conditions, and the results of the 2013 field surveys, the species is not expected to occur on the property and no additional surveys or mitigations are recommended.

Sensitive Animal Species

No threatened or endangered animal species were observed on the project site.

The project site supports habitat for the burrowing owl given the availability of several suitable burrows. However, there were no observations of burrowing owls throughout the breeding season surveys conducted in May, June, and July 2013. Therefore, this species is assumed to be absent from the project site.

The site is located within the Riverside County HCP fee area for the Stephen's kangaroo rat and development of the project site is subject to a per-acre fee. The project site is not located within a core conservation area for this species; therefore, no additional analysis will be required. All project-related impacts to this species is covered under the incidental take permit associated with the SKR HCP.

Multiple Species Habitat Conservation Plan

The MSHCP is a comprehensive multi-jurisdictional effort that includes Riverside County and 14 cities in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system. The MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the U.S. Fish and Wildlife Service (USFWS) and/or CDFW. The MSHCP was adopted on June 17, 2003 by the Riverside County Board of Supervisors. The Incidental Take Permit was issued by both the USFWS and CDFW on June 22, 2004 for the entire MSHCP area.

The project site is located within the Elsinore Area Plan of the MSHCP, and is subject to the appropriate fees and other provisions of the MSHCP. The site is not located within any designated criteria cell area and is not subject to a HANS process review.

3.4.2 - Regulatory Setting

Federal Regulations

Federal Endangered Species Act (FESA)

The primary federal law protecting listed threatened and endangered species is the Federal Endangered Species Act (FESA). This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7, federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) (and/or the National Marine Fisheries Service [NOAA Fisheries]) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or destroy or adversely modify designated critical habitat.

The Migratory Bird Treaty Act

The Migratory Bird Treaty Act makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of any such bird listed in wildlife protection treaties between the United States, Great Britain, Mexico, Japan, and the countries of the former Soviet Union.

Section 404 of the Federal Clean Water Act

Section 404 of the Federal Clean Water Act, which is administered by the USACE, regulates the discharge of dredge and fill material into waters of the United States. Waters of the United States include surface waters, rivers, lakes, estuaries, coastal waters, and wetlands.

State Regulations

The California Endangered Species Act (CESA) and implementing regulations in the Fish and Game Code, Section 2050 through Section 2089, includes provisions for the protection and management of plant and animals species listed as endangered or threatened, or designated as candidates for such listing. Incidental take of an endangered species is permitted by CDFW only under certain conditions and provided that the proper federal permits have been obtained and notifications made to the CDFW as described in Fish and Game Code Section 2080.1. Plants of California declared to be endangered, threatened, or rare are listed at 14 CCR Section 670.2. Animals of California declared to be endangered or threatened are listed at 14 CCR Section 670.5.14. CCR Section 15000 et seq. describes the types and extent of information required to evaluate the effects of a project on biological resources of a project site.

Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The Act is administered by the California Department of Fish and Game.

Section 1600 of the State Fish and Game Code

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California are subject to the regulatory authority of the California Department of Fish and Game.

Under the Code, a stream is defined as a body of water that flows at least periodically, or intermittently, through a bed or channel having banks and supporting fish or other aquatic life. Included are watercourses with surface or subsurface flows that support or have supported riparian vegetation.

The California Department of Fish and Game also has jurisdiction within altered or artificial waterways based on the value of those waterways to fish and wildlife, and also has jurisdiction over dry washes that carry water for a short period of time during storm events (also called “ephemeral waters”).

Local Regulations

Western Riverside County Multiple Species Habitat Conservation Plan

The County of Riverside General Plan (2008) states:

> The proposed Western Riverside County MSHCP encompasses approximately 1.26 million acres (approximately 1,997 square miles) and includes unincorporated and incorporated County land (excluding Indian land) west of the crest of the San Jacinto

Mountains to the Orange County line. The plan is the largest HCP ever attempted and covers multiple species and multiple habitats within multiple jurisdictions. The proposed MSHCP covers a diverse landscape from urban cities to undeveloped foothills and montane forests. In addition to the presence of multiple habitats, the plan stretches across the Santa Ana Mountains, Riverside Lowlands, San Jacinto Foothills, San Jacinto Mountains, Aqua Tibia Mountains, Desert Transition and San Bernardino Mountain bio-regions.

This proposed MSHCP is intended to serve as a Habitat Conservation Plan pursuant to section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan under the NCCP Act of 1991. If adopted, it will be used to allow incidental "take" of plant and animal species identified within the proposed MSHCP. The purpose of the proposed MSHCP is for the Wildlife Agencies to grant "take authorization" for otherwise lawful actions that may incidentally take or harm individuals of a species outside of preserve areas, in exchange for supporting assembly of a coordinated reserve system. Conservation and management duties, as well as implementation assurances, will be provided by the County and other signatory agencies or jurisdictions identified as permittees through a corresponding Implementation Agreement.

Habitat Evaluation and Acquisition Negotiation Process

The Habitat Evaluation and Acquisition Negotiation Process (HANS) applies to property, which may be needed for inclusion in the MSHCP Reserve or subjected to other MSHCP criteria. Under the proposed incentive-based MSHCP program, the County may obtain interests in property needed to implement the MSHCP over time. If it is determined that all or a portion of a property is needed for the MSHCP Reserve, various incentives or monetary compensation may be available to the property owner in exchange for the conveyance of property. Incentives are intended to provide a form of compensation to property owners who convey their property. When a property interest is obtained, it will become part of the MSHCP Reserve.

Wildomar General Plan

Below are MSHCP-related policies from the Wildomar General Plan.

- **OS 17.1:** Enforce the provisions of applicable MSHCP's, if adopted, when conducting review of development applications.
- **OS 17.3:** Enforce the provisions of applicable MSHCP's, if adopted when conducting review of possible general plan amendments and/or zoning changes.

The Multipurpose Open Space Element of the City's General Plan contains policies for the preservation of environmentally sensitive land within the City, including, but not limited to, the land to be preserved through the MSHCPs:

- **OS 18.1:** Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs, if adopted.

Wildomar Municipal Code Chapter 3.43

This chapter establishes the Stephen's Kangaroo Rat Habitat Conservation Plan fee assessment area and sets mitigation fees.

Elsinore Area Plan

Below are relevant policies from the Elsinore Area Plan that pertain to biological resources:

- **ELAP 18.1:** Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines adopted by Riverside County and the Vegetation section of the Multipurpose Open Space Element of the General Plan.
- **ELAP 19.1:** Protect sensitive biological resources in the Elsinore Area Plan through adherence to General Plan policies found in the General Plan Multipurpose Open Space Element.
- **ELAP 19.8:** Conserve sensitive plants, including Parry's spineflower, prostrate spineflower, Payson's jewelflower, smooth tarplant, slender-horned spineflower, Coulter's matilija poppy, Palomar monkeyflower, little mousetail, vernal barley, San Jacinto Valley crownscale, Coulter's goldfields, heart-leaved pitcher sage, and the Quino checkerspot butterfly.

3.4.3 - Methodology

The following methods were employed to identify and evaluate the existing biological setting of the project study area:

- Pertinent environmental documents were reviewed prior to initiation of biological fieldwork (including but not limited to sensitive species occurrence maps, Riverside County MSHCP, data from the California Natural Diversity Data Base, field guides, soil maps, and biological assessments prepared for other projects in the general project area).
- Initial biological surveys were conducted on April 30, 2012, with additional surveys conducted on May 1, June 14, and July 5, 2013, to evaluate the existing biological conditions.
- Vegetation was classified based on a classification system described by Holland and several methods were used to identify wildlife species. Birds were identified via visual observations and vocalizations. Visual observations of individual animals, as well as tracks, scats, etcetera were also used to determine the mammal and reptile populations on the site and in the surrounding area.
- Evaluation of habitats and review of existing documentation were also utilized to determine the types of large and small mammals that may occur on the property, either as permanent residents or transitory species.
- A narrow endemic plant survey and a focused survey for the burrowing owl were both conducted in May, June, and July of 2013.

3.4.4 - Thresholds of Significance

The following thresholds are based on CEQA Guidelines' Appendix G Environmental Checklist and used to determine significance of impacts. Would the project:

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

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

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

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

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

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

3.4.5 - Project Impact Analysis

Effect on Species

Impact BIO-1:	**The project would potentially have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.**

Impact Analysis

According to Section 4 of the General Biological Resources Assessment prepared for the project, there are several sensitive plant and animal species identified by the CNDDB within a 5-mile radius of the project. However, such species are not expected to occur on the project site due to lack of suitable habitat, no observation of species on site, and the distance from the site to the nearest recorded occurrence of the species. The project site has been subject to partial fragmentation as a result of past development. Fragmentation occurs when human development separates a piece of habitat from a larger piece of contiguous habitat. The project site has development to the north, east, and south. Undeveloped, although disturbed habitat occurs to the west, but only for a quarter of a mile. This fragmentation reduces the changes of natural recruitment of native plants and does not allow native wildlife species, such as bobcat, mountain lions, and deer to travel to the project site. However, due to the partial fragmentation of the site, opportunistic species such as coyote, raccoon, and opossum may use the project site as a travel path for foraging within the surrounding development areas.

The project site does not contain any vernal pools and is not within the watershed of any adjacent vernal pools. Therefore, development of the project will not impact vernal pools. No sensitive plant species occur on the project site, therefore development will not impact sensitive plants. In addition, there are no burrowing owls present on the project site, but suitable habitat for this species does occur within the project site. Therefore, there is potential for project-related impacts to burrowing owl.

The project site contains several stands of large trees and therefore project development may potentially impact nesting migratory birds protected under the Migratory Bird Treaty Act. No other sensitive plant or wildlife species are present or supported by the site based on the data reviewed in the CNDDB and CNPSEI as well as information collected during the reconnaissance-level surveys. Therefore, there will not be a substantial adverse effect, either directly or through habitat modifications, on candidate, sensitive or special status species.

All Best Management Practices (BMP), as well as measures required by the NPDES requirements, will be implemented to ensure that the quantity and quality of runoff from the site is not a significant impact when compared to existing conditions. Stormwater systems for the project will be designed to prevent toxins, chemicals, petroleum products, and other toxic substances from entering any adjacent drainage channels, and will not impact downstream riparian/riverine habitats.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1 Pre-construction surveys shall be performed for the burrowing owl as per CDFW survey protocols within 30 days prior to the start of site grading/clearing to verify the presence or absence of the species. A survey report will be prepared within seven days following completion of the survey and will be submitted to the City for review. If the species is observed during the pre-construction surveys, mitigation measures required by CDFW and the MSHCP will be implemented following consultations with CDFW and the City.

Timing/Implementation: Prior to the issuance of a grading permit
Enforcement/Monitoring: City of Wildomar Planning Department

MM BIO-2 If ground or vegetation disturbance occurs between February and August, a preconstruction nesting bird survey shall be conducted by a qualified biologist thirty (30) days prior to construction, ground disturbance, or vegetation removal. The survey area shall include the project site and a 250-foot buffer around the site. Any active nests identified shall have a buffer area established within a 100-foot radius (200 foot for birds of prey) of the active nest. Construction activities shall not occur within the buffer area until the biologist determines that the young have fledged.

Level of Significance After Mitigation

Less than significant impact.

Riparian Habitat

Impact BIO-2: **The project would potentially have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.**

Impact Analysis

Development of the project site will impact a small drainage swale that occupies approximately 0.1 acres, located on the eastern side of the project site. The swale supports riparian/ riverine habitat as described under the MSHCP (RCA Associates 2013). Under the MSCHP, any project-related impact to riparian/riverine habitat is considered significant and requires compensatory mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-3 The applicant shall coordinate with CDFW in order to provide off-site mitigation for the on-site impacts. Mitigation shall be located off-site because of the limitations on the project site. Specifically, the applicant shall coordinate with the Elsinore Murrieta-Anza Resources Conservation District (EMARCD) to restore and enhance riparian/riverine habitat along existing drainages on a mitigation site owned by EMARCD. Mitigation shall be at a rate of 2:1 and approximately 10,000 square feet of riparian/riverine habitat shall be restored and enhanced. A detailed restoration plan shall be prepared for approval by the City and the resources agencies. The plan shall provide a schedule for site preparation and planting, and shall include a set of performance criteria for percent cover, density, and seed production within the mitigation area. This mitigation measure will ensure a no net loss of riparian/riverine habitat as required under the Multiple Species Habitat Conservation Plan.

Timing/Implementation: Prior to the issuance of a grading permit

Enforcement/Monitoring: City of Wildomar Planning Department

MM BIO-4 The applicant shall implement the MSHCP Urban/Wildlife Interface Guidelines to ensure all indirect impacts to drainage features will be minimized. The guidelines are described in Section 6.1.4 of the MSHCP and include guidelines addressing drainage features, toxics, lighting, noise, invasive species, barriers, access, grading/land development, and fuels management.

Timing/Implementation: Prior to the issuance of a grading permit

Enforcement/Monitoring: City of Wildomar Planning Department

Level of Significance After Mitigation

Less than significant impact.

Federally Protected Wetlands

Impact BIO-3:	**The project would not 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

As previously discussed, there are no wetlands, vernal pools or streams present, or adjacent to the project site that meet the minimum criteria to be considered a Waters of the US under USACE jurisdiction as defined by Section 404 of the Clean Water Act. Therefore, the project will have a less than significant impact on Section 404 waters.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Wildlife Corridors and Nursery Sites

Impact BIO-4:	**The project would not 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

As described in the General Biological Resources Assessment (page 1), the project area has undergone a significant amount of development and there are now several residential developments in the immediate project area. Other residential developments are also currently being planned for the area. Based on the existing site conditions and the current surrounding land use, the proposed residential project is not expected to have an adverse effect on wildlife movements in the immediate area.

Based on the MSHCP, there are no designated wildlife movement corridors within the project site. Linkage 8 occurs north of the project site and constrained linkages 13 and 15 occur south of the project. These linkages connect large core conservation areas. Since the project site is not located within a known wildlife movement corridor under the MSHCP and prior to the surrounding development, did not provide the necessary components for a wildlife movement corridor, the project site does not contain a wildlife movement corridor. Therefore, project development will not adversely affect any wildlife movement corridors.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Local Policies or Ordinances Protecting Biological Resources

Impact BIO-5:	**The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

The discussion of Wildomar General Plan policies OS 17.1, OS 17.2, and OS 18.1 are considered city policies and require participation with the Western Riverside County MSHCP, which is also covered under Impact BIO-6. The proposed development is consistent with the requirements of the MSHCP and following payment of the appropriate MSHCP fee, will not adversely affect any City of Wildomar General Plan Policies.

Similarly, Wildomar Municipal Code Chapter 3.43 establishes the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR-HCP) fee assessment area and sets mitigation fees and requires participation with the SKR-HCP, which is also covered under Impact BIO-6. The proposed development is consistent with the requirements of the SKR-HCP and therefore following payment of the SKR-HCP fee will not adversely affect any City of Wildomar General Plan Policies.

The relevant policies from the Elsinore Area Plan that pertain to biological resources include ELAP 18.1 ELAP 19.1, and ELAP 19.8. Policies 18.1 and 19.8 will not be adversely affected because the project site does not contain any viable oak woodlands, sensitive plants, or Quino checkerspot butterfly. Policy 19.1 specifically address the same issues covered under Wildomar General Plan policies OS 17.1, OS 17.2, and OS 18.1. Since the proposed development is participating in the MSHCP process, there will be no adverse effect on Elsinore Area Plan Policies ELAP 18.1 ELAP 19.1, and ELAP 19.8. Policies 18.1 and 19.8.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Participation in the MSHCP process and payment of the MSHCP and SKR-HCP fees are required under the City's General Plan and Municipal Code. The mitigation measures for these items are more appropriately included in the Section Impact BIO-6.

Level of Significance After Mitigation

Less than significant impact.

Conservation Plans

Impact BIO-6: The project would potentially conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis

Based on the General Biological Resources Assessment prepared for the project, the project site is located within the MSHCP and SKR-HCP. Development of the project site is subject to fees associated with both the MSHCP and SKR-HCP (see MM BIO-3 above as well as MM BIO-5 and MM BIO-6 below).

The project site is not located within any designated cell critical area and is not subject to a HANS process review under the MSHCP. The site does not contain any suitable habitat for riparian species and does not contain any vernal pools. The project site does not contain any narrow endemic plants or burrowing owl. The proposed development will potentially impact a small upland swale determine to be a riparian/riverine area by USFWS and CDFW representatives. A DBESP document was prepared to address the potentially significant impacts. The DBESP includes all project-related impacts and appropriate avoidance, minimization, and mitigation measures to offset those impacts.

With payment of applicable fees, the proposed project would have a less than significant impact regarding conflict with an adopted HCP and the MSCHP.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-5 Prior to issuance of a grading permit for the proposed project, the project applicant shall pay all applicable MSHCP fees in full.

Timing/Implementation: Prior to the issuance of a grading permit
Enforcement/Monitoring: City of Wildomar Planning Department

MM BIO-6 Prior to issuance of a grading permit for the proposed project, the project applicant shall pay all applicable SKR-HCP fees in full.

Timing/Implementation: Prior to the issuance of a grading permit
Enforcement/Monitoring: City of Wildomar Planning Department

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.5 - Cultural Resources

3.5.1 - Introduction

This section provides a discussion of the cultural resource and paleontological resource issues for the project, as well as an analysis of potential impacts that may occur as the result of project implementation. Descriptions and analyses in this section are based on information contained in the following documents:

- Update to Historical/Archaeological Resources Survey Assessor's Parcel No. 380-290-029 (Siena Apartments Project), City of Wildomar, Riverside County, California, prepared in July 2013 by CRM Tech, included in this Draft EIR as Appendix D
- A Phase I Cultural Resources Assessment of Hidden Springs Ranch APN 380-290-029, ± 9.5 Acres of Land near Wildomar, Riverside County, California
- Wildomar Municipal Code

As part of Government Code Section 65352.3 (Senate Bill [SB] 18), the City of Wildomar sent a letter dated August 19, 2013, to Ms. Anna Hoover, RPA, Cultural Analyst, Pechanga Band of Mission Indians. The letter is considered a formal request from the City of Wildomar to initiate the SB 18 consultation review process with the Pechanga, in compliance with the provisions of SB 18. Ms. Hoover responded via e-mail and USPS on November 15, 2013. At this time, Ms. Hoover is requesting environmental documentation for the project for review. Once documentation is reviewed by Ms. Hoover, a face-to-face meeting may be requested.

3.5.2 - Environmental Setting

Topography and Geology

The project site is located within a topographically diverse region with Cottonwood Canton to the north, French Valley to the east, Galivan Mountain to the south, and Elsinore Peak to the west. The project area is located on the eastern margin of the Elsinore Mountains, a portion of the Northern Peninsular Ranges of Southern California. The inland escarpment of this range comprises the Elsinore Fault Zone. Natural flow drainage pattern is generally in a southwesterly direction toward Murrieta Creek, which ultimately drains into the Santa Margarita River south of Temecula. For the most part, drainage is intermittent, occurring only as a result of seasonal precipitation.

Topographically, the subject property is comprised of rolling contours and a low hillock in the southeastern property corner. Elevations within the project boundaries range from a low of 1,340 feet above sea level near the southeastern corner, to a high of approximately 1,380 feet above sea level near the northwestern property corner. A permanent source of water was not observed within the project boundaries during the field survey, but a detention basin in the northeastern property corner has obviously held a great deal of standing water, apparently receiving drainage from all surrounding properties.

Geological formations within the Northern Peninsular Range province are generally composed of a great mass of granitic rocks called the Southern California Batholith. Representative rock types include gabbro, diorite, quartz diorite, quartz monzonite, and granite, with quartz diorite predominating. Exposed bedrock outcrops suitable for food processing, rock art, or shelter by indigenous peoples of the region are not found within the boundaries of the subject property. Loose lithic material is present in only limited quantities, none of which would have been suitable for aboriginal tool production.

Climate

The climate of the study area is that typical of cismontane Southern California, which overall is mild, sunny, warm, and rather dry. This climate is classified as Mediterranean or "summer-dry subtropical." Temperatures seldom fall below freezing or rise above 100 degrees Fahrenheit. The rather limited precipitation received occurs primarily during the winter and early spring months.

Natural Resources

Natural resources located within the boundaries of the subject property offered few potential subsistence sources that could be utilized by the indigenous peoples of the region. Local flora and fauna resources could have provided some food, components for medicines, tools, or construction materials. Tool quality lithic material is not available and there are no bedrock outcrops suitable for food processing, rock art, or shelter located within the property boundaries. The absence of a permanent source of water would have greatly decreased the desirability of the property for habitation by native peoples, although an intermittent source of water would have been present.

Criteria for habitation during the historical era was generally somewhat different than for aboriginal occupation, since later populations did not depend solely on environmental conditions for survival. During the historical era, the subject parcel would have probably been considered desirable because of the availability flat, tillable soil; its location near Wildomar and Murrieta; and its proximity to major transportation corridors.

Information Center Records Search

On June 11, 2013, CRM TECH Archaeologist Daniel Ballester, B.A. conducted a records search at the Eastern Information Center (EIC), located at the University of California, Riverside. The search radius included the project area and a one-mile radius outside the project boundaries. To identify any historic properties or resources, the current inventories of the National Register of Historic Places (NRHP), the California Register of Historic Resources (CRHR), the California Historical Landmarks list, the California Points of Historical Interest list, and the California State Historic Resources Inventory were reviewed to determine the existence of previously documented local historical resources.

The results of the records search indicate that one previous study had been conducted for the project area; a Phase I Cultural Resources Assessment conducted in 2005. The study included a records search and reconnaissance survey of the project area with negative findings. No historic or prehistoric sites, features, or resources were previously recorded within or adjacent to the project boundaries.

According to the EIC files, numerous cultural resources studies have been conducted adjacent to the project area, including property to the west and the Prielipp Road/Jackson Avenue Alignment to the south. Eight historical/archaeological sites and five isolates have been previously recorded within the one-mile search radius. None of these sites or isolates are located within or adjacent to the project area. Table 3.5-1 lists the type of previously recorded cultural resources.

Table 3.5-1: Previously Recorded Cultural Resources

Primary #	Description
33-003405	Grinding slick on granite boulder
33-007804	Schwartz House, ca. 1934
33-008652	Sparse lithic scatter
33-008654	Four historic-period artifacts, 1930-1950
33-008948	Isolate (quartz flake)
33-008949	Sparse lithic scatter
33-011434	Fire-affected lithic flakes
33-011435	Isolate (quartz hammerstone)
33-011436	Isolate (granite metate fragment)
33-013913	Lithic scatter
33-015304	Isolate (quartz flake)
33-015305	Isolate (andesite flake)
33-017366	Sparse lithic scatter
Source: CRM TECH, 2013	

Native American Consultation

On June 6, 2012, CRM TECH submitted a written request to the State of California's Native American Heritage Commission (NAHC) for a search of its Sacred Lands files. NAHC's response letter dated July 3, 2013, stated that the sacred lands record search identified no Native American cultural resources within the project boundaries, but recommended that local Native American groups be contacted for further information (Appendix D).

On July 5, 2013, information request letters were sent to 12 Native American contacts listed on NAHC's referral list (Appendix D). In addition, Steven Estrada, Environmental Director for the Santa Rosa Band of Cahuilla Indians, John Gomez, Jr., Cultural Resource Coordinator for the Ramona Band of Cahuilla Mission Indians, and Yvonne Markle, Environmental Office Manager for the Cahuilla Band of Indians, were contacted in accordance with past tribal requests.

As of this date, no responses have been received.

The City of Wildomar received comments from the NAHC concerning the Notice of Preparation on May 1, 2014. The NAHC recommends contacting Native American tribes for consultation concerning the project site to determine if proposed activities might impact cultural resources.

CRM TECH also contacted the Pechanga Band of Luiseño Indians to notify them of upcoming fieldwork and invited them to participate. The Pechanga Band subsequently assigned a Native American monitor to accompany CRM TECH personnel on the field survey.

Field Survey

A pedestrian reconnaissance-level field survey of the project area was completed on June 14, 2013, by the CRM Tech archaeologist and a Native American monitor from the Pechanga Band of Luiseño Indians. The project area was surveyed by walking parallel north-south transects spaced 20 meters apart. Ground visibility was fair to excellent (70 to 100 percent) despite the scattered vegetation growth on portions of the property (see Appendix D for site photos).

No prehistoric or historic resources were discovered during the course of the field survey; however, a modern (ca. 1979) ranch complex was noted in the southeastern corner of the project area (Keller 2005). No buildings, structures, objects, sites, features, or artifacts over 50 years old were observed during the survey.

Paleontological Resources

Paleontology is defined as a science dealing with the life of past geological periods known from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations that have produced fossil material. Such locations and specimens are important nonrenewable resources. CEQA offers protection for these sensitive resources and requires that they be addressed during the environmental impact report process.

FirstCarbon Solutions reviewed sensitivity maps and reports obtained from the Riverside County Land Information System, which indicated that the project area has a high paleontological sensitivity designation. This designation of High Sensitivity suggests that significant fossil remains could be encountered below the surface if conditions are conducive for fossil preservation.

3.5.3 - Regulatory Framework

State and local laws, regulations, plans, or guidelines that are potentially applicable to the project area are summarized below.

State

California Register of Historical Resources

The CRHR is an inventory of significant architectural, archaeological, and historical resources in the State of California. Important cultural resources can be listed in the CRHR through a number of methods, and listing requires approval from the State Historic Resources Commission. Properties can be nominated to the CRHR by local governments, private organizations, or citizens. State Historical Landmarks and NRHP-listed properties gain automatic listing in the CRHR. The evaluative

criteria used by the CRHR for determining eligibility are closely based on those developed by the National Park Service for the NRHP. In order for a cultural resource to be significant or in other words eligible for listing in the CRHR, it must reflect one or more of the following criteria (PRC 5024.1c):

- Criterion 1 (Events): Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- Criterion 2 (Persons): Resources that are associated with the lives of persons important to local, California, or national history.
- Criterion 3 (Architecture): Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values.
- Criterion 4 (Information Potential): Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation.

California Environmental Quality Act

CEQA requires that public agencies assess the effects on historical resources of public or private projects that the agencies finance or approve. Historical resources are defined as buildings, sites, structures, objects, or districts that may have historical, architectural, archaeological, cultural, or scientific significance.

CEQA requires that if a project results in an effect that may cause a substantial adverse change in the significance of a historical resource, alternative plans or mitigation measures must be considered. However, only significant historical resources need to be addressed. Therefore, before the assessment of effects or development of mitigation measures, the significance of cultural resources must be determined. The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

1. Identify potential historical resources.
2. Evaluate the eligibility of historical resources.
3. Evaluate the effects of the project on all eligible historical resources.

The CEQA Guidelines define three ways that a property may qualify as a historical resource for the purposes of CEQA review:

1. The resource is listed in or determined eligible for listing in the CRHR.
2. The resource is included in a local register of historical resources, as defined in PRC Section 5020.1(k), or identified as significant in a historical resource survey that meets the requirements of PRC Section 5024.1(g), unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record (CEQA Guidelines 15064.5[a]).

These conditions are related to the eligibility criteria for inclusion in the CRHR (PRC Sections 5020.1[k], 5024.1, 5024.1[g]). A cultural resource may be eligible for inclusion in the CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of an important creative individual; or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, properties that are listed in or eligible for listing in the NRHP are considered eligible for listing in the CRHR and thus are significant historical resources for the purposes of CEQA (PRC Section 5024.1[d][1]). According to CEQA, a project may cause a substantial adverse change in the significance of a historical resource and thus may have a significant impact on the environment (CEQA Guidelines 15064.5[b]). CEQA also states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired. Actions that would materially impair the significance of a historic resource are any actions that would demolish or adversely alter the physical characteristics of a historic resource that convey its historical significance and qualify it for inclusion in the CRHR or in a local register or survey that meet the requirements of PRC Sections 5020.1(k) and 5024.1(g).

Significant Historic Resources under CEQA Guidelines

In completing an analysis of a project under CEQA, it must first be determined if the project site possesses a historic resource. A site may qualify as a historic resource if it falls within at least one of four categories listed in CEQA Guidelines Section 15064.5(a). The four categories are:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code Section 5024.1, Title 14 CCR, Section 4850, et seq.).
2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of

California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852).

4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Pub. Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Pub. Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Pub. Resources Code sections 5020.1(j) or 5024.1.

A lead agency must consider a resource that has been listed in, or determined to be eligible for listing in the CRHR (Category 1) as an historical resource for CEQA purposes. In general, a resource that meets any of the other three criteria listed in CEQA Guidelines Section 15064.5(a) is also considered a historical resource unless "the preponderance of evidence demonstrates that the resource is not historically or culturally significant."

CEQA also applies to effects on archaeological sites, as detailed in CEQA Guidelines Section 15064.5(c). The provisions of this section are as follows:

1. When a project will impact an archaeological site, a lead agency shall first determine whether the site is a historical resource, as defined in CEQA Guidelines Section 15064.5(a), discussed above.
2. If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
3. If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4. If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or EIR, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

State Health and Safety Code

The discovery of human remains is regulated according to California Health and Safety Code Section 7050.5, which states:

> If human remains are encountered, 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 to the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify Most Likely Descendant (MLD). With the permission of the landowner or his or her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

California Government Code 65352.3-5: Local Government-Tribal Consultation

As of March 1, 2005, California Government Codes 65092; 65351; 65352; 65352.3; 65352.4; 65352.5 and 65560, formerly known as SB 18, require city and county governments to consult with California Native American tribes before individual site-specific, project-level land use decisions are made. In particular, this process applies to General Plan Amendments and adoptions of Specific Plans. The intent of this legislation is to provide all tribes, whether federally recognized or not, an opportunity to consult with local governments for the purpose of preserving and protecting their sacred places.

Local

The applicable policies listed below are from the Wildomar General Plan are intended to ensure the preservation of cultural, historical, archaeological, paleontological, geological, and educational resources in the City.

- **OS 19.2:** Review all proposed development for the possibility of archaeological sensitivity. A Phase I Cultural Resources Assessment and a Paleontological Resources Assessment have been prepared to address potential impacts of the proposed project.
- **OS 19.8:** Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.
- **OS 19.9:** This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.

3.5.4 - Methodology

Prior to commencement of the Phase I Cultural Resources Assessment field survey, a records search was completed at the California Historical Resources Information System, EIC, 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. A request for a Sacred Lands File search was submitted to the Native American Heritage Commission, and project scoping letters were sent to 15 tribal representatives listed who may be interested in project development in the area.

Following the records and Sacred Lands File searches, a literature search of available published references to the study area was completed. Reference material included all available photographs, maps, books, journals, historical newspapers, registers, and directories at the Riverside Public Library Local History Collection, and at the University of California, Riverside libraries. Map research was conducted at the Science Library of the University of California, Riverside. The following maps were consulted:

- 1901 Elsinore 30' USGS Topographic Quadrangle
- 1953 Murrieta, California 7.5' USGS Topographic Quadrangle
- 1979 (photo revised) Murrieta 7.5' USGS Topographic Quadrangle

Subsequent to the records and map research, a field survey of the project site was completed on September 18, 2005, and again on June 14, 2013. The project site was surveyed by traversing the property in parallel transects at 15-meter intervals.

3.5.5 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, impacts to cultural resources would be significant if the project would:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

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

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

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

3.5.6 - Project Impact Analysis

Historic Resource

Impact CUL-1: **The project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.**

Impact Analysis

According to available map sources and aerial photographs, no structures or improvements have been shown within the project site boundaries between 1901 and 1979, indicating that it was vacant during that span of time. The modern ranch complex, reportedly postdating 1979 (Keller 2005), was noted in the southeastern corner of the project area during the pedestrian survey; however, no buildings, structures, objects, sites, features, or artifacts more than 50 years old were encountered throughout the course of the fieldwork. Since no significant historical resources are located on the project site, the project would have no impact regarding historic sites and no mitigation is required.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Archaeological Resource

Impact CUL-2: **The project would potentially cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.**

Impact Analysis

No previously recorded archaeological sites are located within the project boundaries. Additionally, no archaeological resources were encountered during the archaeological field survey. The previous archaeological studies of the project site indicate the project would have no impact regarding substantial adverse changes in the significance of an archaeological resource. However, to ensure that the project has a less than significant impact on archaeological sites, mitigation is proposed in the event that any unknown resources are found onsite.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Mitigation Measures CUL-1 through CUL-6 are required.

MM CUL-1 If during grading or construction activities, archaeological 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 a qualified archaeologist and the Pechanga Tribe. Any unanticipated archaeological resources that are discovered shall be evaluated and a final report prepared by the qualified archaeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. If the qualified archaeologist and the Pechanga Tribe determine the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Section 15064.5(c) and Public Resources Code Section 21083.2 and the Archaeological Resources Treatment and Monitoring Agreement required by Mitigation Measure CUL-2. This mitigation measure shall be incorporated into all construction contract documentation.

Timing/Implementation:	As a condition of project approval, and implemented during ground-disturbing construction activities
Enforcement/Monitoring:	City of Wildomar Building and Planning Departments

MM CUL-2 At least 30 days prior to seeking a grading permit, the project applicants shall contact the Pechanga Tribe to notify them of the proposed grading and shall coordinate with the City of Wildomar and the Pechanga Tribe to develop an Archaeological Resources Treatment and Monitoring Agreement. The agreement shall include but not be limited to outlining provisions and requirements for addressing the treatment of archaeological resources; project grading and development scheduling; terms of compensation for the monitors; treatment and final disposition of any archaeological resources, 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. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

Timing/Implementation:	Prior to the issuance of a grading permit
Enforcement/Monitoring:	City of Wildomar Engineering and Planning Departments

MM CUL-3 All archaeological resources, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Archaeological Resources Treatment and Monitoring Agreement required by Mitigation Measure CUL-2, that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility, which meets the standards set forth in 36 CFR Part 79 for federal repositories.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

MM CUL-4 All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified professional in consultation with the Pechanga Tribe. To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Section 15064.5.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

MM CUL-5 If inadvertent discoveries of subsurface archaeological resources are discovered during grading, work shall be halted immediately within 50 feet of the discovery. The developer, the project archaeologist, and the Pechanga Tribe shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. If the developer and the Pechanga Tribe cannot agree on the significance of or the mitigation for such resources, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Pechanga Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the City of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant state and local law, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4. This mitigation measure shall be incorporated into all construction contract documentation.

Timing/Implementation: As a condition of project approval, and implemented during ground-disturbing construction activities

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

MM CUL-6 To address the possibility that archaeological resources may be encountered during grading or construction, a qualified professional archaeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued

as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Timing/Implementation:	As a condition of project approval, and implemented during ground-disturbing construction activities
Enforcement/Monitoring:	City of Wildomar Engineering and Planning Departments

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Paleontological Resource or Geologic Feature

Impact CUL-3: The project would potentially directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Impact Analysis

The project site is located within an area with high paleontological sensitivity. Implementation of the proposed project could potentially directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Excavations associated with the development of the proposed project could affect paleontological resources buried within the project site. Therefore, it is possible that project-related ground-disturbing activities in undisturbed soils could uncover previously unknown paleontological resources within project boundaries. Unanticipated and accidental paleontological discoveries during project implementation have the potential to affect significant paleontological resources. Implementation of Mitigation Measure CUL-7 will ensure less than significant impacts.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-7 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.

Timing/Implementation:	Prior to the issuance of a grading permit, pre-construction, and during ground-disturbing activities
Enforcement/Monitoring:	City of Wildomar Engineering and Planning Departments

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Human Remains

Impact CUL-4: The project would potentially disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis

No human remains are known to exist within the project area. However, there is always the possibility that subsurface construction activities associated with the proposed project, such as trenching and grading, could potentially damage or destroy previously undiscovered human remains. Accordingly, this is a potentially significant impact. However, if human remains are discovered, implementation of mitigation measure (MM CUL-8) would reduce this potential impact to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-8 If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the Riverside 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 a reasonable time frame. Subsequently, the Native American Heritage Commission shall identify the "most likely descendant" within 24 hours of receiving notification from the coroner. The most likely descendant shall then have 48 hours to make recommendations and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. This mitigation measure shall be incorporated into all construction contract documentation.

Timing/Implementation:	As a condition of project approval, and implemented during ground-disturbing construction activities
Enforcement/Monitoring:	City of Wildomar Engineering and Planning Departments

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

THIS PAGE INTENTIONALLY LEFT BLANK

3.6 - Geology, Soils, and Seismicity

3.6.1 - Introduction

This section describes the current geologic and soil conditions of the proposed Villa Siena Residential Project site and general vicinity, and analyzes issues such as potential exposure of people and property to seismic and geologic hazards such as ground rupture, settlement, and landslides. The types of soils that have been identified on the project site as they relate to the proposed project are also discussed. Information in this section is based on the Geotechnical Report prepared by Earth-Strata, Inc. (2013), included in Appendix E, and the Hydrology Study prepared by Pacific Coast Land Constraints, Inc. (2013), included in Appendix F of this Draft EIR.

3.6.2 - Environmental Setting

Geologic Conditions

Topography

Regionally, the site is located in the Peninsular Ranges Geomorphic Province of California. The Peninsular Ranges are characterized by northwest trending steep mountain ranges separated by sediment filled elongated valleys. The dominant structural geologic features reflect the northwest trend of the province. Associated with and subparallel to the San Andreas Fault are the San Jacinto, Newport-Inglewood, and Whittier-Elsinore Faults. The Santa Ana Mountains are above the west side of the Elsinore Fault, while the Perris Block forms the other side of the fault zone to the east. The Perris Block is bounded to the east by the San Jacinto Fault. The northern perimeter of the Los Angeles basin forms part of a northerly dipping blind thrust fault at the boundary between the Peninsular Ranges Province and the Transverse Range Province.

The mountainous regions within the Peninsular Ranges Province are comprised of Pre-Cretaceous, metasedimentary, and metavolcanic rocks along with Cretaceous plutonic rocks of the Southern California Batholith. The low-lying areas are primarily comprised of Tertiary and Quaternary non-marine alluvial sediments consisting of alluvial deposits, sandstones, claystones, siltstones, conglomerates, and occasional volcanic units.

Geology and Soils

The earth materials on the site are primarily comprised of Quaternary alluvial materials and bedrock. A general description of the dominant earth materials on the site is provided below.

Quaternary Alluvium (map symbol Qal): Quaternary alluvium was encountered to a maximum depth of 5 feet. These alluvial deposits consist predominately of interlayered light brown to brown, fine to coarse grained clayey sand, and occasional sandy silt. These deposits were generally noted to be in a slightly moist to moist, loose to medium dense state.

Quaternary Pauba Formation (map symbol Qpfs): Pauba Formation bedrock was generally encountered below the topsoil and alluvial materials to the full depth of exploration. These materials primarily consisted of olive gray to yellow brown, fine to coarse grained sandstone with varying amounts of silt and clay, and interbedded claystone/siltstone. These materials were

generally noted to be slightly moist to moist, moderately soft to hard and poorly bedded. Typically, the upper 1 to 3 feet of this unit is slightly more weathered and not as hard with occasional lenses of less indurated rock.

Seismic Conditions

The alluvium described is common to this area and the geologic structure is consistent with regional trends. The bedrock is generally massive and lacks significant structural planes. The project is located in a seismically active region and as a result, significant ground shaking will likely impact the site within the design life of the proposed project. The geologic structure of the entire southern California area is dominated by northwest-trending faults associated with the San Andreas Fault system, which accommodates most of the right lateral movement associated with the relative motion between the Pacific and North American tectonic plates. Known active faults within this system include the Newport-Inglewood, Whittier-Elsinore, San Jacinto, and San Andreas Faults.

An active fault is defined by the State of California as having surface displacement within the past 11,000 years or during the Holocene geologic time period. No active faults are known to go through the project site, and the site is not located within an Alquist-Priolo Earthquake Fault Zone, established by the State of California to restrict the construction of new habitable structures across identifiable traces of known active faults.

The Elsinore Fault, with an approximate source to site distance of 3.7 kilometers, is the closest known active fault anticipated to produce the highest ground accelerations, with an anticipated maximum modal magnitude of 6.75.

Secondary Seismic Hazards

Secondary effects of seismic shaking considered as potential hazards include several types of ground failure as well as induced flooding. Different types of ground failure, which could occur as a consequence of severe ground shaking at the site, include landslides, ground lurching, shallow ground rupture, and liquefaction/lateral spreading.

The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, the state of subsurface earth materials, groundwater conditions, and other factors. Based on subsurface exploration, and laboratory testing, all of the above secondary effects of seismic activity are considered unlikely.

Seismically induced flooding is normally a consequence of a tsunami (seismic sea wave), a seiche (a wave-like oscillation of surface water in an enclosed basin that may be initiated by a strong earthquake), or failure of a major reservoir or retention system up-gradient of the site. Since the site is at an elevation of more than 1,300 feet above mean sea level and is located more than 20 miles inland from the nearest coastline of the Pacific Ocean, the potential for seismically induced flooding due to a tsunami is considered nonexistent. Since no enclosed bodies of water lie adjacent to or up gradient of the site, the likelihood for induced flooding due to a seiche is considered nonexistent.

Ground Lurching

The physics of ground lurching are not well understood, but it is generally thought to effect lightly loaded structures such as pavement, pipelines, and sidewalks. Heavier structures typically resist damage from ground lurching. Loose cohesionless earth materials near the surface are prone to ground lurching. Because of the lack of loose cohesionless earth materials near the surface, the potential for ground lurching is not expected to occur.

Ground Subsidence

Groundwater or oil withdrawal from sedimentary earth materials can cause the permanent collapse of pore space previously occupied by the fluid. The consolidation of subsurface sediments resulting from fluid withdrawal could cause the ground surface to subside. If sufficient differential subsidence occurs, it can significantly damage engineered structures. Since no excessive withdrawal of fluids is planned in the vicinity of the proposed project, the potential for subsidence is considered low to remote.

Landslides

Landslide debris was not observed during the subsurface exploration, and no ancient landslides are known to exist on the site.

Groundwater

Groundwater was not observed during the subsurface exploration. Shallow groundwater may be present in the low area on the east side of the site.

3.6.3 - Regulatory Framework

State

Alquist-Priolo Earthquake Fault Zoning Act

In response to the severe fault rupture damage of structures by the 1971 San Fernando earthquake, the State of California enacted the Alquist-Priolo Earthquake Fault Zoning Act in 1972. This act required the State Geologist to delineate Earthquake Fault Zones along known active faults that have a relatively high potential for ground rupture. An “active fault” is defined as a fault that has experienced movement in the last 11,000 years (i.e., Holocene Epoch). Faults that are zoned under the Alquist-Priolo Act must meet the strict definition of being “sufficiently active” and “well-defined” for inclusion as an Earthquake Fault Zones. The Earthquake Fault Zones are revised periodically. No structures for human occupancy may be built across an identified active fault trace. An area of 50 feet on either side of an active fault trace is assumed to be underlain by the fault, unless proven otherwise. Proposed construction in an Earthquake Fault Zone is permitted only following the completion of a fault location report prepared by a California Registered Geologist.

Under the Act, the California State Geologist identifies areas in the State that are at risk from surface fault rupture. The main purpose of the Act is to prevent construction of buildings used for human occupancy where traces of active faults are evident on the earth’s surface. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault zone

where the fault breaks along the surface. Such a rupture could potentially displace and/or deform the ground surface.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed by the California legislature in 1990 (Public Resources Code, Chapter 7.8, Section 2690-2699.6). SHMA direct the Department of Conservation, California Geologic Survey to identify and map areas prone to liquefaction, earthquake-induced landslides and amplified ground shaking. The purpose of the SHMA is to minimize the loss of life and property through the identification, evaluation and mitigation of seismic hazards. The City of Wildomar is shown as a planned mapping area as of the date of the map in 2008.

California Building Code

The California Building Standards Code establishes building requirements for building design and construction. The California Building Standards Code is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national model codes;
- Building standards that have been adopted and adapted from the national model code standards to meet California conditions; and
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

In the context of earthquake hazards, the California Building Standards Code's design standards have a primary objective of assuring public safety, and a secondary goal of minimizing property damage and maintaining function during and following a seismic event. Recognizing that the risk of severe seismic ground motion varies from place to place, the California Building Standards Code seismic code provisions will vary depending on location (Seismic Zones 0, 1, 2, 3, and 4; with 0 being the least stringent and 4 being the most stringent).

Local

City of Wildomar Development Standards

The City requires that all grading conform to the 2013 California Building Code. The City also requires issuance of a grading permit before any grading that involves 50 or more cubic yards may occur. The grading permit application must be accompanied by a geotechnical soils report for the City Engineer's review and approval prior to issuance.

3.6.4 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to geology and soils are significant, the following questions are analyzed and evaluated. Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
   i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
   ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?
   iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?
   iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

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

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

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

3.6.5 - Project Impact Analysis

Earthquake Fault

Impact GEO-1:	**The project would potentially expose 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? Refer to Division of Mines and Geology Special Publication 42.**

Impact Analysis

The project site is not located in an Alquist-Priolo Earthquake Zone fault as defined within the Geological Report (Earth-Strata, Inc.). No active faults traverse the site, and the nearest active fault is located approximately 3.7 kilometers from the project site. Therefore, the potential for surface rupture is considered less than significant.

The City of Wildomar is known for strong seismic activity. The Elsinore Fault, with an approximate source to site distance of 3.7 kilometers, is the closest known active fault anticipated to produce the highest ground accelerations, with an anticipated maximum modal magnitude of 6.75. Based on the

data compiled during the preparation of the Geological Report (Earth-Strata, Inc.), the potential for surface rupture to adversely impact the proposed structures is very low to remote.

Seismic hazards cannot be completely eliminated, but site-specific geotechnical investigation and advanced building practices would minimize potential impacts from a seismic event. In the City of Wildomar, because of its geology, exposure to seismic hazards is generally expected to some degree. However, the California Uniform Building Code (UBC) requires that project structures be designed with adequate strength to withstand the lateral dynamic displacements induced by the Design Basis Ground Motion, which the UBC defines as the earthquake ground motion that has a 2-percent chance of being exceeded in 50 years. The project is required to comply with the UBC and all California seismic design requirements, which would ensure that the project would not expose persons or property to strong seismic ground shaking hazards.

Seismic shaking can also cause ground failures such as liquefaction events. Liquefaction occurs as a result of a substantial loss of shear strength or shearing resistance in loose, saturated, cohesionless earth materials subjected to earthquake-induced ground shaking. As noted in Section 3.6-2, Existing Conditions, the probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, the state of subsurface earth materials, groundwater conditions, and other factors. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, the potential for liquefaction and ground failure at the site is considered unlikely. Furthermore, landslide debris was not observed during subsurface exploration and no ancient landslides are known to exist on the site. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, landslides at the site are considered unlikely. Related impacts would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Seismic Ground Shaking

Impact GEO-2:	**The project would potentially expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.**

Impact Analysis

As outlined within Impact GEO-1, the City of Wildomar is known for strong seismic activity. The Elsinore Fault, with an approximate source to site distance of 3.7 kilometers, is the closest known active fault anticipated to produce the highest ground accelerations, with an anticipated maximum modal magnitude of 6.75. Based on the data compiled during the preparation of the Geological

Report (Earth-Strata, Inc.), the potential for surface rupture to adversely impact the proposed structures is very low to remote.

Seismic hazards cannot be completely eliminated, but site-specific geotechnical investigation and advanced building practices would minimize potential impacts from a seismic event. In the City of Wildomar, because of its geology, exposure to seismic hazards is generally expected to some degree. However, the California Uniform Building Code (UBC) requires that project structures be designed with adequate strength to withstand the lateral dynamic displacements induced by the Design Basis Ground Motion, which the UBC defines as the earthquake ground motion that has a 2-percent chance of being exceeded in 50 years. The project is required to comply with the UBC and all California seismic design requirements, which would ensure that the project would not expose persons or property to strong seismic ground shaking hazards. Adherence to the UBC and California seismic design requirements would ensure potential impacts related to seismic ground failure would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Ground Failure

Impact GEO-3:	**The project would potentially expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction.**

Impact Analysis

Seismic shaking can also cause ground failure events. As noted in Section 3.6-2, Existing Conditions, the probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, the state of subsurface earth materials, groundwater conditions, and other factors. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, the potential for ground failure at the site is considered unlikely. Therefore, potential impacts related to seismic related ground failure would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Landslides

Impact GEO-4: The project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides.

Impact Analysis

Landslide debris was not observed during subsurface exploration, and no ancient landslides are known to exist on the site. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, landslides at the site are considered unlikely. Related impacts would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Soil Erosion or Topsoil Loss

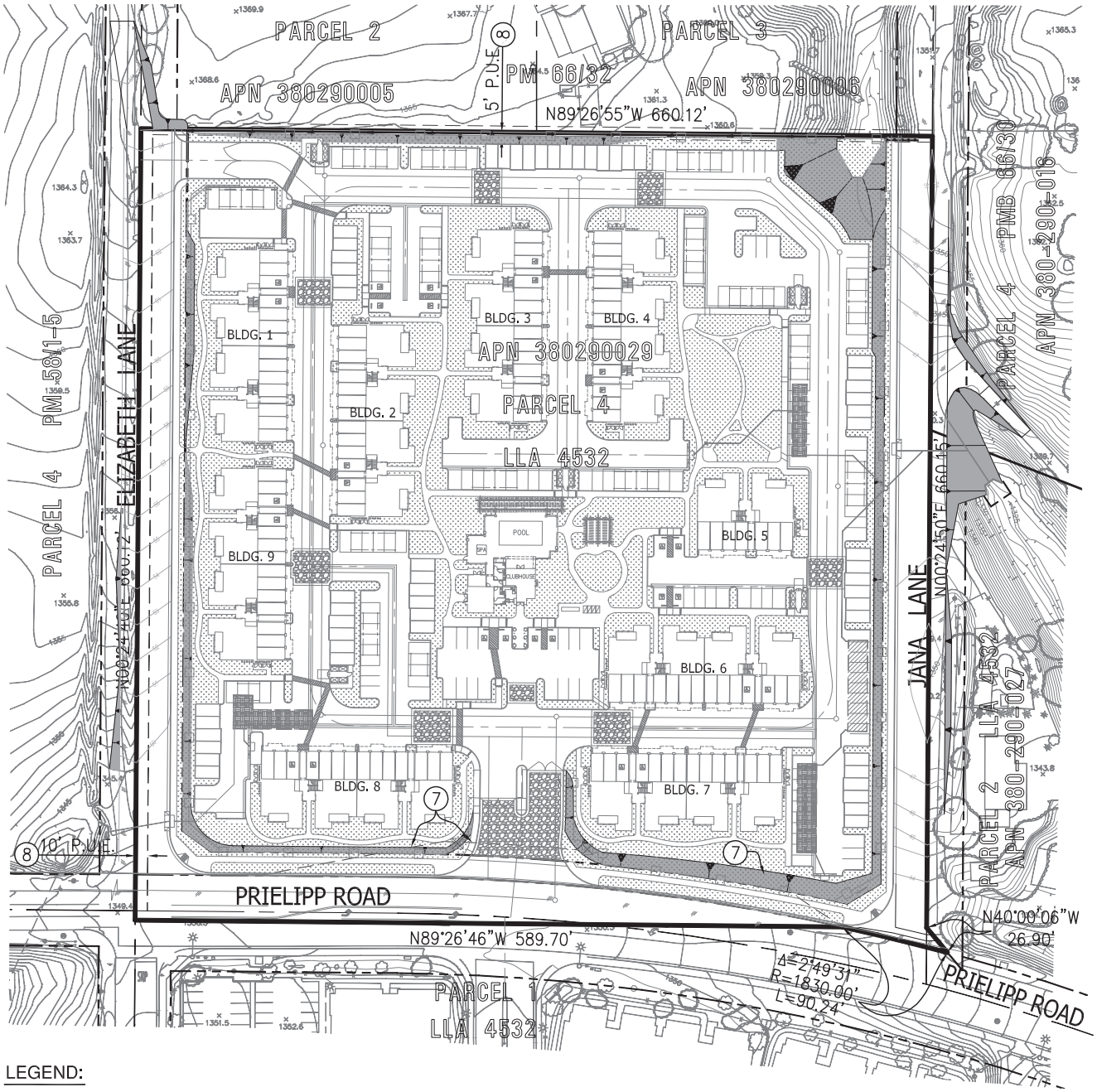
Impact GEO-5: The project would not result in substantial soil erosion or the loss of topsoil.

Impact Analysis

Severe erosion typically occurs on moderate slopes of granular materials (sands and silts) and on steep clay slopes subjected to concentrated water runoff. In general, these conditions do not exist at the site because of the relatively flat condition of the site; however, there is always some potential for localized erosion caused by concentrated surface water flows. Refer to Exhibit 3.6-1 for conceptual grading plans.

The Pacific Coast Land Constraints, Inc. Hydrology Study notes that the site drainage system would be designed to disrupt a natural drainage course at the northeast corner of the project site. The valley will be filled in order to provide for the proposed development. A pipe will be installed at the north property line, within the existing drainage course, and will be designed to outlet beyond the project within the downstream portion of the existing drainage course. An outlet structure and rock rip-rap will be installed to control the outflow and disperse the resulting flows to control potential erosion and degradation of the natural drainage course.

Surface flows within the project will be collected in catch basins, and pipe systems will transmit flow into underground storage/filtrations devices sized to meet the regulatory treatment requirements. From the storage/filtration devices, pipes will be installed and outlet onto adjacent properties to locations that historically forms the pre-development drainage courses. Outlet structures and rip-rap will be installed to control potential erosion and degradation (see Exhibit 3.6-1 for Grading Plan).



LEGEND:

- PROPERTY LINE/ PARCEL LINE
- PROPOSED RIGHT OF WAY
- EASEMENT
- GRASS/LANDSCAPE
- ENCHANCED STAMPED CONCRETE PAVEMENT
- FILTRATION & DETENTION AREA (WQMP)
- DETENTION AREA (WQMP)

Source: Pacific Coast Land Consultants, Inc., November 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.6-1
Preliminary Grading Plan

THIS PAGE INTENTIONALLY LEFT BLANK

In addition, the National Pollutant Discharge Elimination System (NPDES) stormwater permitting programs regulate stormwater quality from construction sites and new development, which includes erosion and sedimentation. Construction projects that disturb 1 acre or more are required to obtain a permit and prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP includes a site map, description of stormwater discharge activities, and best management practices that would be employed to prevent water pollution. The SWPPP for general construction activity permits must describe Best Management Practices (BMPs) that would be used to control soil erosion and discharges of other construction-related pollutants that could contaminate nearby water resources.

Typical BMPs intended to control erosion include sand bags, detention basins, silt fencing, storm drain inlet protection, street sweeping, and monitoring of water bodies:

- **Erosion Control.** Employ measures to prevent the movement of soil by wind or water during project construction and may include watering and physical barriers to the movement of soil particles.
- **Sediment Control.** Employ features to prevent the offsite conveyance of sediments, including onsite catch basin inlet protection.
- **Tracking of Soil.** Employ measures to effectively minimize the tracking of soil by vehicles, which may include gravel driveways, wheel washes, and street sweeping.
- **Wastes and Cleanup.** The SWPPP must address storage and disposal related to debris, trash, concrete, asphalt, paint, coatings, solvents, and other materials applicable to preparation and construction at the project site.
- **Other Reasonable BMPs.** The SWPPP must also implement other applicable BMPs as needed to keep pollutants away from stormwater. The SWPPP must identify additional applicable measures taken during the rainy season and when storms are anticipated.

Years of field testing and field use have demonstrated that these BMPs reduce stormwater runoff impacts to a less than significant level. Implementation of typical BMPs consistent with NPDES construction regulations would ensure the reduction of potential pollutants during stormwater discharges. Construction activities must comply with the SWPPP and NPDES permit, which provide methods and strategies to reduce soil erosion from construction related activities and reduce potential impacts to less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Unstable Geologic Location

Impact GEO-6: The project would potentially 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

Landslide debris was not observed during subsurface exploration, and no ancient landslides are known to exist on the site. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, landslides at the site are considered unlikely. Related impacts would therefore be less than significant.

Secondary effects of seismic shaking considered as potential hazards include several types of ground failure. Different types of ground failure, which could occur as a consequence of severe ground shaking at the site, include landslides and liquefaction/lateral spreading. The probability of occurrence of each type of ground failure depends on the severity of the earthquake, distance from faults, topography, the state of subsurface earth materials, groundwater conditions, and other factors. Based on the Geological Report (Earth-Strata, Inc.), subsurface exploration, and laboratory testing, all of the above secondary effects of seismic activity are considered unlikely.

Liquefaction occurs as a result of a substantial loss of shear strength or shearing resistance in loose, saturated, cohesionless earth materials subjected to earthquake-induced ground shaking. Potential impacts from liquefaction include loss of bearing capacity, liquefaction related settlement, lateral movements, and surface manifestation such as sand boils. Seismically induced settlement occurs when loose sandy soils become denser when subjected to shaking during an earthquake. The three factors determining whether a site is likely to be subject to liquefaction include seismic shaking, type and consistency of earth materials, and groundwater level. The proposed structures will be supported by compacted fill and competent alluvium, with groundwater at a depth of over 50 feet. As such, the potential for earthquake-induced liquefaction and lateral spreading beneath the proposed structures is considered very low to remote due to the recommended compacted fill, relatively low groundwater level, and the dense nature of the deeper onsite earth materials.

Subsidence from scarification and recompaction of exposed bottom surfaces is expected to be negligible to approximately 0.01 foot. Groundwater or oil withdrawal from sedimentary earth materials can cause the permanent collapse of pore space previously occupied by the fluid. The consolidation of subsurface sediments resulting from fluid withdrawal could cause the ground surface to subside. If sufficient differential subsidence occurs, it can significantly damage engineered structures. Since no excessive withdrawal of fluids is planned in the vicinity of the proposed project, the potential for subsidence is considered low to remote. Consequently, impacts from landslide, lateral spreading, subsidence, liquefaction or collapse would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Expansive Soil

Impact GEO-7:	**The project would potentially be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.**

Impact Analysis

Preliminary laboratory test results indicate that onsite earth materials exhibit an expansion potential of very low to low, as classified in accordance with 2013 CBC Section 1803.5.3 and ASTM 04829-03. Additionally, testing for expansive soil conditions should be conducted upon completion of rough grading. Since the onsite earth materials exhibit expansion indices of 20 or less, the design of slab-on-ground foundations is exempt from the procedures outlined in Sections 1808.6.1 and 1808.6.2 of the CBC. Therefore, impacts related to expansive soils would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Wastewater Disposal Systems

Impact GEO-8:	**The project would potentially have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.**

Impact Analysis

The project will connect directly to the Elsinore Valley Municipal Water District (EVMWD) existing sewer lines, and will therefore not use of septic tanks or alternative wastewater disposal systems for the disposal of wastewater. Therefore, no impacts are anticipated in this regard.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.7 - Hazards and Hazardous Materials

3.7.1 - Introduction

This section describes the existing setting regarding hazards and hazardous materials and potential effects from project implementation on the site and its surrounding area. Descriptions and analyses in this section are based in part on information contained in the Phase I Environmental Site Assessment (ESA), prepared by Earth-Strata, Inc. (2013), included in this Draft EIR as Appendix E.

3.7.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic – causes human health effects
- Ignitable – has the ability to burn
- Corrosive – causes severe burns or damage to materials
- Reactive – causes explosions or generates toxic gases

A hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24, contains technical descriptions of characteristics of hazardous waste (California DTSC 2010).

Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA), dated June 30, 2013, was prepared for the project site at 36485 Jana Lane (Earth-Strata, Inc. 2013). The Phase I ESA was performed in accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Phase I ESA Standard E1527-05 (equivalent to the United States Environmental Protection Agency's (EPA's) All Appropriate Inquiry [AAI] Standard). The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs) in connection with a given property. RECs are defined by ASTM E1527-05 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater or surface water of the property."

The project site consists of one residential structure with a detached garage totaling approximately 1,478 square-feet and 660 square-feet, respectively. One water well and one overhead power line

with a transformer are located on the project site. The project site also contains construction equipment and materials. One occupied trailer is also parked on the property.

Mr. Rick McLintock, the Key Site Manager for the property, was not aware of and so did not provide information indicating a specific knowledge of RECs, historic RECs, environmental liens, activity and use limitations, or environmental deed restrictions related to the subject property.

The Phase I ESA analyzed the land uses adjacent to the project site. Two residential properties are located immediately north of the project site. The project site is bordered by Jana Lane to the east (an unpaved road) and residential and vacant/land properties. Prielipp Road runs along the southern boundary of the project site followed by multi-unit residential properties. Elizabeth Lane (an unpaved road) runs along the western boundary of the project site followed by vacant land property.

A review of the Murrieta, California USGS Quadrangle Map shows no physical features that are likely to environmentally impact the project site. The project site is identified as a rural residential developed, rectangular property. No mines, aboveground storage tanks, or wetlands were identified in the immediate area of the subject property; however, there is an intermittent wash to the west and to the east.

General Hydrogeological Characteristics

The subject property is within the Temecula Valley Groundwater Basin, underlying the Santa Margarita watershed. The basin is bounded by non-water bearing crystalline rocks of the Peninsular Ranges. The overlying valleys are drained mainly by Wilson, Temecula, Murrieta, Warm Springs, and Pechanga Creeks, to the Santa Margarita River, which flows west out of the Temecula Valley. The Pechanga Indian Reservation overlies some of the southwestern part of the basin. Average annual precipitation ranges from 7 to 15 inches.

FCS checked the GeoTracker website (www.geotracker.waterboards.ca.gov) for groundwater information at leaking underground storage tank (LUST) cases at facilities in the vicinity of the project site. Based on monitoring well reports prepared for nearby LUST cases, groundwater is between 16 and 32 feet below ground surface.

The topography of the site is rolling, with deeper depressions that collect surface runoff. There is a large area north of the project that drains into a valley area that carries collected runoff across the northeast corner of the site onto the adjacent property to the east. These conditions may affect groundwater subsurface depth.

Historic Review

Aerial photographs were reviewed to evaluate past land-use patterns of the project area. From 1938 to 1976, the project site was located in a rural area, undeveloped and used for agricultural purposes. The surrounding area also consisted of rural undeveloped native and agricultural land. In 1976, Jana Lane and one structure are shown immediately south of the project site. By 1989, the project site was developed with a single-family residence. The surrounding area also consisted of residential and commercial use, as well as rural undeveloped native and agricultural land. No significant additional information was revealed after review of historic topographic maps.

Interviews

Mr. McLintock, occupant of the property site, was interviewed. Mr. McLintock stated that he was slightly familiar with the history of the property. He is not aware of any hazardous materials or petroleum products previously stored on the site. Mr. McLintock also indicated that the property has always been used for residential purposes. He was not aware of any underground storage tanks (USTs) or chemical storage areas.

Agency Findings

Information obtained by the database search and governmental agency review indicated the following:

- No environmental liens, environmental deed restrictions, nor activity and/or land use limitations related to environmental issues were specifically listed.
- The project site is not listed on any federal, state/local governmental agency lists.
- No known oil or gas wells are located within 0.25 mile of the site.
- There is one leaking underground storage tank case located approximately 0.50 mile to the west. A leak was reported in July 1999 and a No Further Action letter dated October 19, 2006, confirms the completion of a site investigation and corrective action for the UST.
- No other cleanup sites, land disposal sites, and/or military sites are located within 1 mile of the project site.

Asbestos-Containing Materials

Based on the date of construction of the structure onsite (post-1980) and the apparent age of at least some of the construction materials (post-1985), the likelihood of possible asbestos-containing materials (ACMs) used in construction of the structure and/or added later is low. During onsite observations, suspect ACMs were not identified. Prior to any demolition, renovation, or any other activity that may disturb these materials, either an inspection should be performed by an accredited Building Inspector, or the affected materials should be handled as asbestos-containing. If future sampling identifies any such materials as ACMs, an approved Operations and Maintenance (O&M) Program would be required to maintain the materials in place. Should specific information regarding the quantities, locations and conditions of potential ACMs be necessary, an asbestos survey should be performed by a state Certified Asbestos Consultant.

Lead-Based Paint

Based on the age of the building (post-1978), the likelihood that lead-based paint was used is low. Damaged, chipping, flaking, or peeling paint was not observed.

Wildfire Hazards

The danger of damage to land and structure from wildfire is high in California, due to a generally dry climate and a preponderance of highly flammable vegetation over much of the State. From 1999 to 2003, wildfires within the jurisdiction of California Department of Forestry and Fire Protection (CAL FIRE) numbered an average of 6,081 per year and burned an average of 217,908 acres per year. The

number of structures damaged during that 5-year span averaged about 1,560 per year. Average annual monetary damages are estimated to be about $275.6 million. In 2003 alone, the damage from wildfires, which burned 527,753 acres within the California Division of Forestry (CDF) jurisdiction, was estimated at about $950 million.

The combination of southern California's arid climate, with its winter chill, hot dry summers, and occasional high winds, create optimal conditions for wildfires. The project site contains primarily undeveloped land, with one residential structure and detached garage totaling approximately 1,478 square feet and 660 square feet, respectively. The structures are located in the southeast corner of the project site, and comprise approximately 5 percent of the total project site. The unoccupied portions of the project site support vegetation growth, such as grasses and weeds. The land bordering the project site to the west is currently undeveloped and supports vegetation growth that includes grass, weeds, and low-lying shrubs. Without maintenance, this vegetation may be susceptible to wildfire. The majority of Riverside County fire stations have a minimum of two career firefighters on duty at all times; typically, a Captain and a firefighter. Volunteer firefighters typically augment the career firefighters on the first-roll engine. Additional volunteer firefighters may respond on a rescue squad or second-roll fire engine, which is exclusively staffed by volunteer firefighters (Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume I).

There are several County fire stations within 8 miles of the project site, listed in Table 3.7-1. The closest fire station to the project site is Station 75, located at 38900 Clinton Keith Road in Murrieta. This fire station is located approximately 3.8 travel miles southwest of the project site.

Table 3.7-1: Area Fire Stations

No.	Name, Address	Distance and Direction from the Project Site
75	Bear Creek, 38900 Clinton Keith Road, Murrieta	3.8 miles southwest
61	Wildomar, 32637 Gruwell Street, Wildomar	4.3 miles northwest
73	Rancho California, 27415 Enterprise Circle West, Temecula	7.3 miles southeast
83	French Valley, 37500 Sky Canyon Drive, # 401, Murrieta	7.7 miles southeast
Source: Riverside County Fire 2014.`		

The City of Wildomar adopted the Fire Hazard Safety Zones (FHSZ) map used by Riverside County to identify which areas of the county (the Local Regional Authority) would be categorized as being a Very High Fire Hazard Safety Zone (VHFHS zone). This map identifies the project site as a VHFHS zone under the authority of the City of Wildomar.

Airports

The closest airport to the project site is the Ontario International Airport, which is located approximately 39 miles northwest. There are no private airfields located within 2 miles of the project site. The two closest airfields are Skylark Field Airport, located 4.8 miles northwest of the

site, and McConville Airstrip, located approximately 12 miles northwest of the site (AirNav 2014 and Google Earth 2014).

3.7.3 - Regulatory Framework

Federal, state, and local county regulations pertain to the use and storage of hazardous materials. This section discusses each of the agencies' roles in regulating hazardous materials.

Federal and State

Resource Conservation and Recovery Act

The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards. As of 2001, an estimated 85 percent of USTs complied with the required standard.

Comprehensive Environmental Response, Compensation and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The act was intended to be comprehensive in encompassing both the prevention of, and response to uncontrolled hazardous substances releases. The act deals with environmental response, providing mechanisms for reacting to emergencies and chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for, and respond to, failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Hazardous Material Transportation Act

The Hazardous Material Transportation Act (HMTA) was published in 1975. Its primary objective is to provide adequate protection against the risks to life and property inherent in the transportation of hazardous material in commerce by improving the regulatory and enforcement authority of the Secretary of Transportation. A hazardous material, as defined by the Secretary of Transportation is, any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property."

State Regulations

California Health and Safety Code

The California Environmental Protection Agency (CalEPA) has established rules governing the use of hazardous materials and the management of hazardous wastes. California Health and Safety Code Sections 25531, et seq., incorporate the requirement of Superfund Amendments and Reauthorization Act and the Clean Air Act as they pertain to hazardous materials. Health and Safety Code Section 25534 directs facility owners storing or handling acutely hazardous materials in reportable quantities to develop a Risk Management Plan (RMP). The RMP must be submitted to the appropriate local authorities, the designated local administering agency, and the EPA for review and approval.

Transport of Hazardous Materials

Transportation of hazardous materials is regulated by the California Department of Transportation, the California Highway Patrol, and the Riverside County Fire Department (RCFD). Drivers must have a hazardous materials endorsement to operate a commercial vehicle carrying hazardous materials, including explosives. During the transport of materials, a route map must be maintained that indicates safe routing and safe stopping places along the route.

California Fire Code Article 77 states that a permit from the local fire department must be obtained for both the storage and use of explosive materials. In addition, the responsible party must file a $100,000 corporate surety bond or have public liability insurance for the same amount. Section 7703 of the California Fire Code describes requirements for use, handling, and transportation of explosive materials.

CAL FIRE

CAL FIRE is dedicated to the fire protection and stewardship of over 31 million acres of California's privately owned wildlands. In addition, CAL FIRE provides varied emergency services in 36 of the State's 58 counties via contracts with local governments. CAL FIRE's firefighters, fire engines, and aircraft respond to an average of more than 5,600 wildland fires each year. Those fires burn nearly 172,000 acres annually (CAL FIRE 2012a.)

According to CAL FIRE's Fire Hazard Severity Zones in a State Responsibility Area (SRA) Map, the project site is located in a high fire hazard severity zone within a Local Responsibility Area.

Hazardous Materials and Waste

The management of hazardous materials and waste within the State of California falls within the jurisdiction of the CalEPA, a subdivision of the EPA, and the California Department of Toxic Substances Control (DTSC). DTSC regulates hazardous waste, cleans existing contamination, and looks for ways to reduce hazardous waste produced in California. DTSC's authority to regulate hazardous waste in California stems from EPA authorization to carry out the federal Resource Conservation Recovery Act of 1976. Additional authority is given to DTSC by the California Health and Safety Code. DTSC also oversees the implementation of the hazardous waste generator and onsite treatment program, which is one of six environmental programs implemented at the local level within the Certified Unified Program. There are 72 Certified Unified Program Agencies, which

are generally part of the local fire department or environmental health department, that have authority to enforce regulations, conduct inspections, administer penalties, and hold hearings (DTSC 2010a).

Cortese List

The provisions in Government Code Section 65962.5 are commonly referred to as the Cortese List. Relevant subsections are listed below.

Subsection 65962.5.(a)

The DTSC shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code.
5. All sites included in the Abandoned Site Assessment Program.

Subsection 65962.5.(b)

The State Department of Health Services shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to Section 116395 of the Health and Safety Code.

Subsection 65962.5.(c)

The State Water Resources Control Board shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all of the following:

1. All underground storage tanks for which an unauthorized release report is filed pursuant to Section 25295 of the Health and Safety Code.
2. All solid waste disposal facilities from which there is a migration of hazardous waste and for which a California regional water quality control board has notified the Department of Toxic Substances Control pursuant to subdivision (e) of Section 13273 of the Water Code.
3. All cease and desist orders issued after January 1, 1986, pursuant to Section 13301 of the Water Code, and all cleanup or abatement orders issued after January 1, 1986, pursuant to Section 13304 of the Water Code, that concern the discharge of wastes that are hazardous materials.

Subsection 65962.5.(d)

The local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the California Code of Regulations, shall compile as appropriate, but at least annually, and shall submit to the California Department of Resources Recycling and Recovery (CalRecycle) a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. CalRecycle shall compile the local lists into a statewide list, which shall be submitted to the Secretary for Environmental Protection and shall be available to any person who requests the information.

Subsection 65962.5.(e)

The Secretary for Environmental Protection shall consolidate the information submitted pursuant to this section and distribute it in a timely fashion to each city and county in which sites on the lists are located. The secretary shall distribute the information to any other person upon request. The secretary may charge a reasonable fee to persons requesting the information, other than cities, counties, or cities and counties, to cover the cost of developing, maintaining, and reproducing and distributing the information.

Subsections 65962.5.(f) and (g)

These two subsections do not specifically apply to CalEPA or any of its constituent organizations.

A site's presence on the list has bearing on the local permitting process as well as on compliance with CEQA. While Government Code Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992, and this information is now largely available on the Internet sites of the responsible organizations. Those requesting a copy of the Cortese "list" are now referred directly to the appropriate information resources contained on the Internet web sites of the boards or departments that are referenced in the statute. The project site is not listed on the State's list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2014 and Waterboards 2014).

Emergency Response

Government Code Section 8607(a) directs the Governor's Office of Emergency Services to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. The program is intended to provide effective management of multi-agency and multijurisdictional emergencies in California. SEMS consists of five organizational levels, which are activated as necessary: (1) Field Response, (2) Local Government, (3) Operational Area, (4) Regional, and (5) State.

Local governments must use SEMS to be eligible for funding of their response-related personnel costs under state disaster assistance programs. The City of Wildomar is generally responsible for emergencies that occur within city boundaries and has adopted an Emergency Operations Plan that is consistent with the SEMS.

Local

City of Wildomar Disaster Operation and Relief Plan

The purposes of the Disaster Operation and Relief Plan (Ordinance No. 44) are to provide for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of the emergency functions of the City with all other public agencies, corporations, organization, and affected private persons.

The Riverside County Hazardous Waste Management Plan (CHWMP)

As indicated in the Safety Element of the County of Riverside General Plan, the Board of Supervisors adopted the Riverside County Hazardous Waste Management Plan (CHWMP) on September 12, 1989. With a framework of 24 existing and recommended programs, the CHWMP serves as the County's primary planning document for the management of hazardous substances. The CHWMP is a comprehensive document containing all of the County programs for managing hazardous materials and waste. As the City adopted the County General Plan upon incorporation, the CHWMP applies within the City of Wildomar.

3.7.4 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, hazards and hazardous materials impacts are significant environmental effects if the project would:

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

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

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

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

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

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

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

h) 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?

3.7.5 - Project Impact Analysis

Routine Use

Impact HAZ-1: The project would potentially create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact Analysis

Short-Term Impacts (Construction)

The construction of the proposed residential apartments would not result in the routine use, storage, transport, or disposal of large quantities of hazardous substances. The project could involve the use of some hazardous and flammable substances that would be used during the construction phase. These substances could include vehicle fuels and oils in the operation of heavy equipment for site grading and roadway construction. Construction vehicles onsite may require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials used would not be in quantities or stored in a manner that pose a significant hazard to the public. Based on the date of construction of the residential structure onsite (post-1980) and the apparent age of at least some of the construction materials (post-1985), the likelihood of possible ACMs used in construction of the structure and/or added later is low. However, while no impacts are anticipated from demolition of the existing residential structure, an inspection should be performed by an accredited building inspector for ACMs prior to any demolition activities. In California, asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the State Department of Health Services. In addition, the California Occupational Safety and Health Administration (Cal/OSHA) has regulations concerning the use of hazardous materials, including requirements for safety training, availability of safety equipment, hazardous materials exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous materials, describing the hazards of chemicals, and documenting employee-training programs. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Implementation of Mitigation Measure HAZ-1 would reduce potential short-term construction impacts to less than significant.

Long-Term Operation

The project would develop residential apartment units. The secondary activities that would occur at the residential units (e.g., building and landscape maintenance) would involve the use of limited quantities of hazardous materials. Cleaning and degreasing solvents, fertilizers, pesticides, and other materials used in the regular maintenance of buildings and landscaping would be utilized by the proposed residential use. Based on the nature of the proposed project, no routine transport, use, or disposal of hazardous materials would foreseeably occur. Therefore, long-term impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HAZ-1 Prior to demolition, an inspection shall be performed by an accredited building inspector for asbestos-containing materials (ACMs). All demolition that could result in the release of lead and/or asbestos must be conducted according to the California Occupational Safety and Health Administration (Cal/OSHA) standards.

Timing/Implementation: As a condition of project approval, and implemented prior to demolition activities

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Accident Conditions

Impact HAZ-2: The project would potentially create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the hazardous materials into the environment.

Impact Analysis

Construction

The project could involve the use of some hazardous and flammable substances during the construction phase. These substances could include vehicle fuels and oils in the operation of heavy equipment for site grading and roadway construction. Construction vehicles onsite may require routine or emergency maintenance that could result in the release of oil, diesel fuel, transmission fluid, or other materials. However, the materials used would not be in quantities or stored in a manner that would pose a significant hazard to the public. Because project construction would comply with applicable federal, state, and local laws pertaining to the safe handling and transport of hazardous materials, impacts associated with accidental release of hazardous materials from construction equipment/vehicles or operational activities would be less than significant.

Long-Term Operation

As discussed above in Impact HAZ-1, project operation would involve limited quantities of hazardous materials, routinely used in the maintenance of buildings and grounds. Therefore, it is not anticipated that the project would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Schools

Impact HAZ-3:	**The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

Impact Analysis

The nearest school, Gateway Kids Preschool, is located approximately 0.70 mile southwest from the project site. No schools are located within one-quarter mile of the project. Therefore, the project would have no impact upon school facilities.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Hazardous Materials Site Listing

Impact HAZ-4:	**The project would not 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 not create a significant hazard to the public or the environment.**

Impact Analysis

The project site is not listed on the State's list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2014 and Waterboards 2014). Thus, the project would have no impact.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Airports

Impact HAZ-5:	**The project is not 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. The project would not result in a safety hazard for people residing or working in the project area.**

Impact Analysis

The project would not result in a safety hazard for people residing or working in the project area. The project is not located within an airport land use plan or in the vicinity of an airport. The nearest airport is the Ontario International Airport, which is located approximately 39 miles northwest of the project site. Because of the project's distance from the nearest airport, the project would not result in a safety hazard. Therefore, the project would have no impact.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Private Airstrip

Impact HAZ-6:	**The project is not within the vicinity of a private airstrip, and the project would not result in a safety hazard for the people residing or working in the project area.**

Impact Analysis

There are no private airstrips in the vicinity of the project site (AirNav.com 2014, Google Earth 2014). The two closest airfields are Skylark Field Airport, located 4.8 miles northwest of the site, and McConville Airstrip, located approximately 12 miles northwest of the site. Therefore, the project would not present a safety hazard for people residing or working in the project area.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Emergency Plans

Impact HAZ-7: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

The City of Wildomar Emergency Plan (Ordinance No. 44) objectives are to prepare for and facilitate coordinated and effective responses to emergencies in Wildomar and to provide adequate assistance to other jurisdictions as needed. The plan specifies actions for the coordination of operations, management, and resources during emergencies; governmental responsibilities during emergency events; and a plan for the organization of nongovernmental organizations providing support assistance. The project site is not identified as an Emergency Operations Center. Further, project improvements would provide adequate access for emergency vehicles. Therefore, the project would have a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Wildland Fires

Impact HAZ-8: The project would not 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.

Impact Analysis

State

The project site does not fall within a fire hazard area under the Fire Hazard Severity Zones in an SRA. An SRA is defined in Section 4102 of the Public Resources Code as: areas of the State in which the financial responsibility of preventing and suppressing fires has been determined by the board pursuant to Public Resources Code Section 4125, to be primarily the responsibility of the State.

Local

The project site falls within the Local Responsibility Area (LRA), City of Wildomar within Riverside County. According to the VHFHS Zone LRA map, the project site is within a VHFHS zone under the authority of the City of Wildomar. The project site is adjacent to vacant land and is topographically up gradient and, therefore, is susceptible to wildland fires. The project will include design features that will reduce the project's susceptibility to fire. The project will be surrounded by roads on three sides (east, west and south), will include hardscapes, and will include a landscape design plan in compliance with the fire department's safety design elements. The project would be designed to comply with Fire Code and other legal requirements aimed at minimizing fire risks, including safety

equipment standards, provide adequate emergency access, and provide sufficient fire hydrants and water flows in compliance with the RCFD. The project would be required to pay its fair share contribution into the City's development impact fee program and annex into the City's CFD 2013-1, which funds fire protection and suppression services. Based on the proposed project site's proximity to a fire station, design features, and the urban characteristics within the project area, the categorization of the project site as a VHFHS zone would not result in any significant exposure of people or structures to the threat of wildfires.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.8 - Hydrology and Water Quality

3.8.1 - Introduction

This section describes the existing setting regarding hydrology and water quality and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the project-specific Preliminary Water Quality Management Plan (WQMP) (Pacific Coast Land Consultants, Inc. 2014a); the Phase I Environmental Site Assessment (Earth-Strata, Inc. 2013); and the Preliminary Hydrology Study for the proposed project (Pacific Coast Land Consultants, Inc. 2014b), all of which are included in this EIR as Appendix E and F, respectively.

3.8.2 - Environmental Setting

Climate

The climate in and around Wildomar, as well as most of Southern California, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. This high-pressure cell produces a typical Mediterranean climate with warm summers, mild winters, and moderate rainfall. This pattern is infrequently interrupted by periods of extremely hot weather brought in by Santa Ana winds. Most of the area's precipitation occurs intermittently between November and April; the area is still dominated by sunny or partly sunny conditions during these months. Cyclic land and sea breezes are the primary factors affecting the region's mild climate. The daytime winds are normally sea breezes, predominantly from the west, that flow at relatively low velocities (Kunzman Associates, Inc. 2014).

Flood Zone

The project area is classified as flood Zone X, according to Flood Insurance Rate Map Number 06065C2705G published by the Federal Emergency Management Agency (FEMA). This zone is described as "areas determined to be outside the 0.2 percent annual chance floodplain," which means that the project is in an area determined to be outside the 500-year annual chance floodplain (FEMA 2014).

Regional Surface Water Hydrology

Riverside County incorporates four major watershed areas in which river systems, lakes and reservoirs, and natural drainage areas are located. Specifically, the project site is located within the Santa Margarita River Watershed. The County of Riverside's supply of water is limited by its arid climate, agricultural practices, projected population growth and its associated demand and development, and the dependence on low quality imported water. Additionally, the availability of imported surface water has been reduced by changing regulations, despite an ever-increasing water demand (County of Riverside General Plan 2008).

The project site is within the Temecula Valley Groundwater Basin, underlying the Santa Margarita water shed. The Temecula Valley Groundwater Basin underlies several valleys in the southwestern portion of Riverside County and northern San Diego County. Murrieta, Temecula, Pauba, Long, and Lancaster Valleys are largest of the valleys overlying this basin. The basin is bounded by non-water-

bearing crystalline rocks of the Peninsular Ranges. The overlying valleys are drained mainly by Wilson, Temecula, Murrieta, Warm Springs, and Pechanga Creeks, to the Santa Margarita River, which flows west out of Temecula Valley. The Pechanga Indian Reservation overlies some of the southwestern part of the basin.

Average annual precipitation ranges from 7 to 15 inches. The project site is located approximately 1,360 feet above mean sea level with a gentle topographic gradient to the southwest and there is an intermittent wash located to the west and east of the project site (Earth-Strata, Inc. 2013).

Local Surface Water Hydrology

According to the Hydrology Analysis prepared for the project, the topography of the site is rolling, with deeper depressions that collect surface runoff. There is a large area north of the project that drains into a depression area that carries collected runoff across the northeast corner of the site onto adjacent property to the east. The project will block this flow and a pipe system will be constructed to transmit flow to an outlet point on the adjacent property within the current drainage course. Additionally, there is a natural drainage course in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site in a hydraulic jump (Pacific Coast Land Consultants 2014b).

Surface Water Quality

The cumulative effect of runoff from land uses in a region can have significant impacts on surface water quality, with both point- and non-point-source discharges contributing contaminants to surface waters. The land uses surrounding the project site vary from rural residential to high density residential.

The project is within the jurisdiction of the San Diego Regional Water Quality Control Board (Region 9) and the Santa Margarita River Watershed, Wildomar Sub-watershed. Receiving waters for urban runoff from the proposed project are listed below and all except the Pacific Ocean are on the 303d list of water quality impairments: Murietta Creek, Santa Margarita River – Upper and Lower, Santa Margarita Lagoon, and Pacific Ocean. Refer to Table 3.8-1, which shows the list of impairments for receiving waters.

Table 3.8-1: Receiving Waters for Urban Runoff from the Project Site

Receiving Water	303(d) List Impairments	TMDL Status*
Murietta Creek	Chlorpyrifos (pesticides), iron, copper (metals), manganese, nitrogen (nutrients), toxicity	No applicable TMDL
Upper Santa Margarita River	Enterococcus fecal coliform (bacteria), phosphorous, total nitrogen (nutrients)	No applicable TMDL
Lower Santa Margarita River	Enterococcus fecal coliform (bacteria), phosphorous, total nitrogen (nutrients)	No applicable TMDL
Santa Margarita Lagoon	Eutrophoic (nutrients and oxygen demanding substances)	No applicable TMDL
Pacific Ocean	None	No applicable TMDL
Source: Pacific Coast Land Consultants, Inc., 2014a; San Diego RWQCB 2014.		

Groundwater

Groundwater resources in the County are delineated by their quality and quantity. Most groundwater basins within the County of Riverside store local and imported water and are used to satisfy seasonal and drought-year demands. Under groundwater recharge programs, groundwater basins are artificially replenished in wet years with surplus imported water. Water is then extracted during drought years or emergencies. Groundwater recharge may also involve the recharge of reclaimed water, thereby enhancing the region's ability to meet water demand during years of short supply; increasing overall local supply reliability (Riverside General Plan 2008).

Although site-specific groundwater information for the project site is unavailable, according to information obtained from the California Department of Water Resources on-line database[1] the closest well site with available on-line groundwater data[2] indicates an estimated depth to first groundwater of approximately 66 feet below ground surface in 1968.

Seismically Induced inundation

Seismically induced inundation refers to flooding that occurs when water retention structures fail during an earthquake. Often, inundation is triggered by damage from a seiche. A seiche is a wave that reverberates on the surface of water in an enclosed or semi-enclosed basin, such as a reservoir, lake, bay, or harbor, in response to ground shaking during an earthquake. The following water bodies are located in the vicinity of the project site: Lake Elsinore, approximately 6.5 miles northwest; Canyon Lake, approximately 6.4 miles northwest; Skinner Reservoir, approximately 9 miles east; and Diamond Valley Lake, approximately 10.6 miles northeast.

Water Supply

The Elsinore Valley Municipal Water District (EVMWD) provides potable water service in the vicinity of the project. The proposed project's water and sewer service will be provided by EVMWD because the project falls within the boundaries of the service area for the EVMWD. In addition, see Section 3.16, Utilities and Service Systems for information on water demand and existing and future supplies.

3.8.3 - Regulatory Framework

Federal and State

In California, the regulation, protection, and administration of water quality are carried out by the State Water Resources Control Board (SWRCB) and nine California Regional Water Quality Control Boards (RWQCBs). In compliance with Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, each RWQCB is required to adopt a Water Quality Control Plan or Basin Plan which recognizes and reflects regional differences in existing water quality, the beneficial uses of the region's ground and surface water, local water quality conditions and problems, and Total Maximum Daily Loads (TMDL).

The project site is located within the San Diego Region, which is addressed in the Water Quality Control Plan for the San Diego Basin (1994), with amendments effective on or before April 4, 2011.

[1] California Department of Water Resources on-line database at https://www.casgem.water.ca.gov, accessed in June 2014.
[2] (State Well ID 06S03W32P001)

The San Diego Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. The San Diego RWQCB has the authority to implement water quality protection standards through the issuance of permits to waters within its jurisdiction (San Diego RWQCB 1994).

States are required to develop a TMDL to address each pollutant causing impairment. A TMDL defines how much of a pollutant a water body can tolerate and still meet water quality standards. As indicated in Table 3.8-1, no TMDLs have been established for receiving waters in the project vicinity.

The San Diego RWQCB administers the National Pollutant Discharge Elimination System (NPDES) permit requirements for the project area, including the project site. In 1999, the State adopted the NPDES General Permit for Storm Water Discharges Associated with Construction Activities (Construction Activities General Permit) (SWRCB Order No 99-08-DWQ, NPDES CAS000002) which requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) for applicable projects with 1 acre or greater of soil disturbance. The SWPPP is required to achieve two major objectives: to help identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and, to describe and ensure the implementation of Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater and non-stormwater discharges.

Dischargers covered under the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity, State Water Resources Control Board Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ (CGP) on or after September 2, 2012, are required to comply with the runoff reduction requirements in Section XIII(A). This order regulates stormwater runoff and urban runoff, which includes storm water and authorized non-storm water discharges from traditional construction activities such as residential, commercial, and industrial development, as well as linear underground/overhead construction projects. Order No. 2009-0009-DWQ authorizes the discharge of storm water runoff from construction projects that may result in land disturbance of one (1) acre or more (or less than one acre, if it is part of a larger common plan of development or sale which is one acre or more). Unlike its predecessors, this General Construction Permit classifies construction sites under three Risk Levels. Risk Level 1 sites are subject to requirements similar to those established in Order No. 99-08-DWQ. Risk Level 2 sites are subject to Numeric Action Levels (NALs) for pH and turbidity, in addition to Risk Level 1 requirements. Risk Level 3 sites are subject to Numeric Effluent Limits (NELs), in addition to Risk Level 1 and 2 requirements. Project Risk Levels are determined by the project's sediment discharge risk and its receiving water risk. The discharger shall develop a SWPPP and a construction site-monitoring program prior to the commencement of any of the construction activities, to be implemented until project completion.

Federal Clean Water Act

Section 303 of the Clean Water Act (CWA) requires that states adopt water quality standards for all surface waters of the United States. Section 304(a) of the Federal CWA requires that the U.S. Environmental Protection Agency (EPA) publish water quality criteria that accurately reflect the most current scientific knowledge regarding the effects on health and welfare from the presence of pollutants in the surface water. Where multiple uses occur, water quality standards must protect the

most sensitive land use. Typically, water quality standards are numeric, although narrative criteria may be used where numerical standards cannot be established or where they are needed to supplement numerical standards. States are required to adopt numerical water quality standards for toxic pollutants for which the EPA has published water quality criteria and which could be expected to interfere with designated uses in a water body.

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate municipal and industrial discharges to the surface Waters of the United States. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Section 402 of the CWA contains general requirements regarding NPDES permits. Section 307 of the CWA describes the factors the EPA must consider in setting effluent limits for priority pollutants.

Amendments adopted in 1972 to the CWA prohibit the discharge of pollutants to navigable waters from a point source (discharge from a single conveyance such as a pipe) unless the discharge is authorized by an NPDES permit. In 1987, in recognition that diffuse or non-point sources were significantly impairing surface water quality, Congress amended the CWA to address non-point source stormwater runoff pollution in a phased program requiring NPDES permits for operators of municipal separate storm sewer systems (MS4s), construction projects, and industrial facilities. Phase I, approved in 1990, required municipal permits for MS4s generally serving populations over 100,000, construction permits for projects five acres or greater, and industrial permits determined by certain Standard Industrial Classification Code.

In December 1999, the EPA finalized Phase II of the NPDES program, which requires that operators of MS4s located in urban areas implement programs and policies to control polluted stormwater runoff through the use of NPDES permits. In addition, Phase II includes small construction activities that result in land disturbances of equal to or greater than one acre and less than five acres within the NPDES program.

The purpose of the NPDES program is to establish a comprehensive water quality program to manage stormwater in order to minimize pollution of the environment to the maximum extent practicable. The NPDES program consists of characterization of the receiving water quality; identification of harmful constituents; identification of potential sources of pollutants; and, implementation of a Comprehensive Stormwater Management Program. One of the primary objectives of water quality regulations, including the NPDES program, is the reduction of pollutants and sediments in stormwater runoff to the maximum extent possible through the use of BMPs.

There are two categories of BMPs: structural BMPs and non-structural BMPs. Structural BMPs involve the specific construction, modification, operation, maintenance, or monitoring of facilities to minimize the introduction of pollutants from the drainage system. Non-structural BMPs are activities, programs, and other non-physical measures that would contribute to the reduction of pollutants from non-point source pollutants to the drainage system.

California Fish and Wildlife Code Sections 1601-1603

This legislation is intended to protect and conserve fish and wildlife resources of the State by requiring a permitting procedure for diverting, changing, or otherwise disturbing a current natural waterway. A Streambed Alteration Permit is required from the California Department of Fish and Wildlife (CDFW) (formerly the California Department of Fish and Game), for any changes to the stream, stream channel, or banks. For the project, compliance with this code would be required if tributaries on the project site are diverted, changed, or otherwise disturbed. Compliance is usually satisfied with issuance of a permit from CDFW, typically referred to as a 1602 Permit.

Local Regulations

Regional Water Quality Control Board, San Diego Region

The Water Quality Control Plan for the San Diego Basin (Basin Plan) designates beneficial uses for water bodies in the San Diego Region, and establishes water quality objectives and implementation plans to protect those beneficial uses. The San Diego Regional Board's mission is developing and enforcing water quality objectives and implementing plans that will best protect the area's waters while recognizing our local differences in climate, topography, geology and hydrology.[3]

Waste Discharge Requirements for Riverside County Municipal Separate Storm Sewer Systems (MS4s) (Order No. R9-2010-0016)

This order is based on the federal Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act, applicable state and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the SWRCB, the Water Quality Control Plan for the San Diego Basin adopted by the San Diego Water Board (Basin Plan), the California Toxics Rule, and the California Toxics Rule Implementation Plan. This Order reissues NPDES Permit No. CAS0108766, which was first adopted by the San Diego Water Board on July 16, 1990 (Order No. 90-38), and then reissued on May 13, 1998 (Order No. 98-02).[4] The proposed project would be required to comply with all applicable provisions of the order.

The cities of Murrieta, Menifee and Wildomar also discharge into the waters of the U.S. in the California RWQCB, Santa Ana Region (Santa Ana Water Board), so are located partially within both the San Diego and Santa Ana Water Board boundaries. As authorized by CWC §13228 and pursuant to written agreements dated September 28, 2010 between the San Diego Water Board and the Santa Ana Water Board, the cities of Murrieta and Wildomar are wholly regulated by the San Diego Water Board under this Order, including those portions of the cities' jurisdiction not within the San Diego Water Board's region.[5]

Wildomar Stormwater/Urban Runoff Management and Discharge Controls Ordinance (Wildomar Municipal Code Chapter 13.12)

The purpose of the Stormwater/Urban Runoff Management and Discharge Controls Ordinance is to reduce pollutants in stormwater discharges to the maximum extent practicable, regulate illicit

[3] http://www.swrcb.ca.gov/sandiego/about_us/. Accessed May 21, 2014.
[4] http://www.waterboards.ca.gov/rwqcb9/water_issues/programs/stormwater/docs/rsd_permit/updates122110/FINAL_R9-2010-0016.pdf. Accessed May 21, 2014.
[5] Ibid.

connections and discharges to the storm drain system, and regulate non-stormwater discharges to the storm drain system. The ordinance requires new development projects to control stormwater runoff to prevent any deterioration of water quality that would impair subsequent or competing uses of the water via BMPs that may, among other things, require new developments or redevelopments to increase permeable areas, direct runoff to permeable areas, and maximize stormwater storage for reuse.

Wildomar Municipal Code Chapter 15.96

The City is a participating community in the National Flood Insurance Program (NFIP), which requires participating agencies to adopt floodplain management ordinances. The intent of the Chapter 15.96 is to ensure that new construction and/or substantial improvements within mapped floodplains are performed in a manner that reduces damage to the public and property. Any development or substantial improvement within a regulatory floodplain may require floodplain review by the City. This includes the submittal of a floodplain application permit form to the City's Building and Safety Department along with corresponding fees and attachments.

City of Wildomar General Plan

Water Conservation Policies

Following are water conservation policies that seek to manage existing supplies, by promoting the efficient use of water to the maximum extent possible, so that they can be maintained for future use.

- **OS 2.2:** Where feasible, decrease stormwater runoff by reducing pavement in development areas, and by design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention.
- **OS 2.3:** Encourage native, drought-resistant landscape planting.

Water Quality Policies

The following policies are intended to provide local guidance for the protection and maintenance of water quality in Wildomar.

- **OS 3.3:** Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.

Groundwater Recharge Policies

In order to facilitate groundwater recharge, the following policies may apply:

- **OS 4.3:** Ensure that adequate aquifer water recharge areas are preserved and protected.
- **OS 4.4:** Incorporate natural drainage systems into developments where appropriate and feasible.
- **OS 4.5:** Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.

Floodways, the Floodplain Fringe, and Riparian Area Policies

The following set of policies addresses floodways, the floodplain fringe, and riparian areas in the City.

- **OS 5.5:** New development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.
- **OS 5.6:** Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.
- **S 4.5:** Prohibit substantial modification to water courses, unless modification does not increase erosion or adjacent sedimentation, or increase water velocities, so as to be detrimental to adjacent property, nor adversely affect adjacent wetlands or riparian habitat.
- **S 4.7:** Any substantial modification to a watercourse shall be done in the least environmentally damaging manner possible in order to maintain adequate wildlife corridors and linkages and maximize groundwater recharge.
- **S 4.10:** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

Elsinore Area Plan

The following policies pertain to flooding and dam inundation. According to the Elsinore Area Plan, Temescal Wash, Murrieta Creek, and the San Jacinto River as well as Lake Elsinore pose significant flood hazards within the Elsinore Area Plan. Dam failure of the Railroad Canyon Dam at Canyon Lake would cause flooding in the plan area. However, a review of the flood hazard map within the Area Plan indicates no flood hazards would impact the project site.

Policies:

- **ELAP 20.1:** Adhere to the flood proofing and flood protection requirements of the Riverside County Flood Control and Water Conservation District.
- **ELAP 20.2:** Protect proposed development projects that are subject to flood hazards, surface ponding, high erosion potential or sheet flow by requiring submittal to the Riverside County Flood Control and Water Conservation District for review.
- **ELAP 20.3:** When possible, create flood control projects that maximize multi-recreational use and water recharge.
- **ELAP 20.4:** Protect life and property from the hazards of potential dam failures and flood events through adherence to the Flood and Inundation Hazards section of the General Plan Safety Element.

3.8.4 - Methodology

The analysis in this section is based upon the Federal Emergency Management Agency website, the City's General Plan, Elsinore Area Plan, City of Wildomar Municipal Code and website, and the following technical reports, prepared for the proposed project: the Preliminary Water Quality Management Plan, Phase I Environmental Site Assessment, and Preliminary Hydrology Study.

3.8.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether hydrology and water quality impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Violate any water quality standards or waste discharge requirements?

b) 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 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?

c) Substantially alter the existing drainage pattern of 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?

d) 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?

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

f) Otherwise substantially degrade water quality?

g) 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?

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

i) 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?

j) Inundation by seiche, tsunami, or mudflow?

3.8.6 - Project Impact Analysis

Water Quality Standards and Requirements

Impact HWQ-1:	**The project would potentially violate any water quality standards or waste discharge requirements.**

Impact Analysis

Implementation of the project would result in construction activities that could have the potential to contribute to pollutants in off-site surface waters, potentially impacting the water quality of water within the San Diego RWQCB's jurisdiction (SWRCB 2014). Generally, construction-phase activities

could generate pollutants such as increased silts, debris, chemicals, and dissolved solids related to the activities described below:

- Grading – Disruption of surface soils and increased susceptibility to erosion
- Building construction – Use of sealants, glues, wood preservatives, oils, concrete, and the generation of debris related to construction activities
- Painting – Paint fragments and stucco flakes
- Construction equipment and vehicle maintenance – Washing, chemical degreasing

Water quality in jurisdictional areas can be negatively affected by potential surface runoff and sedimentation during construction. The use of petroleum products (e.g., fuels, oils, and lubricants) and erosion of cleared land during construction could potentially contaminate surface water. Decreased water quality may adversely affect vegetation, aquatic animals, and terrestrial wildlife that depend upon these resources. Impacts to water quality would be significant unless mitigated.

Indirect impacts associated with water quality shall be mitigated to below a level of significance through compliance with NPDES requirements, identified in the mitigation below.

Because construction activities could result in increased pollutants to surface water, construction of the project could potentially result in a short-term degradation to surface water quality. Accordingly, prior to the issuance of grading or construction permits, the project applicant will prepare a SWPPP that conforms to the SWRCB NPDES permit. The SWPPP shall identify BMPs to prevent construction related pollutants from reaching stormwater and all products of erosion from moving off-site. Therefore, temporary construction impacts would be considered less than significant.

Long-Term Operational Impacts

Long-term operations of the project would increase the potential of stormwater runoff transporting contaminants from roadway surfaces, parking lots, roofs and other exposed structural and landscape surfaces into the storm drain system. Typical industrial runoff contaminants (e.g., oil, grease, surfactant, heavy metals, trash, solvents, pesticides, nutrients, or fecal coliform bacteria) can be expected within runoff. Table 3.8-2 below includes information from the project's WQMP that identified the potential pollutants that would be generated by the project.

Table 3.8-2: Potential Urban Runoff Pollutants

Type of Development (Land Use)	Sediment /Turbidity	Nutrients	Organic Compounds	Trash & Debris	Oxygen Demanding Substances	Bacteria & Viruses	Oil & Grease	Pesticides	Metals
Apartments	P	P[1]	P	P	P[1]	P[1]	P	P[1]	P[1]

Notes:
P= Potential Pollutant
[1] Site-specific pollutants of concern
Source: Pacific Coast Land Consultants, 2014a.

According to the WQMP for the project, impacts to the hydrologic regime resulting from the project may include increased runoff volume and velocity; reduced infiltration; increased flow frequency, duration, and peaks; faster time to reach peak flow; and water quality degradation. Under certain circumstances, changes could also result in the reduction in the amount of available sediment for transport; storm flows could fill this sediment-carrying capacity by eroding the downstream channel. These changes have the potential to permanently impact downstream channels and habitat integrity. A change to the hydrologic regime of a project's site would be considered a hydrologic condition of concern if the change would have a significant impact on downstream erosion compared to the predevelopment condition or have significant impacts on stream habitat, alone or as part of a cumulative impact from development in the watershed. However, the project would meet Condition C of the Riverside County Water Quality Management Plan for urban runoff. Under this condition, the project's runoff flow rate, volume, velocity, and duration for the post-development condition would not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition would be achieved by minimizing impervious area on the site and incorporating other site design features that mimic pre-development conditions.

A series of onsite storm drain systems will be constructed. Catch basins will be fitted with inserts designed to capture larger floatables and debris, as well as providing some filtration of hydrocarbons. Downstream manholes will be fitted with restrictor plates to limit outlet flows to no more than the pre-development condition. Underground storage chambers will be installed to provide additional filtration treatment. The soil characteristics are such that infiltration is too low to be utilized for infiltration so the structures will be founded on porous material containing under drains to direct filtered water to the storm drain system.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HWQ-1 Prior to the issuance of grading permits for any portion or phase of the project, the developer shall prepare and submit a Preliminary Water Quality Management Plan and a Storm Water Pollution Prevention Plan (SWPPP) to the City of Wildomar for review and approval. (Note: a Draft WQMP, contained in Appendix F, has been submitted to the City for review and will be implemented in its final form once approved.) The WQMP and SWPPP shall contain specific Best Management Practices (BMPs) to limit stormwater pollution from construction and operational sources. These BMPs shall identify a practical sequence for site restoration, implementation, contingency measures, responsible parties, and agency contacts. The developer shall include conditions in construction contracts requiring the plans to be implemented and shall have the ability to enforce the requirement through fines and other penalties. The plans shall incorporate control measures in the following categories:

- Soil stabilization practices
- Dewatering practices (if necessary)

- Sediment and runoff control practices
- Monitoring protocols
- Waste management and disposal control practices

Once approved by the City of Wildomar, contractors working on the site shall be responsible throughout the duration of the project for installing, constructing, inspecting, and maintaining the control measures included in the WQMP and SWPPP.

The WQMP and SWPPP shall identify pollutant sources that could affect the quality of stormwater discharges from the project site. Control practices shall include those that effectively treat target pollutants in stormwater discharges anticipated from project construction sites. To protect receiving water quality, the WQMP and SWPPP shall include but is not limited to the following elements:

- Temporary erosion control measures (such as fiber rolls, staked straw bales, detention basins, temporary inlet protection, check dams, geofabric, sandbag dikes, and temporary revegetation or other ground cover) shall be employed for disturbed areas.
- No disturbed surfaces will be left without erosion control measures in place during the winter and spring months (September 30–March 30).
- Sediment shall be retained onsite by one or more basins, traps, or other appropriate improvements. Of critical importance is the protection of existing catch basins that eventually drain to the Santa Margarita River.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains.
- BMP performance and effectiveness shall be determined either by visual means where applicable (such as observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required to determine adequacy of the measure.
- Native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance.

Timing/Implementation: As a condition of project approval, and implemented prior to site grading.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Groundwater Supplies and Recharge

Impact HWQ-2: **The project would not 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 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).**

Impact Analysis

Implementation of the project would increase the amount of impervious surfaces onsite. The conversion of permeable land to impervious surfaces could reduce groundwater recharge. As discussed in the Preliminary Water Quality Management Plan prepared by Earth-Strata, Inc. (2014), since soil conditions on the project site do not favor infiltration, existing infiltration rates on the project site are likely low, despite the predominantly vacant condition. In addition, given the limited size of the project, the project would not be likely to impede recharge in such a way as to substantially deplete groundwater supplies.

Therefore, impacts associated with ground water supply and recharge would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Drainage Pattern: Erosion or Siltation

Impact HWQ-3: **The project would potentially 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.**

Impact Analysis

Potential impacts resulting from construction, including erosion, are discussed under Impact HWQ-1, and were identified as potentially significant. Implementation of Mitigation Measure HWQ-1 would reduce those impacts to less than significant.

Development of the project would increase runoff from the site by increasing the amount of impervious surfaces and decreasing the pervious surfaces that could allow infiltration of precipitation. Impervious and paved areas for the site include project streets, curbs, sidewalks and gutters, parking areas, driveways and the impervious roofs of each building.

The Hydrology Report for the project demonstrates the project's compliance with Water Quality Management Plan requirements that limit post-development condition flow rates for the 2-year, 24-hour and 10-year, 24-hour development condition. The project meets Condition C of the Riverside

County Water Quality Management Plan for urban runoff, as the greater of 2-year, 24-hour or 10-year, 24-hour storm event flows are mitigated on-site and reduced to below or near existing condition prior to release in the or storm drain system. A series of onsite storm drain systems would be constructed.

Catch basins would be fitted with inserts designed to capture larger floatables and debris, as well as providing some filtration of hydrocarbons. Downstream manholes would be fitted with restrictor plates to limit outlet flows to no more than the pre-development condition. Underground storage chambers would be installed to provide additional filtration treatment. The soil characteristics are such that existing infiltration is too low to be utilized for filtration so the structures would be founded on porous material containing under drains to direct filtered water to the storm drain system (Pacific Coast Land Consultants 2014a).

Based on the Preliminary Water Quality Management Plan for the project, there is a large area north of the project that drains into a valley area that carries collected runoff across the northeast corner of the site onto adjacent property to the east. Additionally, there is a natural drainage course in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site in a hydraulic jump. This portion of the site would receive as much as 20 feet of fill and the off-site drainage would require interception and transmission to the natural off-site drainage course that currently accepts these flows. The onsite runoff would be collected in a series of catch basins and transmitted to underground storage facilities on the northwest and southwest ends of the site. Treatment through infiltration would occur in the storage facilities, and then flows would be released to adjacent properties at their pre-developed rates and along the same drainage course as they currently follow (Pacific Coast Land Consultants 2014a). Thus, the project would not result in substantial erosion or siltation on- or off-site.

The project would not result in an increase in water erosion either onsite or off-site. The drainage system includes a number of drainage features, including:

- The site would incorporate a landscaping percentage greater than the minimum required by the City Guidelines.
- All parking spaces would incorporate a two-foot overhang to reduce paving area and increase landscape area. Minimum width meandering walkways would be used to increase the pervious landscape areas.
- BMP Treatment would consist of retention facilities with underdrains. The retention facilities would also be underlain by a rock reservoir to retain double the BMP Design Volume to promote infiltration, since the site is not feasible solely for an infiltration BMP.
- All storm flows would be directed to the retention facilities. First flush flows would be treated in the retention facilities and larger storm events would be intercepted by raised inlets and conveyed in a separate by-pass storm drain. The retention underdrain would connect to the storm drain prior to leaving the site.
- The system would retain the incremental increase of a 2-year storm event, a 10-year storm event, or the BMP design volume, whichever is greater.

As provided in the Water Quality Management Plan, the project would meet Condition C by minimizing impervious area on a site and incorporating other site design features that mimic pre-development conditions. As designed, the project would limit storm event flows, which are mitigated on-site and reduced to below or near existing condition prior to release in the storm drain system. Therefore, the project would have a less than significant impact on the existing drainage pattern.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Mitigation Measure HWQ-1 is required.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Drainage Pattern: Flooding

Impact HWQ-4:	**The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.**

Impact Analysis

Development of the project would increase runoff from the site by increasing the amount of impervious surfaces (e.g., asphalt, concrete, rooftops, etc.) and decreasing the pervious surfaces that could allow infiltration of precipitation. A General Construction Activities Stormwater Permit will be required from the SWRCB (Pacific Coast Land Consultants, Inc. 2014a).

Pre-Development Hydrology (Onsite)

The topography of the site is rolling, with deeper depressions that collect surface runoff. There is a large area north of the project that drains into a valley area that carries collected runoff across the northeast corner of the site onto adjacent property to the east. Additionally, there is a natural drainage course in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site in a hydraulic jump. The project would block this flow and a pipe system would be constructed to transmit flow to an outlet point on the adjacent property within the current drainage course (Pacific Coast Land Consultants, Inc. 2013b).

Post-Development Hydrology (Onsite)

The proposed project would disrupt a natural drainage course at the northeast corner of the project site. The depression would be filled in order to provide for the proposed development. A pipe would be installed at the north property line, within the existing drainage course and would be designed to outlet beyond the project within the downstream portion of the existing drainage course. An outlet structure and rock riprap would be installed to control the outflow and disperse the resulting flows to control potential erosion and degradation of the natural drainage course.

Surface flows within the project would be collected in catch basins and pipe systems would transmit flow into underground storage/filtrations devices sized to meet the regulatory treatment requirements. From the storage/filtration devices, pipes would be installed and outlet onto adjacent properties to locations that historically forms the pre-development drainage courses. Outlet structures and riprap would be installed to control potential erosion and degradation (Pacific Coast Land Consultants, Inc. 2014b).

Based on the Preliminary Water Quality Management Plan for the project, there is a natural drainage course in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site in a hydraulic jump. This portion of the site would receive as much as 20 feet of fill and the off-site drainage would require interception and transmission to the natural off-site drainage course that currently accepts these flows. The onsite runoff would collect in a series of catch basins and be transmitted to underground storage facilities on the northwest and southwest ends of the site. Treatment through infiltration would occur in the storage facilities, and then flows would be released to adjacent properties at their pre-developed rates and along the same drainage course as they currently follow. Roof drains would be directed to landscape areas where practical. In areas where not practical, they would spill onto impervious surfaces and become part of the surface flows collected and treated in the storm drain system (Pacific Coast Land Consultants, Inc. 2014a).

The project meets Condition C of the Riverside County Water Quality Management Plan for urban runoff, as the greater of 2-year, 24-hour or 10-year, 24-hour storm event flows would be mitigated on-site and reduced to below or near existing condition prior to release in the or storm drain system. A series of onsite storm drain systems would be constructed. Catch basins would be fitted with inserts designed to capture larger floatables and debris, as well as providing some filtration of hydrocarbons. Downstream manholes would be fitted with restrictor plates to limit outlet flows to no more than the pre-development condition. Underground storage chambers would be installed to provide additional filtration treatment. The soil characteristics are such that infiltration is too low to be utilized for infiltration so the structures would be founded on porous material containing under drains to direct filtered water to the storm drain system (Pacific Coast Land Consultants, Inc. 2014a).

Site Design Best Management Practices

As stated in the WQMP prepared for the project, the following site design features have been incorporated into the project:

1. Minimize Urban Runoff:
   The project has been designed to maximize the available permeable area to minimize urban runoff. The site will incorporate landscaping percentage greater than the minimum required by the City Guidelines. All parking spaces are incorporating a two-foot overhang to reduce paving area and increase landscape area. Minimum width meandering walkways are being used to minimize impervious surfaces.

   The project will Incorporate landscaped buffer areas between sidewalks and streets. Prielipp Road, Elizabeth Lane and Jana Lane will include a landscaped parkway adjacent to the curb and gutter and the right-of-way. A landscape buffer will be utilized onsite wherever possible.

The project will maximize canopy interception and water conservation by planting additional native or drought tolerant trees and large shrubs. The site development will plant native/drought tolerant trees and shrubs as part of the site landscape concept.

2. Minimize Impervious Footprint
   The project has been designed to maximize permeable area. The site will incorporate landscaping percentage greater than the minimum required by the City Guidelines. All parking spaces are incorporating a two-foot overhang to reduce paving area and increase landscape area. Minimum width meandering walkways are being used to increase the pervious landscape areas.

   Where practical, the project will construct walkways, trails, patios, overflow parking lots, alleys, driveways, low-traffic streets and other low-traffic areas with open-jointed paving materials or permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

   The project will construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety and a walk able environment for pedestrians are not compromised. Additionally, the project will minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.

3. Conserve Natural Areas
   The project will maximize canopy interception and water conservation by planting additional native or drought tolerant trees and large shrubs.

4. Minimize Directly Connected Impervious Areas (DCIAs)
   The project proposes to allow for the roof runoff thru Roof downspouts to be directed/ treated on site to drain through the perimeter landscape areas as the initial treatment but the waters will be directed to the onsite filtration systems. Interior walkways are designed to flow across landscape areas, where possible, prior to flowing to the onsite filtration systems. The project will increase the use of vegetated drainage swales in lieu of underground piping or imperviously lined swales.

Source Control Best Management Practices

Below is a list and brief description of the Source Control BMPs (non-structural and structural) that are included in the project:

Non-Structural Source Control BMPs

1. Education for Property Owner, Operators, Tenants, Occupants, or Employees
2. Activity Restrictions
3. Irrigation System and Landscape Maintenance
4. Common Area Litter Control
5. Street Sweeping Public Streets and Parking Lots
6. Drainage Facility Inspection and Maintenance

Structural Source Control BMPs

1. MS4 Stenciling and Signage
2. Landscape and Irrigation System Design
3. Protect Slopes and Channels
4. Trash Storage Areas

These BMPs are described in-depth in the Preliminary Water Quality Management Plan (Pacific Coast Land Constraints 2014a) located in Appendix F. As described above both site design and source control BMPs would be used to reduce runoff and improve water quality. Thus, with implementation of the above described design features and BMPs, impacts from flooding would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Runoff Water and Drainage Systems

Impact HWQ-5:	**The project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**

Impact Analysis

Each of the nine regional boards is required to adopt a Water Quality Control Plan, or Basin Plan, which recognizes and reflects regional differences in existing water quality, the beneficial uses of the Region's ground and surface waters, and local water quality conditions and problems. The WQMP is a programmatic document developed by the Permittees. The principal document translates the MS4 Permit requirements into Permittee programs and implementation plans. The Drainage Area Management Plan (DAMP) is used by the Permittees in their development of the Local Implementation Plans, individual ordinances, plans, policies and procedures to manage Urban Runoff (California RWQCB San Diego Region 1994).

New development associated with the proposed project would alter drainage on the site and increase stormwater runoff rates and volumes by introducing 170 apartment units contained in nine separate buildings, a clubhouse with offices (totaling 1,906 square feet), a pool and spa, open space, 268 parking spaces, landscaping, sidewalks, and alleys. The project would have a total lot coverage of 400,752 square feet.

Based on the Preliminary Water Quality Management Plan for the project, there is a large area north of the project that drains into a valley area that carries collected runoff across the northeast corner of the site onto adjacent property to the east. Additionally, there is a natural drainage course in the

southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site in a hydraulic jump. This portion of the site would receive as much as 20 feet of fill and the off-site drainage would require interception and transmission to the natural off-site drainage course that currently accepts these flows. The onsite runoff would be collected in a series of catch basins and transmitted to underground storage facilities on the northwest and southwest ends of the site. Treatment through infiltration would occur in the storage facilities, and then flows would be released to adjacent properties at their pre-developed rates and along the same drainage course as they currently follow.

The project design meets Condition C of the Riverside County Water Quality Management Plan for urban runoff, as the greater of 2-year, 24-hour or 10-year, 24-hour storm event flows would be mitigated on-site and reduced to below or near existing condition prior to release in the or storm drain system.

A series of onsite storm drain systems would be constructed. Catch basins would be fitted with inserts designed to capture larger floatables and debris, as well as providing some filtration of hydrocarbons. Downstream manholes would be fitted with restrictor plates to limit outlet flows to no more than the pre-development condition. Underground storage chambers would be installed to provide additional filtration treatment. The soil characteristics are such that infiltration is too low to be utilized for infiltration so the structures would be founded on porous material containing under drains to direct filtered water to the storm drain system.

Infiltration and re-use BMPs were considered and found to be infeasible (see Appendix F, page 12). Therefore, the BMP treatment would consist of retention facilities with underdrains. The retention facilities would also be underlain by a rock reservoir to retain double the BMP Design Volume to promote infiltration, since the site is not feasible for solely an infiltration BMP. All storm flows would be directed to the retention facilities. First flush flows would be treated in the retention facilities and larger storm events would be intercepted by raised inlets and conveyed in a separate by-pass storm drain. The retention underdrain would connect to the storm drain prior to leaving the site. The system would retain the incremental increase of a 2-year storm event, a 10-year storm event, or the BMP design volume, whichever is greater.

The volume to be detained and treated is determined by a comparison of the volumes in existing and developed conditions of 2-year and 10-year, 24-hour rainfall events, and the BMP volume for an 85th percentile rain event.

The volumes for the 2-year and 10-year rainfall events have been calculated using the Riverside County synthetic unit hydrograph method. As stated in the Riverside County Flood Control and Water Conservation District Hydrology Manual, the short cut synthetic hydrograph method is appropriate for areas of less than 100 to 200 acres and lag times less than 7 to 8 minutes. The project site acreage (30.7 acres) fits into this consideration and has been used in this study.

The treatment volume resulting from the 85th percentile event has been calculated using the worksheet supplied in the WQMP guidance document for projects within the Santa Margarita River Watershed. The findings for the various events described above are summarized in Table 3.8-3.

Table 3.8-3: Project Existing and Developed Flows

Event	Existing CF	Developed DF
Area A		
2-year, 24-hour	5,449	9,893
10-year, 24 hour	18,816	26,369
85th percentile	—	—
Area B		
2-year, 24-hour	3,628	9,333
10-year, 24 hour	12,528	22,047
85th percentile	—	—
Area C		
2-year, 24-hour	1,683	3,886
10-year, 24 hour	5,812	9,181

Note:
- = Not applicable
Source: Pacific Coast Land Consultants, Inc., 2014a.

The project would have a less than significant impact regarding runoff water because post-development conditions would not result in a significant increase in runoff from the project site. Based on the Hydrology Analysis for the project, a pipe would be installed at the north property line, within the existing drainage course and would be designed to outlet beyond the project within the downstream portion of the existing drainage course. An outlet structure and rock riprap would be installed to control the outflow and disperse the resulting flows to control potential erosion and degradation of the natural drainage course. Surface flows within the project would be collected in catch basins and pipe systems will transmit flow into underground storage/filtrations devices sized to meet the regulatory treatment requirements. From the storage/filtration devices, pipes would be installed and outlet onto adjacent properties to locations that historically forms the pre-development drainage courses. Outlet structures and riprap would be installed to control potential erosion and degradation.

In summary, the project would not substantially increase the rate or amount of surface runoff or result in flooding; either onsite or off-site, and that project runoff would not exceed the capacity of existing or planned storm water drainage systems. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Water Quality

Impact HWQ-6: The project would potentially otherwise substantially degrade water quality.

Impact Analysis

The project has the potential to degrade local water quality. Development of the project site could introduce a number of urban pollutants into the area, most notably nutrients, oxygen demanding substances, bacteria and viruses, pesticides and metals; also see discussion in HWQ-1. However, Mitigation Measure HWQ-1 requires the applicant to prepare a SWPPP and WQMP that conforms to the SWRCB NPDES permit. The SWPPP shall identify best management practices (BMPs) to prevent construction related pollutants from reaching storm water and all products of erosion from moving off-site. With implementation of Mitigation Measure HWQ-1, which requires the preparation of the SWPPP and WQMP, impacts to water quality would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Mitigation Measure HWQ-1 is required.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Housing Placement: Flood Hazard Area

Impact HWQ-7: The project would not place housing within a 100-year flood plain as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

Impact Analysis

The project would construct 170 apartment units that would be outside a 100-year flood hazard area and would not impede flows as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map. The Elsinore Area Plan identifies flood hazards areas potentially subject to flooding, including areas near Lake Elsinore and Canyon Lake. However, the project site is not located in an area of The Elsinore Area plan that is within either a 100-Year or 500-Year Flood Zone. Based on the FEMA Flood Map No. 06065C2705G, the proposed project is located in Zone X, areas determined to be outside the 0.2 percent annual change floodplain (FEMA 2014). Additionally, the proposed project is located outside the areas designated as being within a low, moderate, or high dam hazard zone (Riverside County Planning Department 2011). Thus, the project would have no related impact.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Structures: Flood Hazard Area

Impact HWQ-8:	**The project would not place within a 100-year flood plain structures which would impede or redirect flood flows.**

Impact Analysis

The project site is not within a 100-year flood hazard area and would not locate buildings within an area where structures would impede flows according to the FEMA flood map Number 06065C2705G, nor within a flood hazard area as mapped in the Elsinore Area Plan. Thus, the project would have no related impact.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Flooding

Impact HWQ-9:	**The project would not 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.**

Impact Analysis

Based on the Elsinore Area Plan, dam failure of the Railroad Canyon Dam at Canyon Lake would cause flooding in the plan area, and the Plan maps the dam inundation zones. A review of the Plan and inundation zones indicates the project is not within any dam inundation or hazard zones. There are no levees located anywhere in the project vicinity. Therefore, there will be no impact due to flooding from failure of a dam or levee.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Seiche, Tsunami, or Mudflow

Impact HWQ-10: The project would not be subject to or create inundation by seiche, tsunami, or mudflow.

Impact Analysis

The project site is located approximately 1,360 feet above mean sea level with a gentle topographic gradient to the southwest; there is an intermittent wash located to the west and east of the project site (Earth-Strata, Inc. 2013). The project is located approximately 20 miles from the Pacific Ocean and separated by a mountain range. Thus, there would be no potential impact from inundation by tsunami because of the project's distance from the ocean.

The nearest body of water to the project site is Lake Elsinore, which is located approximately 6.3 miles northwest. Additionally, Canyon Lake is located approximately 6.4 miles northwest of the project site. Because of the project's distance from large bodies of water, there would be a less than significant impact regarding potential inundation by a seiche.

While the slight features uneven terrain, grading will make the sight generally level, and no perched slopes are anticipated either below or above the site that would represent a mudflow concern. Therefore, there would be less than significant impacts from inundation by seismic seiche, tsunami, or mudflow would occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.9 - Land Use and Planning

3.9.1 - Introduction

This section describes existing land uses, applicable land use plans, policies or regulations, and any potential conflicts that may arise through project implementation. This section also describes the proposed project's consistency with Southern California Association of Governments (SCAG) regional growth policies. Descriptions and analysis in this section are derived from field observation (Phase I ESA, Earth-Strata, Inc. 2013), review of pertinent planning documents including the City of Wildomar General Plan (2008), and from project information contained in Appendix A, Notice of Preparation/Responses.

3.9.2 - Environmental Setting

Land Use

Project Site

The proposed project is located within the City of Wildomar, which was incorporated on July 1, 2008. The City has adopted the County of Riverside General Plan as its City of Wildomar General Plan and is in the process of preparing an update to the General Plan. The project site is in an area generally characterized by vacant land and scattered residences. The project site is located on the northeast corner of Elizabeth Lane and Prielipp Road, between Jana and Elizabeth Lanes. The existing residence address located within the project site is 36485 Jana Lane, Wildomar, California 92595.

The proposed project site has regional access via the I-15 Freeway from Clinton Keith Road, and local access via Prielipp Road, Elizabeth Lane, and Jane Lane.

Surrounding Area

The existing residential lots in the surrounding area are typically 1 acre or larger. The land adjacent to the north of the project site is occupied by two residences. There is vacant land to the west of the project site and a multi-unit residential development to the south of the site. The eastern section of the project site is bordered by two residential dwellings, as well as vacant land. The area also features residential subdivisions to the east and west. See Exhibit 3.9-1 for cumulative projects within the project area.

Other development proposed in the project vicinity includes single-family residential, multi-family residential/institutional, commercial/office/retail, and professional office/medical.

General Plan Land Use Designations and Zoning Classifications

Project Site

The General Plan Land Use designation for the project site consists of Medium High Density Residential (MHDR) throughout the project site. According to the Land Use Element of the City of Wildomar General Plan, the Medium High Density Residential land use designation provides for the development of single-family attached and detached residences. Exhibit 3.9-1 shows existing land use designation for the project site and area.

The Community Development Foundation Component of the City of Wildomar General Plan, which encompasses the project site and the residential area in the vicinity of the project site, allows 5 to 8 dwelling unit per acre or higher. Business park designations to the west of the project site allow for a 0.25 to 0.60 floor area ratio (FAR).

The site is zoned Industrial Park (I-P) which permits industrial, manufacturing, service, and commercial uses. The area may be used for airports, heliports, and recycling processing facilities if a conditional use permit is granted (City of Wildomar 2008).

The project site is located within the Elsinore Area Plan, which is a component of the City of Wildomar General Plan that provides area-specific policies and requirements to address local conditions and issues. The Elsinore Area Plan encompasses the cities of Lake Elsinore, Wildomar, and Canyon Lake, as well as several unincorporated communities within Riverside County. Specific Plans are policies or regulations that provide area specific land use and development standards to act in response to individual conditions and goals of the area being proposed for development and conservation. Within the Elsinore Area Plan, individual, specific plans are identified as "policy areas." The project site is not located within a policy area (County of Riverside 2008).

The project includes a General Plan Amendment to change the land use designation from Medium High Density Residential (MHDR) to Very High Density Residential (VHDR). The project applicant is also requesting a Change of Zone from Industrial Park (I-P) to Residential (R-3).

Surrounding Areas

Areas adjacent to the project site have residential development to the north, east, and south, and a vacant lot to the east. The land use designations are contained in Table 3.9-1.

Table 3.9-1: Surrounding Land Use Designations

Relationship to Project Site	Land Use Designation
North	Medium High Density Residential (MHDR) 5–8 du/ac
East	Medium High Density Residential (MHDR) 5–8 du/ac
South	Very High Density Residential (VHDR) 14–20 du/ac
West	Business Park (BP) 0.25–0.60 FAR

Other proposed development in the vicinity includes:

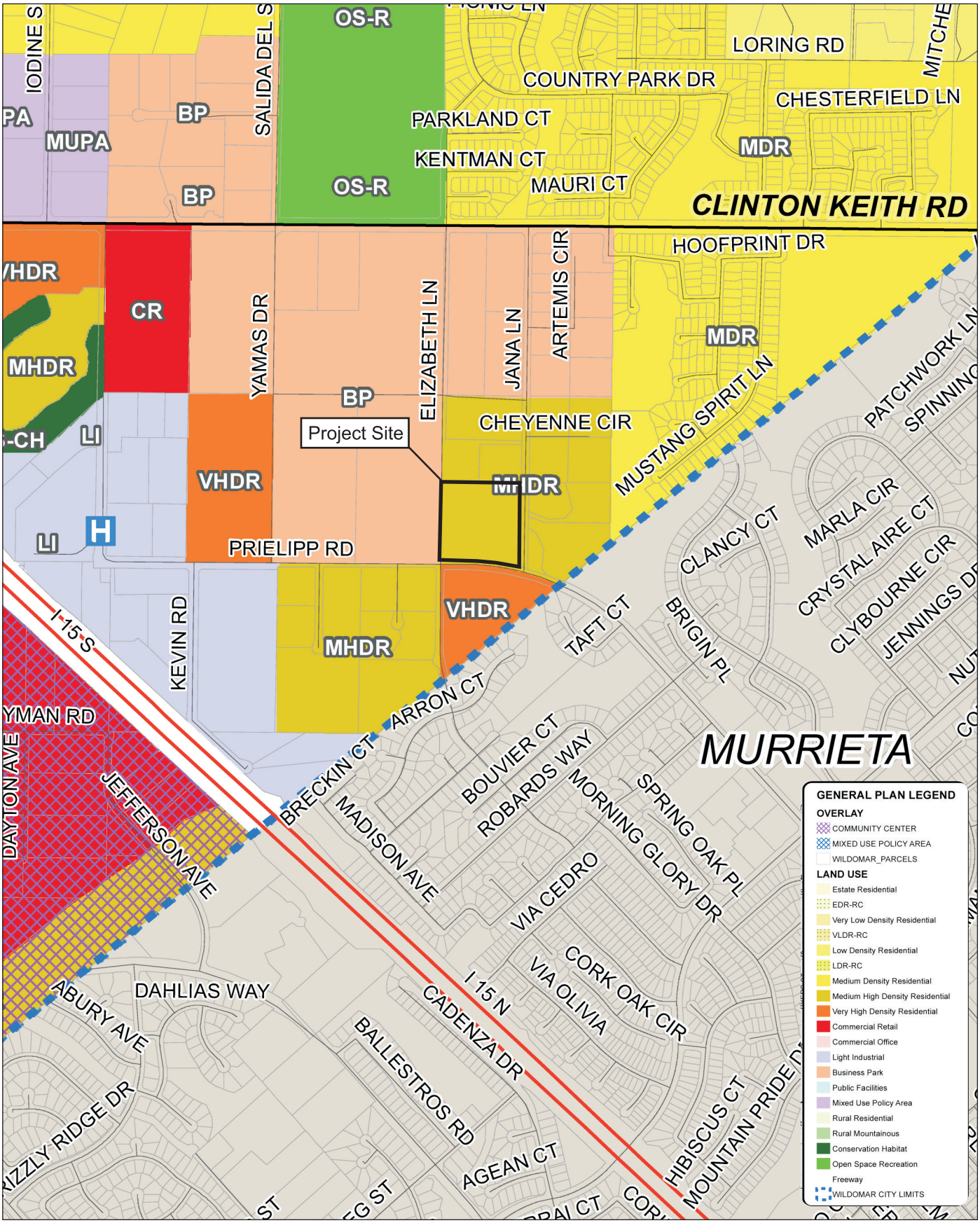
1. Lennar Residential (Tentative Tract Map 36497), Single Family Residential – 67 dwelling units. This project is located adjacent to the southwest corner of the proposed project site (Map Number 1).

Source: Trames Solutions Inc., October 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.9-1
Cumulative Projects

THIS PAGE INTENTIONALLY LEFT BLANK

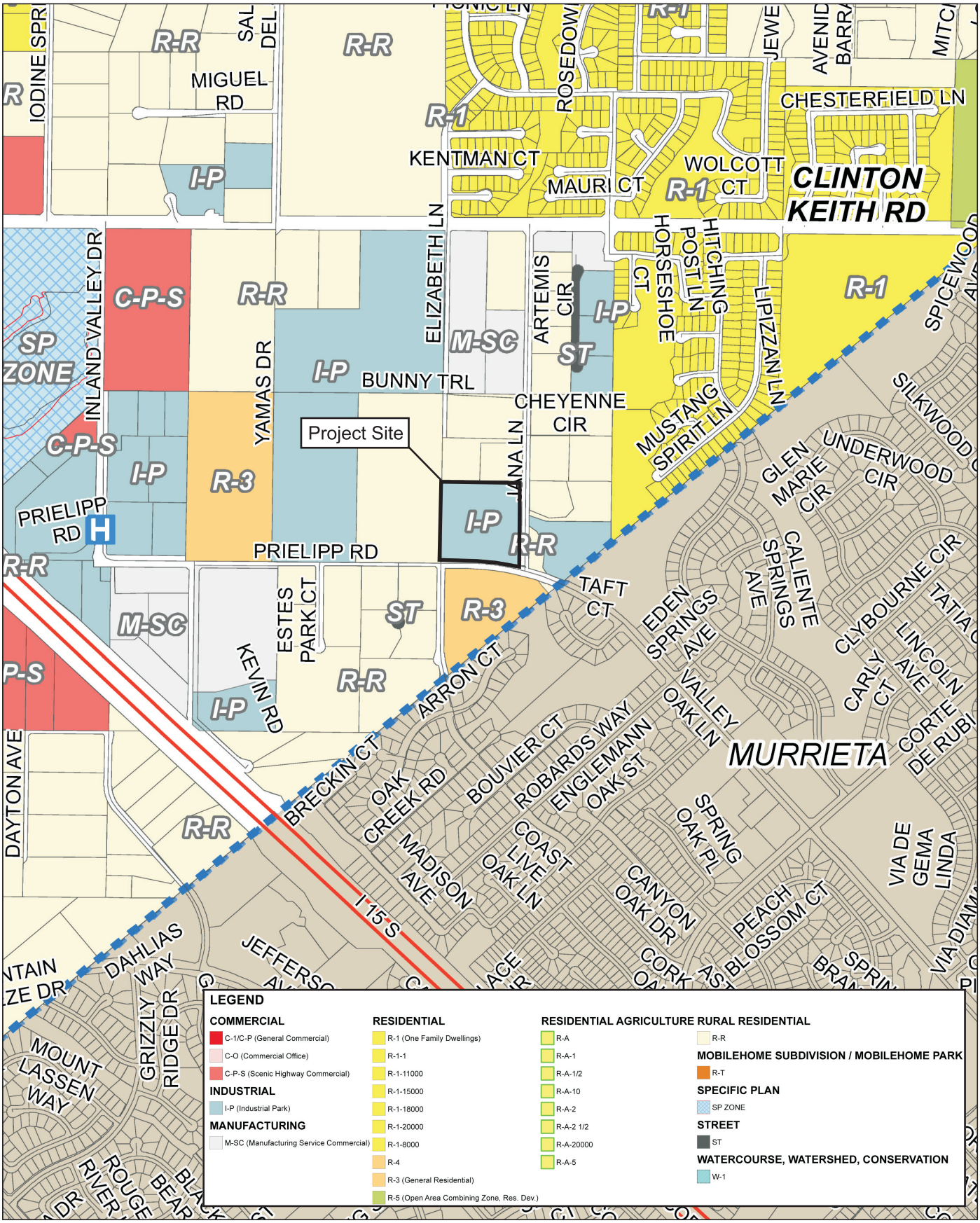


Source: City of Wildmar.

FirstCarbon® SOLUTIONS

Exhibit 3.9-2
Existing Land Use Designations

THIS PAGE INTENTIONALLY LEFT BLANK



Source: City of Wildmar.

FirstCarbon® SOLUTIONS

Exhibit 3.9-3
Existing Zoning Designations

THIS PAGE INTENTIONALLY LEFT BLANK

2. Rancon Medical and Retail Center (Parcel Map 36492), Commercial/Office/Retail – 58,950 square feet. This project is located northwest of the proposed project site, across Elizabeth Lane (Map Number 5).
3. Inland Valley Medical, Professional Office/Medical – 39,000 square feet. This project is located west of the proposed project and east of the Santa Rosa Apartment Homes (Map Number 10).
4. Strata/Clinton Keith PAR, Commercial Retail and Multi-Family Residential – 40,000 square feet commercial and 192 multi-family dwelling units. This project is located northwest of proposed project site, to the right of Inland Valley Drive (Map Number 15).
5. Strata/Prielipp PAR, Institutional and Multi-family Residential – 25,000 square feet institutional and 150 multi-family dwelling units. The project is located adjacent to the western boundary of the proposed project site (Map Number 17).

Also see Exhibit 4-1 in the Cumulative Impacts section showing the distribution of these projects. Overall, these projects represent a continued transition from rural to suburban uses in the region, consistent with planned development.

3.9.3 - Regulatory Framework

State Regulations

Southern California Association of Governments

SCAG is the nation's largest metropolitan planning organization, representing six counties, 191 cities, and over 18 million residents. SCAG undertakes a variety of planning and policy initiatives to encourage a more sustainable Southern California. Over the past 40 years, SCAG has evolved as the largest of nearly 700 councils of government in the United States, functioning as the Metropolitan Planning Organization for the following six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. As the designated Metropolitan Planning Organization, SCAG is mandated by federal and state law to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the state level (SCAG 2013).

Regional Comprehensive Plan and Guide

The proposed project is located within the County of Riverside, and is located in the middle of a six-county metropolitan region comprising Orange, Los Angeles, Ventura, Riverside, San Bernardino, and Imperial Counties.

SCAG has developed a Regional Comprehensive Plan and Guide (RCPG) to help coordinate transportation and infrastructure, open space and environmental planning with population, housing, and employment growth within the multi-county region. The RCPG, adopted in 1995, contains policies addressing planning priorities for the region adopted by the SCAG governing board, the Regional Council. Some of these are core policies that implement state or federal mandates, while most of the policies are ancillary or "advisory-only" guidance for local jurisdictions and public agencies.

SCAG's RCPG includes a package of policies related to growth and development that seek to coordinate infrastructure with projected population and housing growth. In general, SCAG policies encourage job and housing opportunities to be balanced at the county or Regional Statistical Area (both much larger than the project level). SCAG policies also encourage job growth to be concentrated near transit services and transit nodes, and existing freeways, HOV lanes, and toll roads. Given the expansive scope of and general nature of the RCPG, not all of these policies apply to every project.

This project is a project of region-wide significance according to SCAG Intergovernmental Review (IGR) criteria[1] and CEQA Guidelines (Section 15206), because the project involves a general plan amendment. Therefore, this EIR is required to address the proposed project's consistency with the RCPG.

SCAG Compass Blueprint

The Compass Blueprint Growth Vision is a response, supported by a regional consensus, to the land use and transportation challenges facing Southern California now and in the coming years.

The Growth Vision is driven by four key principles (SCAG 2013):

- Mobility – Getting where we want to go
- Livability – Creating positive communities
- Prosperity – Long–term health for the region
- Sustainability – Promoting efficient use of natural resources

2012–2035 Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2012, SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future. The RTP/SCS is the culmination of a multi-year effort involving stakeholders from across the SCAG Region (RTPSCS 2013). The RTP is a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for transportation investments throughout the region. Using growth forecasts and economic trends that project out over a 20-year period, the RTP considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address our mobility needs.

Local Regulations

City of Wildomar General Plan

Pursuant to the Land Use Element of the City of Wildomar General Plan, residential land uses accommodate not only a wide variety of housing types and land use designs, but also an assortment of public uses such as churches, schools, parks, day-care centers, libraries, and other cultural and civic uses that serve as a crucial support element for neighborhoods and communities and help establish focus and identity. The City's goal is to accommodate demand for residential land uses, accommodate a range of housing styles, types, densities and affordability, and to ensure that new

[1] Website: http://scag.ca.gov/igr/clist.htm. Accessed March 13, 2013.

and rehabilitated residential structures enhance the quality of the neighborhood through sound construction techniques and architectural detail (City of Wildomar General Plan 2008).

The project would change the designated land use of the project site from Medium High Density Residential (MHDR) to Very High Density Residential (VHDR). The Very High Density Residential designation allows for single-family attached residences and multi-family dwellings. Building intensity ranges from 14 to 20 dwellings per acre.

The Elsinore Area Plan

As discussed in Section 3.10.1, the project site lies within the Elsinore Area Plan, which is a component of the City of Wildomar General Plan that provides area-specific policies and requirements to address local conditions and issues.

City of Wildomar Zoning Ordinance

According to the City of Wildomar Zoning Ordinance, the project site is currently zoned Industrial Park (I-P). As a result, the project will require approval of a Zone Change to Residential (R-3). Industrial Park (I-P) allows for industrial, manufacturing, and commercial uses. General Residential (R-3) permits uses for single-family dwellings and numerous commercial and residential uses with approved Plot Plan. According to the City of Wildomar Zoning Ordinance, general residential areas are permitted provided that a plot plan shall first have been obtained pursuant to the provisions of Chapter 17.216. The purpose of this zone change is to achieve consistency with the proposed General Plan Amendment.

Multiple Species Habitat Conservation Plan

The Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive multi-jurisdictional effort that includes Riverside County and 14 cities in western Riverside County. Rather than address sensitive species on an individual basis, the MSHCP focuses on the conservation of 146 species, proposing a reserve system of approximately 500,000 acres and a mechanism to fund and implement the reserve system. Most importantly, the MSHCP allows participating entities to issue take permits for listed species so that individual applicants need not seek their own permits from the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife. The MSHCP was adopted on June 17, 2003 by the Riverside County Board of Supervisors (MSHCP Consistency Analysis 2012) and has continued in effect in the City after its incorporation.

The project site is located within the Elsinore Area Plan of the MSHCP, and is subject to the appropriate fees and other provisions of the MSHCP. The site is not located within any designated cell critical area and is not subject to a Habitat Assessment and Negotiation Strategy (HANS) process review.

3.9.4 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether land use and planning impacts are significant, the following questions are analyzed and evaluated. Would the project:

a) Physically divide an established community?

b) 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?

c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?

3.9.5 - Project Impact Analysis

Divide Established Community

Impact LUP-1: The project would not physically divide an established community.

Impact Analysis

The project site is on the western edge of the Clinton Keith Road-Nutmeg Street neighborhood in the southeast portion of Wildomar. On a more localized basis, the single-residence on the project site is situated among a cluster of approximately nine large-lot residential properties, of which the subject residence is the furthest southwest. The project would convert vacant land and remove one residence from this smaller neighborhood and replace it with high-density residential use.

However, the project would not physically divide any neighborhood or community. The proposed use would be consistent with the three-story apartment building to the south of the site. The project would provide additional housing opportunities and convert largely undeveloped land into landscaping that will incorporate a variety of trees, shrubs, and other vegetation, as well as community garden plots. The project would complement the current residential uses within the vicinity and will not create any physical obstructions that divide the neighborhood.

Level of Significance Before Mitigation

No Impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Conflict with Applicable Plans, Policies, or Regulations

Impact LUP-2:	**The project would potentially conflict with 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

Designated Land Use and Zoning

The current General Plan Land Use designation for the project site is Medium High Density Residential (MHDR). According to the Land Use Element of the City of Wildomar General Plan, the Medium High Density Residential land use designation provides for the development of single-family attached and detached residences with density ranges from 5 to 8 dwellings per acre and lot sizes ranging from 4,000 to 6,500 square feet.

The project site consists of 10.02 acres, indicating that development of 170 units would yield a gross density of approximately 16.9 units per acre, which is within the Very High Density Residential (VHDR) land use classification requirement of 14 to 20 units per acre. The project would require a General Plan Amendment for a land use designation change from Medium High Density Residential to Very High Density Residential to accommodate the proposed uses.

The site is zoned Industrial Park (I-P) which permits industrial, manufacturing, service, and commercial uses. The area may be used for airports, heliports, and recycling processing facilities if a conditional use permit is granted (City of Wildomar, 2008).

The project also includes a Change of Zone from Industrial Park (I-P) to General Residential (R-3). General Residential allows for multi-family dwellings and apartment houses with a minimum lot area of 7,200 square feet, but no more than 50 percent of the lots net area can be covered with buildings or structures. All buildings and structures must be 50 feet or less in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230 (Wildomar Municipal Code 2013).

The proposed project is an apartment complex covering a total of 400,752 square feet. Of that area, 93,226 square feet—approximately 23 percent—would be covered with buildings or structures that are 42.2 feet in height or less. The purpose of this zone change is to be consistent with the proposed General Plan Amendment. This proposed project is permitted in the General Residential zone, provided that a Plot Plan Approval is obtained.

Surrounding land uses are undeveloped and residential including large lot and high density residential. The proposed residential use is generally consistent with the adjacent land uses and no land use conflicts have been identified.

Consistency with General Plan Policies

Table 3.9-2 identifies applicable policies for residential development, and evaluates the project's consistency. As indicated in the Table 3.9-2, the project is consistent with the City of Wildomar General Plan policies.

Table 3.9-2: Project Consistency with General Plan Land Use Policies

RCPG Policy	Project Consistency Analysis
The following policies apply to Residential-designated properties:	
LU 22.1 Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.	**Consistent:** With approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the project would to develop 170 units of apartments contained within nine separate buildings. Existing structures on site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid waste standards. The proposed nine buildings total 197,172 square feet, and the project would have a lot coverage of 39,996 square feet. Each of the nine buildings would utilize a similar design scheme and would contain the same number of dwelling units per floor, with the exception of the ninth building, which would contain half as many units (10 units). The project site consists of 10.02 acres, indicating that development of 170 units would yield a gross density of approximately 16.9 units per acre, which is consistent with the Very High Density Residential (VHDR) land use classification for 14 to 20 units per acre. With approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the proposed project would conform to this policy.
LU 22.2 Accommodate higher density residential development near community centers, transportation centers, employment, and services areas.	**Consistent:** The project site consists of 10.02 acres, indicating that development of 170 units would yield a gross density of approximately 16.9 units per acre, which is consistent with the Very High Density Residential (VHDR) land use classification for 14 to 20 units per acre, consistent with a higher density residential development. The project proposes on-site circulation with one full access driveway along Prielipp Road and another full access driveway along Elizabeth Lane. In addition, The Riverside Transit Authority (RTA) Routes 23, 217, and 79 currently service the study area. As this project and the surrounding area develop, the RTA may reassess the potential demand for these facilities in the area, and may establish new routes near the project area. Development coordination with RTA will determine the need for future bus turnouts. The design of the project includes curbs and sidewalks where required, thereby encouraging alternate methods of transportation for future development. Development of the project would comply with the development standards for the City. All access would comply with Americans With Disabilities Act standards for accessibility.

Table 3.9-2 (cont.): Project Consistency with General Plan Land Use Policies

RCPG Policy	Project Consistency Analysis
	The project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges. Elizabeth Lane is anticipated to be extended from its current terminus, south of Clinton Keith Road, to Prielipp Road by 2015. Therefore, two distribution patterns for the project have been prepared, one with, and one without the Elizabeth Lane extension. Therefore, the project would accommodate a higher density residential development, allowing access near community centers, transportation centers, employment, and services areas.
LU 22.3 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.	**Consistent:** The proposed project's water, wastewater, stormwater drainage, and solid waste utility have been analyzed within Section 3.16, Utilities and Service Systems, of the Draft EIR. Implementation of the project was determined to have adequate water resources and sewer facilities to meet the demands of the proposed residential land use. In addition, as outlined within Section 3.15, Traffic and Transportation, of this Draft EIR, potential impacts related to circulation facilities were found to be less than significant. Please also see consistency with Policy LU22.2. Therefore, the project is consistent with Policy LU 22.3.
LU 22.4 Accommodate the development of a variety of housing types, styles, and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.	**Consistent:** As indicated above, with approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the project would to develop 170 units of apartments contained within nine separate buildings. Existing structures on site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid waste standards. The proposed nine buildings total 197,172 square feet, and the project would have a lot coverage of 39,996 square feet. Each of the nine buildings would utilize a similar design scheme, and would contain the same number of dwelling units per floor with the exception of the ninth building, which would contain half as many units (10 units), and ultimately meeting the needs of a range of lifestyles, physical abilities, and income levels.
LU 22.6 Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses.	**Consistent:** The proposed project will not be located near operating agricultural, commercial, or industrial uses. The project involves the conversion of land to an apartment project. The project would result in an increase in traffic compared to existing conditions. The project would have one full access driveway along Prielipp Road and another full access driveway along Elizabeth Lane (future roadway). Off-site and on-site recommended improvements from the

Table 3.9-2 (cont.): Project Consistency with General Plan Land Use Policies

RCPG Policy	Project Consistency Analysis
	Traffic Impact Study have been incorporated as mitigation measures (MM TRANS-1 and TRANS-2) to reduce potentially significant impacts regarding hazards to a less than significant level. For example, the project will need to provide stop sign controls, a dedicated eastbound left turn lane, and meet minimum site distance standards.
LU 22.7 Allow for reduced street widths to minimize the influence of the automobile and improve the character of a neighborhood, in accordance with the Riverside County Fire Department.	**Consistent:** The project would include improvements on streets adjacent to the project site and would include a full access driveway along Prielipp Road, and a full access driveway along Elizabeth Lane (future roadway). Considering the temporary nature of project construction, and established County and City requirements for traffic control on public roadways during construction, the project would have a less than significant impact on emergency access during construction. Regarding emergency access after the project has been constructed, emergency access throughout the project site will be developed in accordance with applicable ordinances, standard conditions of approval, and permits related to emergency access.
LU 22.9 Require residential projects to be designed to maximize integration with and connectivity to nearby community centers, rural villages and neighborhood centers.	**Consistent:** The project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges. Elizabeth Lane is anticipated to be extended from its current terminus, south of Clinton Keith Road, to Prielipp Road by 2015. Therefore, two distribution patterns for the project have been prepared, one with, and one without the Elizabeth Lane extension.
LU 22.10 Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.	**Consistent:** The change in land use is consistent with recent development, including apartments to the south and subdivisions to the east and west, as well as consistent with the emerging development pattern for the area – which is trending from rural to suburban overall. As proposed in the landscape plan, the project site will incorporate a variety of trees, shrubs, and other vegetation throughout the project site. The project will also include several monumental structures, which includes an entry monument with distinguishing features such as tile roof, manufactured stone veneers, and wood corbels.
The following policies apply to land use compatibility:	
LU 6.1 Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts.	**Consistent:** With approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the project would to develop 170 units of apartments contained within nine separate buildings. Existing structures on site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid

Table 3.9-2 (cont.): Project Consistency with General Plan Land Use Policies

RCPG Policy	Project Consistency Analysis
	waste standards. The proposed nine buildings total 197,172 square feet, and the project would have a lot coverage of 39,996 square feet. Each of the nine buildings would utilize a similar design scheme and would contain the same number of dwelling units per floor, with the exception of the ninth building, which would contain half as many units (10 units). The project site consists of 10.02 acres, indicating that development of 170 units would yield a gross density of approximately 16.9 units per acre, which is consistent with the Very High Density Residential (VHDR) land use classification for 14 to 20 units per acre. With approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the proposed project would conform to this policy.
LU 6.3 Consider the positive characteristics and unique features of the project site and surrounding community during the design and development process.	**Consistent:** The proposed project has been designed to integrate into the surrounding topography and the proposed project buildings are proposed to be set back in conformance to City standards. The project also proposes construction of a clubhouse with offices totaling 1,906 square feet, a pool and spa, as well as 99,913 square feet (approximately 25% of the site) of open space/common areas. The proposed recreational amenities as well as development of open space/common area throughout the site, would improve recreational opportunities in the area, and will be in accordance with the City of Wildomar's and the County of Riverside policies and goals.
LU 6.4 Retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic.	**Consistent:** The proposed project would retain much of the site in open space and would not impact public open space areas. The potential impacts identified by this policy, including noise, air quality, light and glare, and traffic impacts, have all been addressed in other sections of this Draft EIR and been determined to be less than significant.
LU 6.5 Require buffering to the extent possible between urban uses and adjacent rural/equestrian oriented land uses.	**This policy does not apply to the proposed project.** The proposed project is not located adjacent to rural/equestrian oriented land uses.
LU 6.6 Require buffering between urban uses and adjacent rural/equestrian oriented land uses.	**This policy does not apply to the proposed project.** The proposed project is not located adjacent to rural/equestrian oriented land uses.
LU 6.7 Buffer and/or maintain a natural edge for proposed development directly adjacent to national forests.	**This policy does not apply to the proposed project.** The proposed project is not located adjacent to a national forest.
Source: City of Wildomar General Plan 2008; analysis: FCS 2014.	

Consistency with SCAG Regional Growth Policies

Consistency with the SCAG Regional Comprehensive Plan and Guide

A consistency analysis comparing the project with the SCAG Regional Comprehensive Plan's (RCP's) Goals and Policies is provided in Table 3.9-3. As outlined within Table 3.9-2, the project would not conflict with any applicable 2008 Regional Comprehensive Plan policy. Therefore, impacts to the Regional Comprehensive Plan would be less than significant.

Table 3.9-3: SCAG 2008 Regional Comprehensive Plan (RCP) Consistency Analysis

RCPG Policy	Project Consistency Analysis
Open Space and Habitat Chapter	
OSN-4 SCAG should support policies and actions that preserve natural areas, specifically those areas identified in local, state, and federal plans.	**Consistent:** The elevation of the project site is approximately 1,360 feet above mean sea level with gentle sloping to the southwest. The property has been disturbed by past human activities, and the majority of the site supports a disturbed grassland community. Development on the site is proposed away from the hillside areas, preserving natural open space. In addition, there is a drainage swale that occupies approximately 0.1 acres, located on the eastern side of the project site. The swale supports riparian/riverine habitat as described under the MSHCP (RCA Associates 2014). The project site mainly consists of a disturbed grassland community that has been affected in the past by residential development. There are no other sensitive natural communities on the project site and no impacts to riparian habitat or other sensitive natural communities would occur. Implementation of Mitigation Measures MM BIO-3 through MM BIO-5 will reduce related impacts to a level of less than significant. Therefore, the project will preserve natural areas on the project site.
OSN-5 SCAG should support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.	**Consistent:** The project's impacts on biological resources, hydrology, and forest land resources are analyzed Section 3.4, Biological Resources; Section 3.9, Hydrology and Water Quality; and Section 3.2, Agriculture and Forestry Resources and are determined to be less than significant with mitigation.
OSN-6 SCAG should encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	**Consistent:** Mitigation measures included in Section 3.5, Cultural Resources identify specific mitigation and procedures that would be implemented if unknown buried prehistoric, archaeological, or historic resources are unearthed during construction of the project.
OSC-12 Developers and local governments should promote water-efficient land use and development.	**Consistent:** At a minimum, the project would comply with all state and local building codes designed to promote water efficiency. Landscaping plans would incorporate drought-tolerant plants and design. In addition, the onsite system of detention/water quality basins and swales will provide for some water recharge.

Table 3.9-3 (cont.): SCAG 2008 Regional Comprehensive Plan (RCP) Consistency Analysis

RCPG Policy	Project Consistency Analysis
WA- 27 Developers and local governments should maximize pervious surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation.	**Consistent:** As outlined within Section 3.9, Hydrology and Water Quality and Section 3.4, Biological Resources, the project has been designed to maximize the available permeable area, which would help protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat.
Energy Chapter	
EN-11 Developers and local governments should submit projected electricity and natural gas demand calculations to the local electricity or natural gas provider, for any project anticipated to require substantial utility consumption. Any infrastructure improvements necessary for project construction should be completed according to the specifications of the energy provider.	**Consistent:** Correspondence with utility providers that serve the project site, including Southern California Edison and The Gas Company, confirmed that existing infrastructure or previously planned improvements would be adequate to serve the energy demands of the project. Any infrastructure improvements deemed necessary for the project would be developed according to energy provider specifications and/or state and local regulations.
Source: SCAG 2008; analysis: FCS 2014.	

Consistency with the SCAG Regional Transportation Plan/Sustainable Communities Strategy

Consistency analysis comparing the project with the SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Goals is provided in Table 3.9-4.

Table 3.9-4: SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis

RTP/SCS Goals	Project Consistency Analysis
RTP/SCS G1 Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent:** With approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the project would to develop 170 units of apartments contained within nine separate buildings. The project and its estimated 170 units of apartments would help balance the residential uses in the region.
RTP/SCS G2 Maximize mobility and accessibility for all people and goods in the region	**Consistent:** The project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges.

Table 3.9-4 (cont.): SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis

RTP/SCS Goals	Project Consistency Analysis
	Elizabeth Lane is anticipated to be extended from its current terminus, south of Clinton Keith Road, to Prielipp Road by 2015. Therefore, two distribution patterns for the project have been prepared, one with and one without, the Elizabeth Lane extension.
RTP/SCS G3 Ensure travel safety and reliability for all people and goods in the region	**Consistent:** As previously stated, the project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges, thus ensuring safe travel and reliability in the region.
RTP/SCS G4 Preserve and ensure a sustainable regional transportation system	**Consistent:** The proposed project would make various on-site and off-site improvements as stated in Section 3.15 Transportation and Traffic. The proposed project would make financial contributions to the regional and local transportation system through payment of DIF and TUMF fees, as well as fair-share contributions to such improvements. Combined, these actions will sustain and improve the regional and local transportation system.
RTP/SCS G5 Maximize the productivity of our transportation system	**Consistent:** Development impact fees would be assessed during the project's development process, offsetting any fiscal burden with respect to capital improvements resulting from development of the project, ultimately maximizing the productivity of the local transportation system.
RTP/SCS G6 Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)	**Consistent:** The project site is located in a generally developed area. The nearest sensitive receptors to the project site are the residential uses located immediately north of the project boundary and approximately 65 feet (19 meters) east of the project boundary on the northeast corner of Prielipp Road and Jana Lane. Existing residences are also located approximately 85 feet (25 meters) south of the project boundary at the southeast corner of Prielipp Road and Elizabeth Lane. Sensitive receptors to pollutants were evaluated in Section 3.3, Air Quality Section of this Draft EIR, and were determined to fall below SCAQMD standards associated with health risk. In addition, an Air Quality and Global Climate Change Impact Analysis report has been prepared for the project, and is included in Appendix B of this Draft EIR. This report analyzes the air pollutant and greenhouse gas emissions that would be generated by the project and recommends mitigation that would reduce air quality and greenhouse gas emissions impacts. Refer to Section 3.3, Air Quality for a discussion of air quality impacts and Section 3.17, Greenhouse Gases for a discussion of greenhouse gas impacts.

Table 3.9-4 (cont.): SCAG 2012 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) Consistency Analysis

RTP/SCS Goals	Project Consistency Analysis
RTP/SCS G7 Actively encourage and create incentives for energy efficiency, where possible	**Consistent:** Correspondence with utility providers that serve the project site, including Southern California Edison and The Gas Company, confirmed that existing infrastructure or previously planned improvements would be adequate to serve the energy demands of the project. Any infrastructure improvements deemed necessary for the project would be developed according to energy provider specifications and/or state and local regulations.
RTP/SCS G8 Encourage land use and growth patterns that facilitate transit and non-motorized transportation	**Consistent:** Development of the project would generally coincide with residential and commercial uses in the project area. Although the project will generate temporary construction jobs, the project does not include any commercial or employment-generating uses. The Riverside Transit Authority (RTA) Routes 23, 217, and 79 currently service the study area. As this project and the surrounding area develop, the RTA may reassess the potential demand for these facilities in the area, and may establish new routes near the project area. Development coordination with RTA will determine the need for future bus turnouts. The design of the project includes curbs and sidewalks where required, thereby encouraging alternate methods of transportation for future development. The RTA would allow temporary construction employees and local residences to commute via public transit or other forms of alternative transportation.
RTP/SCS G9 Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent:** Development impact fees would be assessed during the project's development process, offsetting any fiscal burden placed upon the City with respect to capital improvements resulting from development of the project, ultimately maximizing the security of the local/regional transportation system.
Source: SCAG 2012; analysis: FCS 2014.	

Based on the preceding consistency analysis, the proposed project would not conflict with any applicable land use plan, policy, or regulations of any agency with jurisdiction over the project. In addition, the proposed project would not conflict with any applicable regional transportation plan, policy, or regulations of any agency with jurisdiction over the project. Ultimately, with approval of the requested General Plan Amendment, Zone Change, and Plot Plan applications, the project would to develop 170 units of apartments contained within nine separate buildings, which would accommodate a higher-density residential development, allowing access near community centers, transportation centers, employment, and services areas. Each of the nine buildings would utilize a similar design scheme and would contain the same number of dwelling units per floor, with the exception of the ninth building, which would contain half as many units (10 units), ultimately meeting the needs of a range of lifestyles, physical abilities, and income levels.

In addition, the project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges. The change in land use is consistent with recent development, including apartments to the south and subdivisions to the east and west, as well as consistent with the emerging development pattern for the area—which is trending from rural to suburban overall. Therefore, the proposed project is consistent with the City of Wildomar General Plan policies and SCAG's Regional Transportation Plan (RTP)/Sustainable Communities Strategy (RTP/SCS Goals), and will therefore have a related less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Conflict with Conservation Plans

Impact LUP-3:	**The project would potentially conflict with any applicable habitat conservation plan or natural communities conservation plan.**

Impact Analysis

The project site is located within the Elsinore Area Plan of the MSHCP, and is subject to the appropriate fees and other provisions of the MSHCP. The project site is not located within any designated cell critical area and is not subject to a HANS process review. The property was reviewed for consistency with the MSHCP by analyzing requirements such as habitat for burrowing owl; protected species associated with riparian/riverine areas; protected species associated with vernal pools and vernal pool guidelines; and protected narrow endemic plant species occurring in the region (RCA Associates 2013).

According to the General Biological Resources Assessment (Appendix C of this DEIR), the project site does not contain riparian/riverine plant habitats, vernal pools, or narrow endemic plant species. Initial surveys for burrowing owl in April of 2013 determined that suitable habitat was present on site and numerous burrows were also located throughout the property. A breeding season survey was conducted to determine the presence/absence of the species and the presence/absence of any owl sign (whitewash, castings, etc.). Surveys were conducted on May 1, June 14, and July 5, 2013, and no owls or owl signs were observed. However, in the event that burrowing owls are later determined to be present on the site, mitigation (see MM BIO-1 and MM BIO-2 in Section 3.4) will be incorporated to ensure that impacts are less than significant.

Based on the General Biological Resources Assessment prepared for the project, the project site is located within the Riverside County Habitat Conservation Plan (HCP) fee area for the Stephen's kangaroo Rat. Development of the project site is subject to a per-acre fee (see MM BIO-6 in Section 3.4). Additionally, the proposed project is subject to payment of MSHCP fees (see MM BIO-5). With

payment of applicable fees, the proposed project would have a less than significant impact regarding conflict with an adopted HCP and the County of Riverside MSCHP.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM BIO-1 through MM BIO-6 in Section 3.4, Biological Resources.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.10 - Mineral Resources

3.10.1 - Introduction

This section describes the existing mineral resource conditions and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information obtained from the Wildomar General Plan (2008), and the websites for the Department of Conservation and the Division of Oil, Gas, and Geothermal Resources (DOGGR).

3.10.2 - Environmental Setting

Mineral extraction is an economically important aspect of Riverside County, which has extensive deposits of clay, limestone, iron, sand, and aggregates. In addition, according to the General Plan, the project site is located within an area designated as Mineral Resources Zone (MRZ) 3. MRZ-3 includes areas containing mineral deposits, the significance of which cannot be evaluated from available data.

Oil and gas resources are not a critical element of Riverside County's economy. According to the DOGGR online mapping service (2013), there are no active oil wells in Wildomar. The Well Locator Maps supplied by DOGGR show that the site does not lie within an active oil field, and the closest active wells are located more than 4 miles away.

Riverside County contains copper, silver, and gold mines, sand and gravel operations, and limestone quarries (Earth-Strata Inc. 2013). Neither the project site nor adjacent properties are engaged in the production of mineral resources. There is evidence from past, local, newspapers of gold mining operations in the general area of the project site from late 1893 to mid-1895. By early 1896, mines were closing because of the lack of water, which was needed to process gold-bearing ore, and the land was converted to agriculture uses (CRM Tech 2013).

3.10.3 - Regulatory Framework

The following discussion addresses the regulatory environment for mineral resources at the federal, state, and city level.

State

Division of Oil, Gas, and Geothermal Resources

DOGGR within the State Department of Conservation supervises the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells to protect the environment, public health, and safety, and encourage good conservation practices. DOGGR collects data on the location of groundwater, oil, gas, and geothermal resources, and records the location of all drilled and abandoned wells.

Division of Mines and Geology

The Division of Mines and Geology (DMG) within the State Department of Conservation is responsible for identifying and assisting in the utilization of mineral deposits, and identifying geological hazards, including fault locations.

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA), Chapter 9, Division 2 of the Public Resources Code, requires the State Mining and Geology Board to adopt state policy for the reclamation of mined lands and the conservation of mineral resources. These policies are prepared in accordance with the Administrative Procedures Act (Government Code) and are found in California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

The State of California Legislature, through the passage of the Surface Mining and Reclamation Act (SMARA) in 1975, requires the State Geologist to research and prepare reports that designate mineral deposits of statewide and regional significance in areas designated Production-Consumption (P-C) Regions. The designation of land areas and deposits are assessed by analysis of geologic reports and maps, field investigations, active sand and gravel mining operations, and analysis by geologists at the California Geological Survey (CGS) in the Department of Conservation (DOC). To that end, the CGS has published reports that designate areas of aggregate resources and the expected needs for such resources over the next 50 years. The project is within the Orange County-Temescal Valley P-C Region. The CGS has produced a report and a series of Mineral Land Classification Maps for the area that designate Mineral Resources Zones (MRZ) that define areas where important PCC-grade aggregate deposits occur (DOC 1987). MRZs are defined as follows:

- MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence;
- MRZ-2a: Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present.
- MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present.
- MRZ-3: Areas containing known mineral deposits that may qualify as mineral resources. MRZ-3 is divided into MRZ-3a and MRZ-3b on the basis of knowledge of economic characteristics of the resources. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration work within these areas could result in the reclassification of specific localities into the MRZ-2a or MRZ-2b categories.
- MRZ-4: Areas where available information is inadequate for assignment to any other MRZ zone.

3.10.4 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts to mineral resources are significant environmental effects.

Would the project:

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

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

3.10.5 - Project Impact Analysis

This section discusses the potential impacts associated with the proposed project and provides mitigation measures where appropriate.

Loss of Known Mineral Resource

Impact MIN-1:	**The project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.**

Impact Analysis

Historically, the project site has been used by multiple tenants for residential and agricultural purposes. The General Plan shows the project site as being located within an area designated by the State as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data).

A review of aerial photographs of the project site and surrounding vicinity show no current or historic indication of aggregate operations currently occurring in the area (Earth-Strata 2013). Evidence of historical aggregate mining operations in the vicinity is also not apparent. Furthermore, the General Plan contains a policy restricting incompatible land uses within the impact area of existing or potential surface mining areas (Objective OS-14.2). Aggregate mining operations generally produce particulate matter, which could impact the sensitive receptors and surrounding residential uses within the project area. Noise from such an operation would also be incompatible with nearby residential uses. The project site would not be a feasible candidate for mining operations due to the incompatible land uses in the vicinity. Therefore, although the project site is designated by the State as an area containing mineral deposits, the significance of these resources are unknown at this time and the site is considered unsuitable for mining. Thus, impacts to known mineral resources of value to the region or state would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Loss of Mineral Resource Recovery Site

Impact MIN-2: **The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.**

Impact Analysis

The project site is designated Medium High Density Residential (MHDR) by the General Plan, and Industrial Park (I-P) in the City of Wildomar Zoning Ordinance.

Therefore, the project site is not recognized by the City of Wildomar as an important mineral resource recovery site. Additionally, the project site is not delineated in any specific plan or other land use plan that would indicate that site development would result in the loss of availability of a locally important mineral resource recovery site. Therefore, impacts to a mineral resource recovery site from project implementation would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Cumulative Impacts

Impact MIN-3: **The project will not contribute to the cumulative loss of known mineral resources that would be of value to the region and the residents of the state; nor will it contribute to the cumulative loss of availability of locally important mineral resource recovery sites delineated on local general plans, specific plans or other land use plans.**

Impact Analysis

As analyzed in Impact MIN-1, the project site is designated by the State as an area with known mineral resources. However, the significance of these resources is unknown. Additionally, the City has designated the site for residential use and the surrounding land uses would not be compatible for mining operations to occur on-site. Thus, the project site is not suitable for mining, nor is it designated by local land use plans as an important mineral recovery site. Based on these considerations, the proposed project would not contribute to the cumulative loss of known mineral resources of importance to the State or locally, and no impacts would occur.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.11 - Noise

3.11.1 - Introduction

This section describes the existing noise conditions and potential noise impacts of the project on the site and the surrounding area. The analysis in this section is based on the Noise Impact Analysis prepared by Kunzman Associates, Inc. dated June 25, 2014 (Appendix G).

3.11.2 - Environmental Setting

Noise Fundamentals

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment.

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiate uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

The unit of measurement used to describe a noise level is the decibel (dB). The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the “A-weighted” noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dBA.

Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as a doubled traffic volume, would increase the noise levels by 3 dBA; halving of the energy would result in a 3-dBA decrease.

Average noise levels over a period of minutes or hours are usually expressed as dBA L_{eq}, or the equivalent noise level for that period of time. For example, L_{eq} (3) would represent a 3-hour average. When no period is specified, a one-hour average is assumed.

Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (L_{dn}). CNEL is a 24-hour weighted average measure of community noise. CNEL is obtained by adding five decibels to sound levels in the evening (7:00 p.m. to

10:00 p.m.), and by adding ten decibels to sound levels at night (10:00 p.m. to 7:00 a.m.). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. L_{dn} is a very similar 24-hour average measure that weights only the nighttime hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise standards in terms of percentile exceedance levels, L_n, are often used together with the L_{max} for noise enforcement purposes. When specified, the percentile exceedance levels are not to be exceeded by an offending sound over a stated time period. For example, the L_{10} noise level represents the level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level (which means that the noise level exceeds the L_{50} noise level half of the time, and is less than this level half of the time). The L_{90} noise level represents the noise level exceeded 90 percent of the time and is considered the lowest noise level experienced during a monitoring period. The L_{90} noise level is normally referred to as the background noise level. For a relatively steady noise, the measured L_{eq} and L_{50} are approximately the same.

It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible, and that an increase (decrease) of 10 dBA sounds twice (half) as loud. This definition is recommended by the California Department of Transportation's Traffic Noise Analysis Protocol for New Highway and Reconstruction Projects.

Vibration Fundamentals

Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (RMS) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the RMS velocity amplitude. A commonly used abbreviation is VdB, which in this text, is when the particle velocity level (LV) or sound velocity level (SVL) is based on the reference quantity of 1 microinch per second. The LV should not be confused with the speed of sound.

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Off-site sources that may produce perceptible vibrations are usually caused by construction

equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration.

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform median, while groundborne vibrations travel through the earth, which may contain significant geological differences. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

Existing Traffic Noise Levels

The FHWA Traffic Noise Prediction Model - FHWA-RD-77-108 was used to model existing traffic noise levels for roadway segment in the project vicinity at a distance of 50 feet from the centerline. The analysis was based on traffic data found in the Traffic Study prepared for the proposed project (Trames Solutions, 2013). Project generated increases in ambient noise levels along affected road segments were then calculated. The Existing traffic noise modeling resulted in noise levels ranging between 63.8 and 70.1 dBA CNEL at 50 feet from the centerline of the affected road segments. Modeling output is included in this report as Appendix G.

Sensitive Noise Receptors

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, and residential uses make up the majority of these areas. The project site is adjacent to several existing single-family detached residential neighborhoods to the south and east.

Ambient Vibration Levels

Aside from seismic events, the greatest regular source of groundborne vibration at the project site and in the immediate vicinity is from heavy-duty vehicular travel on local roadways. Trucks typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach up to 72 VdB where trucks and buses pass over bumps in the road. In terms of PPV levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second. Without the influence of significant other sources of vibration, 0.001 inch per second is negligible.

3.11.3 - Regulatory Framework

Federal

In 1972, the federal government passed the Noise Control Act of 1972 to serve the three purposes listed below:

- Promulgate noise emission standards for interstate commerce.
- Assist state and local abatement efforts.
- Promote noise education and research.

The Federal Office of Noise Abatement and Control (ONAC) was initially tasked with implementing the Noise Control Act. However, the ONAC has been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees.

Among the agencies now regulating noise are: the Occupational Safety and Health Administration (OSHA), which limits noise exposure of workers to 90 dB L_{eq} or less for 8 continuous hours or 105 dB L_{eq} or less for 1 continuous hour; the Department of Transportation (DOT), which assumed a significant role in noise control through its various operating agencies; and the Federal Aviation Administration (FAA), which regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA). Transit noise is regulated by the federal Urban Mass Transit Administration, while freeways that are part of the interstate highway system are regulated by the Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately that developments are planned and constructed in such a manner that minimize potential noise impacts.

Since the federal government has preempted the setting of standards for noise levels that may be emitted by transportation sources, the jurisdiction where the project site is located, the City of Wildomar, is restricted to regulating noise generated by the transportation system through nuisance abatement ordinances and land use planning.

State

Established in 1973, the California Department of Health Services Office of Noise Control was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the “Land Use Compatibility for Community Noise Environments Matrix,” which allows the local jurisdiction to delineate compatibility of sensitive uses with various incremental levels of noise (California Department of Health Services, Office of Noise Control 1976.)

Legend

⊗ = Noise Measurement Location

Source: Kunzman Associates, Inc., 2014.

FirstCarbon® SOLUTIONS

Exhibit 3.11-1
Noise Measurement Location

THIS PAGE INTENTIONALLY LEFT BLANK

Title 24, Chapter 1, Article 4 of the California Administrative Code (California Noise Insulation Standards) requires noise insulation in new hotels, motels, apartment houses, and dwellings (other than single-family detached housing) that provides an annual average noise level of no more than 45 dBA CNEL as measured from within the structure's interior. When such structures are located within a 60-dBA CNEL (or greater) exterior noise contour associated with a traffic noise along a roadway, an acoustical analysis is required to ensure that interior levels do not exceed the 45-dBA CNEL annual threshold. In addition, Title 21, Chapter 6, Article 1 of the California Administrative Code require that all habitable rooms, hospitals, convalescent homes, and places of worship shall have an interior CNEL of 45 dB or less due to aircraft noise.

Government Code Section 65302 mandates that the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise/land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The City of Wildomar uses a version of these guidelines to evaluate potential noise/land use impacts.

The proposed project is also subject to review under the State of California Environmental Quality Act (CEQA). Appendix G of the CEQA Guidelines provides impact thresholds for potential noise and vibration impacts.

Local

Noise Regulations

The City of Wildomar is the local responsible agency responsible for adopting and implementing policies as they relate to noise levels and the project's effect on surrounding land uses. Limits for construction noise and stationary noise sources are set forth in the City of Wildomar Municipal Code. Further, goals, objectives, and policies intended to guide land use planning decisions as they relate to noise and vibration are provided in the noise elements of the City's General Plan. Noise level limits and planning guidelines applicable to the proposed project are presented below.

City of Wildomar Municipal Code

Noise Regulations

According to Chapter 9.48 of the Wildomar Municipal Code, "No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards" as shown in Table 3.11-1.

Table 3.11-1: Sound Level Standards (Db L_{max})

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density	Maximum Decibel Level	
				7 am–10 pm	10 pm–7 am
Community Development	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	½ AC	55	45

Table 3.11-1 (cont.): Sound Level Standards (Db L_{max})

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density	Maximum Decibel Level	
				7 am–10 pm	10 pm–7 am
Community Development (*cont.*)	MDR	Medium Density Residential	2–5 AC	55	45
	MHDR	Medium High Density Residential	5–8 AC	55	45
	HDR	High Density Residential	8–14 AC	55	45
	VHDR	Very High Density Residential	14–20 AC	55	45
	H'TDR	Highest Density Residential	20+ AC	55	45
	CR	Retail Commercial	—	65	55
	CO	Office Commercial	—	65	55
	CT	Tourist Commercial	—	65	55
	CC	Community Center	—	65	55
	LI	Light Industrial	—	75	55
	HI	Heavy Industrial	—	75	75
	BP	Business Park	—	65	45
	PF	Public Facility	—	65	45
	SP	Specific Plan-Residential	—	55	45
		Specific Plan-Commercial	—	65	55
		Specific Plan-Light Industrial	—	75	55
		Specific Plan-Heavy Industrial	—	75	75
Rural Community	EDR	Estate Density Residential	2 AC	55	45
	VLDR	Very Low Density Residential	1 AC	55	45
	LDR	Low Density Residential	½ AC	55	45
Rural	RR	Rural Residential	5 AC	45	45
	RM	Rural Mountainous	10 AC	45	45
	RD	Rural Desert	10 AC	45	45
Agriculture	AG	Agriculture	10 AC	45	45
Open Space	C	Conservation	—	45	45
	CH	Conservation Habitat	—	45	45
	REC	Recreation	—	45	45
	RUR	Rural	20 AC	45	45
	W	Watershed	—	45	45
	MR	Mineral Resources	—	75	45

Table 3.11-1 (cont.): Sound Level Standards (Db L_{max})

General Plan Foundation Component	General Plan Land Use Designation	General Plan Land Use Designation Name	Density	Maximum Decibel Level	
				7 am–10 pm	10 pm–7 am
Note: AC = acre Source: (City of Wildomar Municipal Code, 2013, Ord. 18 § 2, 2008, RCC § 9.52.040])					

Therefore, as shown in the above table, the existing and proposed land use designations would require an exterior noise level of 55 dB L_{max} during the day and 45 dB L_{max} at night. Construction is except from these noise requirements (WMC Section 9.48.040) as long as construction is limited to the hours of 6:00 a.m. to 6:00 p.m. during the months of June through September and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May. Cooling and heating units, property maintenance equipment (between the hours of 7:00 a.m. and 8:00 p.m.), safety and alarm devices, and motor vehicles area are also exempt from these standards.

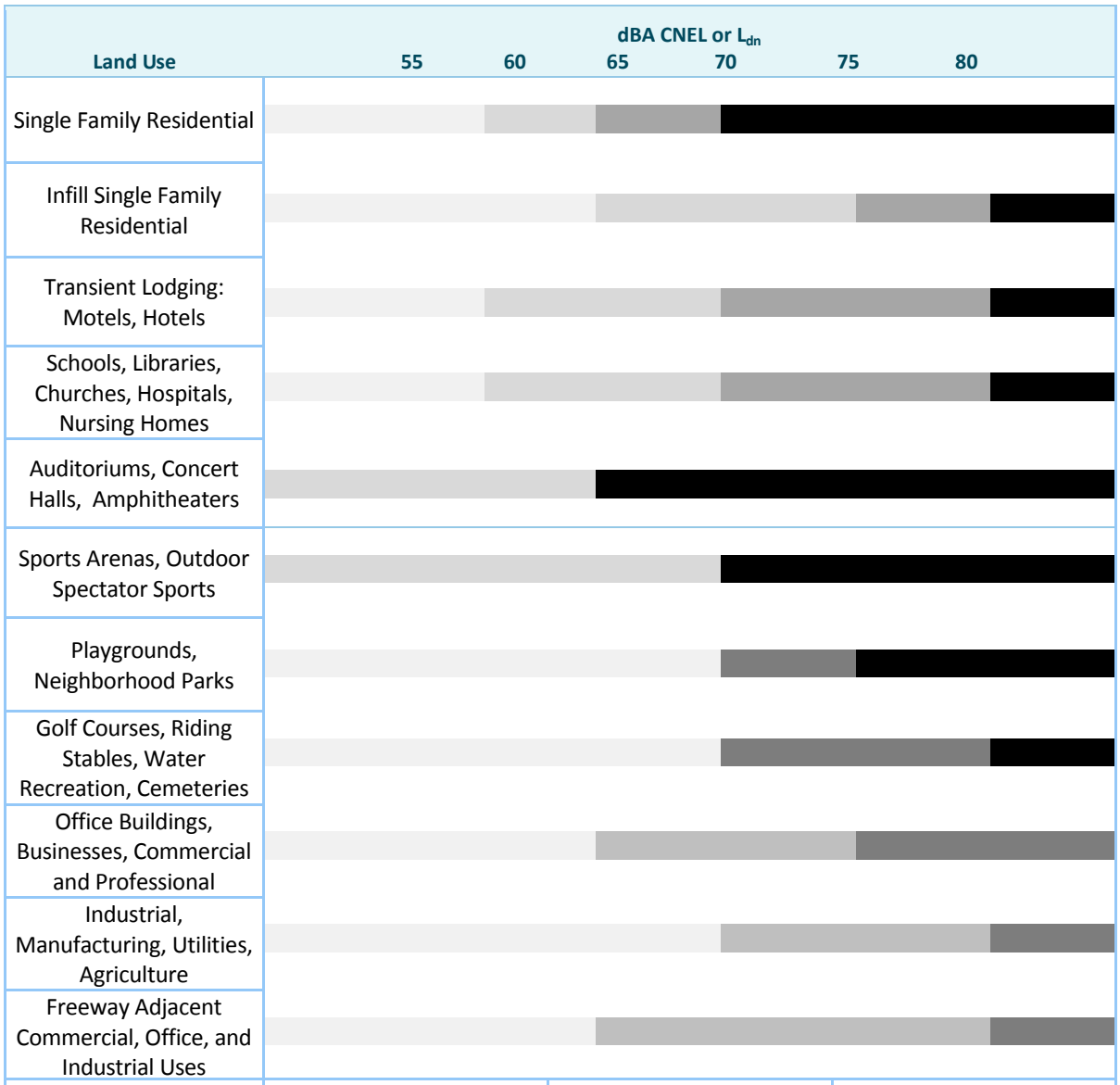
Furthermore, Section 9.48.060 Special Sound Sources Standard states that no person shall operate any power tools or equipment between the hours of 10:00 p.m. and 8:00 a.m., such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment are located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than 100 feet from the power tools or equipment.

However, Section 9.48.010 of the Wildomar Municipal Code provides that the standards stated in Chapter 9.48 are not thresholds of significance for the purposes of CEQA review of projects.

Wildomar General Plan

The Wildomar General Plan Noise Element identifies noise impact criteria depending on the noise source. Impact criteria that apply to the proposed project include criteria for transportation noise impacts to noise sensitive land uses (e.g., an airport, freeway, or arterial traffic noise in residential areas); and criteria that apply to temporary noise impacts from construction activities on sensitive land uses (e.g., construction work impacting neighboring communities). The City has also adopted noise criteria for land use planning purposes. These criteria set outdoor noise level standards that are acceptable, conditionally acceptable, and unacceptable for a variety of land uses. Transportation related noise as measured inside residential dwellings should not exceed 45 L_{dn} (or CNEL); and exterior noise levels due to transportation noise at a residential parcel should not exceed 65 L_{dn} (or CNEL). Noise levels for single-family residential land uses are considered acceptable up to 60 dBA CNEL, and are considered conditionally acceptable up to 65 dBA CNEL. Noise standards are presented below in Table 3.11-2.

Table 3.11-2: Noise and Land Use Compatibility Matrix



Normally Acceptable:	**Conditionally Acceptable:**	**Normally Unacceptable:**	**Clearly Unacceptable:**
Specified land uses is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation or requirements.	New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.	New construction and development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made with needed noise insulation features included in the design. Outdoor areas must be shielded.	New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Source: City of Wildomar General Plan 2025: Figure N-10, 2007.

"An increase in long-term ambient noise by 5 dBA L_{dn} or more" was the threshold used by the County of Riverside to determine if the General Plan would result in a substantial increase in long-term ambient noise levels (County of Riverside 2003). The General Plan does not define what they consider a substantial temporary increase in ambient noise levels. The EIR prepared for the General Plan (2008) does indicate however, that construction noise has the potential to significantly impact off-site sensitive receptors, and that compliance with the City's noise ordinance construction hours would be required to reduce construction-related noise impacts to a less than significant level.

The policies below are from the General Plan and pertain to noise:

- **N 1.3:** Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL: schools; hospitals; residential uses; libraries; passive recreation uses; and places of worship. According to the State of California Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures.

Areas around airports may have different noise standards than those cited above. Each Area Plan affected by a public-use airport includes one or more Airport Influence Areas, one for each airport. The applicable noise compatibility criteria are fully set forth in the area plan's Appendix L and summarized in the Policy Area section of the affected Area Plan.

- **N 1.4:** Determine if existing land uses will present noise compatibility issues with proposed project by undertaking site surveys.
- **N 1.5:** Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

Stationary Noise Sources

Exterior noise levels at properties that contain a "habitable dwelling, hospital, school, library, or nursing home," must not exceed the following worst-case noise levels:

- 45 dBA L_{eq} (10 minutes), between the hours of 10:00 p.m. and 7:00 a.m. (nighttime standard)
- 65 dBA L_{eq} (10 minutes), between the hours of 7:00 a.m. and 10:00 p.m. (daytime standard)

Vibration Regulations

The County of Riverside, City of Wildomar, and the State of California have not adopted criteria or regulations for groundborne vibration or groundborne noise.

Publications from the FTA and Caltrans are two of the seminal works for the analysis of groundborne noise and vibration relating to transportation- and construction-induced vibrations. Although the project is not subject to these regulations, they serve as useful tools to evaluate vibration impacts.

The Caltrans guidelines recommend that a standard of 0.2 inch per section (in/sec) PPV not be exceeded for the protection of normal residential buildings, and that 0.08 in/sec PPV not be exceeded for the protection of old or historically significant structures (Caltrans 2004). With respect

to human response within residential uses (annoyance, sleep disruption), FTA recommends a maximum acceptable vibration standard of 80 VdB (FTA 2006).

3.11.4 - Methodology

The following results are produced using methodology contained in the Noise Impact Analysis prepared by Kunzman Associates, Inc. in June of 2014 (Appendix G).

Federal Highway Administration Traffic Noise Prediction Model

Existing and Existing Plus Project noise levels were modeled for affected nearby road segments utilizing the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108 in order to quantify the proposed project's contribution to increases in ambient noise levels. The FHWA Traffic Noise Prediction Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). Adjustments are then made to the REMEL to account for total average daily trips (ADT); roadway classification; width, speed, and truck mix; roadway grade; and site conditions (hard or soft ground surface). Surfaces adjacent to all modeled roadways were assumed to have a "hard site" to predict worst-case, conservative noise levels. A hard site, such as pavement, is highly reflective and does not attenuate noise as quickly as grass or other soft sites. Possible reductions in noise levels due to intervening topography and buildings were not accounted for in this analysis. Existing and Existing Plus Project traffic volumes were obtained from the project's traffic study (Kunzman Associates, Inc. 2014).

The City of Wildomar does not have published vehicle/truck mixes or Day/Evening/Night (D/E/N) for use in acoustical studies. Vehicle/truck mixes and D/E/N splits for use in acoustical studies published by the Riverside County Department of Industrial Hygiene were utilized for noise modeling. These criteria are intended to implement and are consistent with the goals and policies found in the Noise Element of the City's General Plan. Existing Plus Project vehicle mixes were calculated by adding the proposed project trips to existing conditions.

Road Construction Noise Model

A worst-case construction noise scenario was modeled using the Federal Highway Administration's Roadway Construction Noise Model (RCNM). Modeling parameters and output are provided in Appendix B. RCNM utilizes standard noise emission levels for many different types of equipment and includes utilization percentage, impact, and shielding parameters.

SoundPLAN

SoundPLAN was utilized to model traffic noise associated with Prielipp Road. It is a three-dimensional noise modeling software that takes into account the shielding and reflective effects associated with intervening topography and nearby buildings. Roadway parameters utilized in the model include location, traffic volume, speed and vehicle mix (auto, medium truck and heavy truck). Because the City of Wildomar does not have published mixes, day/evening/night mixes and truck mixes as recommended by the County of Riverside Department of Industrial Hygiene were utilized for modeling purposes.

3.11.5 - Thresholds of Significance

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether noise impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project result in:

a) 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?

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

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

f) 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?

Traffic Noise Thresholds

For purposes of this analysis, noise impacts shall be considered significant if the existing off-site traffic noise levels at nearby noise-sensitive receivers adjacent to roadways conveying proposed project traffic:

- Are less than 60 dBA CNEL and the proposed project creates a 5 dBA CNEL or greater noise level increase; or
- Range from 60 to 65 dBA CNEL and the proposed project creates a 3 dBA CNEL or greater noise level increase; or
- Already exceed 65 dBA CNEL, and the proposed project creates a 1.5 dBA CNEL or greater noise level increase.

Stationary Noise Thresholds

For the purposes of this report, a substantial permanent increase in ambient noise levels due to stationary noise sources shall be considered an increase of 5 dBA or greater.

For purposes of this analysis, construction noise impacts shall be considered significant if project-related construction activities would occur anytime other than between the permitted hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May.

Vibration Thresholds

For purposes of this analysis, vibration impacts shall be considered significant if construction of or implementation of the project would result in an exceedance of the maximum vibration level standard of 0.2 in/sec PPV for the prevention of structural damage to typical residential buildings, or if it would generate vibration levels in excess of 80 VdB as measured at noise-sensitive receiver locations.

3.11.6 - Project Impact Analysis

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary. The majority of the information present is based on the data and discussion included in the Noise Impact Analysis (Kunzman Associates, Inc. 2014) contained in Appendix G.

Noise Levels in Excess of Standards

Impact NOI-1:	**The project would potentially 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 Noise Impacts

Noise levels were calculated utilizing the Road Construction Noise Model (RCNM) provided by the FHWA. Unmitigated noise levels could reach a maximum noise level of up to 81.0 L_{eq} and 85.0 dBA L_{max} at 50 feet, which is the closest to the nearest sensitive receptor the loudest piece of equipment (a grader) is likely to be working for any length of time. Noise levels will lower substantially as construction moves away from the property line. For example, a noise level that is 85 dBA at the source can be expected to drop to 79 dBA at a distance of 100 feet from the source and to 73 dBA at a distance of 200 feet from the source. These noise levels could result in annoyance or sleep disturbance of nearby residential receptors unless mitigation is incorporated into the project. According to the Wildomar Municipal Code section 9.48.040, construction is exempt from the requirements of Chapter 9.48 as long as it does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September or between the hours of 6:00 p.m. and 7:00 a.m. during the months of October through May. Project construction would adhere to these hours of operation. Construction noise impacts that could result in a substantial temporary or periodic increase are discussed in further detail in Impact Section NOI-3, below.

On-Site Operational Impacts

Future exterior noise levels at the façade of the first floor of the proposed units located nearest to Prielipp Road would range between 60.3 and 63.8 dBA CNEL and future noise levels at the façade of second story units would range between 63.0 and 66.2 dBA CNEL. Exterior noise levels at units not adjacent to Prielipp Road would not exceed 65 dBA CNEL. Future noise levels at proposed outdoor recreational areas not adjacent to Prielipp Road will also not exceed 65 dBA CNEL.

Considering that normal construction typically provides 15 to 20 dB of exterior to interior noise reduction, a measure to require architectural treatments that achieve an exterior to interior noise

reduction of at least 25 dB would be required to ensure that interior noise levels do not exceed the state standard for multi-family attached residential units (45 dBA CNEL). Exterior noise levels at the proposed passive and active outdoor use areas will not exceed the standard of 65 dBA CNEL. No mitigation to attenuate outdoor use areas on the project site is required.

The General Plan includes a Noise and Land Use Compatibility Matrix which is used for planning purposes. This matrix identifies 60 dBA CNEL as acceptable for residential land uses and up to 65 dBA CNEL as conditionally acceptable for residential land uses. New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

The Kunzman noise study suffices to meet the criteria of preparing a detailed analysis of the noise reduction requirements needed to achieve and interior noise level of 45 dBA CNEL. Therefore, the proposed project is consistent with the General Plan Noise Element.

Project buildout traffic noise levels would exceed the City's 65 dBA CNEL threshold for exterior noise at the façade of the proposed units located adjacent to Prielipp Road. Without mitigation, interior noise levels are likely to exceed the State of California 45 dBA CNEL interior noise criteria. Enhanced building construction methods and materials must be employed to achieve acceptable interior noise levels. Mitigation Measure (MM) NOI-1, below, is required.

Off-site Operational Noise Impacts

Implementation of the project would introduce new stationary noise sources that could impact noise sensitive receptors in the project vicinity.

The Noise Ordinance included in the City of Wildomar Municipal Code provides performance standards and noise control guidelines for determining and mitigating non-transportation or stationary noise source impacts from operations at private properties. Section 9.48.040 of the Municipal Code 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 L_{eq} during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dBA L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.).

The proposed project will bring new noise sources associated with residential land uses into the area. These sources may include cooling and heating units (HVAC), property maintenance equipment, safety and alarm devices, and motor vehicles. All of these noise sources are exempt from complying with the above noise ordinance between the hours of 7:00 a.m. and 10:00 p.m. The following discussion is intended to explore the potential for these noise sources to violate the part of the ordinance for which they are not exempt.

HVAC noise may impact sensitive receptors located approximately 135 feet east of the property line of the nearest proposed residential building. HVAC units that may affect sensitive receptors are expected to be installed anywhere from 150 feet to 275 feet from the nearest sensitive receptor. Home alarms may be installed as close as 135 feet from the nearest sensitive receptor. A parking

area is proposed along the eastern project boundary, approximately 60 feet west of the property line of the nearest sensitive receptor.

Based on research document prepared for Congress (Bearden 2000) an average HVAC unit can be expected to be approximately 60 dBA L_{eq}[1] at a distance of 20 feet. However, noise associated with new residential HVAC have improved over the years as they become more and more efficient. Even assuming an average noise level rating of 60 dBA L_{eq}, as measured at 20 feet would result in maximum noise levels of up to 42.5 dBA L_{eq} as measured at the nearest off-site sensitive receptor. This would be a worst-case scenario that assumes a direct line of sight to the HVAC unit. This is below the City's daytime and nighttime thresholds for stationary operational noise as shown in Table 3.11-2.

Safety and alarm devices associated with homes and vehicles are not expected to exceed 90 dBA L_{max} at a distance of 50 or 88 dBA L_{max} at the nearest sensitive receptor located along the eastern property boundary. Alarm/security noise events are regulated by OSHA and the National Fire Alarm Association and are exempt from local regulatory agency requirements. In addition, periodic testing of such devised would not be expected to exceed the hourly average L_{eq} daytime or nighttime noise standards presented above as measured at the nearest off-site sensitive land uses.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-1 The developer shall implement all of the following mitigation measures as needed to achieve interior noise levels of 45 dBA CNEL at 1st and 2nd story units proposed adjacent to Prielipp Road:

a. Air conditioning or mechanical ventilation.
b. Double-paned glass.
c. Solid core doors with weather stripping and seals.
d. Stucco or brick veneer exterior walls or wood siding w/one-half inch thick fiberboard under-layer.
e. Glass portions of windows/doors not to exceed 20 percent.
f. Exterior vents facing noise source shall be baffled.

MM NOI-2 The project applicant shall utilize noise attenuating shielding on all sides of the HVAC units in the three easternmost clusters of residential buildings and shall utilize HVAC units that are manufacture rated to not exceed 55 dBA L_{eq} at 50 feet.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

[1] David M. Bearden, Environmental Information Analyst, Resources, Science, and Industry Division. 2000. Congressional Research Service, Report for Congress, RS20531, Noise Abatement and Control: An Overview of Federal Standards and Regulations. April 7.

Excessive Groundborne Vibration

Impact NOI-2: **The project would potentially result in exposure of people to or generation of excessive groundborne vibration or groundborne noise levels.**

Impact Analysis

The project does not contain any components, such as use of heavy-duty vehicles, that could result in the exposure of people or generation of excessive ground borne vibration or noise levels during project operation.

Construction

During construction, the project would utilize equipment that will create ground borne vibration.

The PPV, which is defined as the maximum instantaneous positive or negative peak of the vibration signal, is the descriptor most utilized in the analysis of vibratory impacts to buildings. Table 3.11-3 below describes the peak particle velocities of some common construction equipment.

Table 3.11-3: Construction Equipment Vibration Source Levels

Equipment	Peak Particle Velocity in inches per second[2]		
	at 25 feet	at 50 feet	at 100 feet
Clam Shovel Drop (slurry wall)	0.202	0.071	0.025
Vibratory Roller	0.210	0.074	0.026
Hoe Ram	0.089	0.031	0.011
Large Bulldozer	0.089	0.031	0.011
Caisson Drilling	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Jackhammer	0.035	0.012	0.004
Small Bulldozer	0.003	0.001	0.0004

Notes:
Source: Noise Impact Analysis, Kunzman Associates 2014.

The most vibration-causing piece of equipment that will likely be used on-site is the vibratory roller which would generate 0.21 PPV at a distance of 25 feet (see Table 3.11-3). Because of the proximity of adjacent single-family detached residential dwelling units, project construction activities may result in groundborne vibration that is annoying but would only occur during site grading and preparation activities. Structural damage is not expected to occur at vibration levels that do not exceed 0.2 in/sec PPV (Kunzman, 2014). The nearest existing structure is located approximately 40 feet east of the project site. Use of vibratory roller along the project's eastern boundary may result in vibration levels of up to 0.09 in/sec PPV at this structure. No structural damage is anticipated.

Due to the proximity of adjacent single-family detached residential dwelling units, project construction activities may result in ground borne vibration that is annoying but would only occur during site grading and preparation activities. According to the Noise Impact Assessment prepared for the project (see Appendix G, page 23), structural damage is not expected to occur at vibration levels that do not exceed 0.2 in/sec PPV. The nearest existing structure is located approximately 40 feet east of the project site. Use of a vibratory roller along the project's eastern boundary may result in vibration levels of up to 0.09 in/sec PPV at this structure. No structural damage is anticipated. However, these potential vibration impacts will be reduced through implementation of construction mitigation measures contained in Mitigation Measures NOI-3 through NOI-8, which limit the permissible hours of construction activity to daytime hours. As previously mentioned, project construction will not result in any structure damage and impacts are less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-3 During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

MM NOI-4 The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

MM NOI-5 The use of music or sound amplification on the project site during construction shall be prohibited.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

MM NOI-6 The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

MM NOI-7 Avoid the use of pavement breakers and vibratory rollers and packers near sensitive receptors.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

MM NOI-8 The construction contractor shall ensure that all on-site noise producing construction activities shall be limited to between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September or between the hours of 6:00 a.m. and 7:00 p.m. during the months of October through May.

Timing/Implementation: As a condition of project approval, and implemented during construction

Enforcement/Monitoring: City of Wildomar Building & Safety and Planning Departments

Level of Significance After Mitigation

Less than significant with mitigation incorporated.

Permanent Increase in Ambient Noise Levels

Impact NOI-3: The project would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Analysis

Construction

Project construction would be completed over one phase of development, and would not constitute a permanent increase in noise levels, due to the temporary nature of construction activities. Impacts from construction are discussed in Impact NOI-4, below.

Operation

For purposes of this analysis, noise impacts shall be considered significant if the existing off-site traffic noise levels at nearby noise-sensitive receivers adjacent to roadways conveying proposed project traffic:

- Are less than 60 dBA CNEL and the proposed project creates a 5 dBA CNEL or greater noise level increase; or
- Range from 60 to 65 dBA CNEL and the proposed project creates a 3 dBA CNEL or greater noise level increase; or
- Already exceed 65 dBA CNEL, and the proposed project creates a 1.5 dBA CNEL or greater noise level increase.

The proposed project would contribute to existing ambient noise levels in the project vicinity by increasing traffic on local roadways during operation that could affect sensitive receptors. As is shown in the setting discussion, the existing traffic noise modeling resulted in noise levels ranging between 63.8 and 70.1 dBA CNEL at 50 feet from the centerline of the affected road segments. Existing Plus Project traffic noise model would result in noise levels ranging from 64.2 to 70.16 dBA CNEL at 50 feet from the centerline. Table 3.11-4 contains the Traffic Noise Model Results. The greatest resulting increase would occur along Prielipp Road from Yamas Drive to Elizabeth Lane which would experience noise levels of up to 65.9 under with project conditions, which is a 1.8 dBA increase over existing conditions. The existing traffic noise levels along this segment are 64.10 dBA CNEL, therefore an increase of 3 dBA or greater would be considered significant. Therefore, an increase in project-related traffic noise levels of 1.8 dBA would be considered a less than significant impact on off-site receptors.

Table 3.11-4: Traffic Noise Model Results

Roadway	Segment	Modeled Noise Levels (dBA CNEL)			
		Existing	Existing Plus Project	Increase	Substantial Increase?
Clinton Keith Road	West of Inland Valley Drive	70.10	70.16	0.06	No
	Inland Valley Drive to Elizabeth Lane	68.56	68.62	0.06	No
	East of Elizabeth Lane	68.35	68.41	0.06	No
Inland Valley Drive	Prielipp Road to Clinton Keith Road	64.83	65.02	0.19	No
Jackson Avenue	Elizabeth Lane to Oak Creek Apts	64.10	64.45	0.35	No
	East of Oak Creek Apts	64.26	64.41	0.15	No
	West of Nutmeg Street	65.89	66.02	0.13	No

Table 3.11 4 (cont.): Traffic Noise Model Results

Roadway	Segment	Modeled Noise Levels (dBA CNEL)			
		Existing	Existing Plus Project	Increase	Substantial Increase?
Jackson Avenue (*cont.*)	East of Nutmeg Street	67.27	67.32	0.05	No
Nutmeg Street	South of Nutmeg Street	65.86	65.88	0.02	No
Prielipp Road	Inland Valley Drive to Yamas Drive	63.82	64.15	0.33	No
	Yamas Drive to Elizabeth Lane	64.10	65.90	1.80	No
Source: Noise Impact Analysis, Kunzman Associates, 2014.					

Project stationary noise sources would similarly not result in a substantial increase in ambient noise levels as measured at off-site sensitive receptors. According to the thresholds of significance for this project, a substantial permanent increase in ambient noise levels due to stationary noise sources shall be considered an increase of 5 dBA or greater. As is shown in impact discussion NOI-1 above, modeling results show that noise levels associated with HVAC operation could reach a maximum noise level of up to 42.5 dBA L_{eq} as measured at the nearest off-site sensitive receptor. Existing traffic noise levels in the project vicinity range up to more than 64 dBA CNEL. Therefore, these stationary source noise levels, when averaged over a 24-hour period would not result in a substantial (5 dBA or greater) increase in ambient noise levels compared to levels existing without the project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Temporary or Periodic Increase in Ambient Noise Levels

Impact NOI-4: **The project would potentially result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

Impact Analysis

The noise impact analysis prepared for the proposed project analyzes potential noise impacts from project construction. Project construction activities have the potential to cause short-term noise impacts to the residential uses in the project vicinity. For purposes of this analysis, construction noise impacts shall be considered significant if project-related construction activities would occur

anytime other than between the permitted hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May.

Construction noise will vary depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work. Typical noise sources and noise levels associated with construction activities are shown in Table 3.11-5.

Table 3.11-5: Typical Construction Noise Levels

Type of Equipment	Range of Maximum Sound Levels Measured (dBA at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA at 50 feet)
Rock Drills	83 to 99	96
Jack Hammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Dozers	77 to 90	85
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86
Source: Bolt, Beranek & Newman; Noise Control for Buildings and Manufacturing Plants, 1987.		

As part of project construction, mass grading of the site will be required as well as other site development activities. Construction of internal roadways will require fine grading, trenching, and paving activities. After site preparation, the project would require the construction of buildings that would require the following phases: site development, building construction, architectural coatings application, and paving associated with the buildings. The first phase of development, site grading, will produce the highest construction noise levels. Several graders, dozers, excavators, scrapers, and pickup trucks will be required for grading.

A drop-off rate of 6 dBA per doubling of distance from the construction noise sources was utilized to calculate noise levels at nearby sensitive receptors associated with a worst-case construction scenario. Noise levels were calculated utilizing the RCNM provided by the FHWA. Unmitigated noise levels could reach a maximum noise level of up to 81.0 L_{eq} and 85.0 dBA L_{max} at 50 feet, which is closest to the nearest sensitive receptor using the loudest piece of equipment (a grader), is likely to be working for any length of time. Therefore, this is a conservative, worst-case scenario estimate.

However, noise levels will lower substantially as construction moves away from the property line. For example, a noise level that is 85 dBA L_{max} at the source can be expected to drop to 79 dBA L_{max} at a distance of 100 feet from the source and to 73 dBA L_{max} at a distance of 200 feet from the source. These intermittent noise levels could result in temporary or periodic increases of more than 5 dBA over existing background ambient noise levels which could also result in annoyance or sleep disturbance of nearby residential receptors unless mitigation is incorporated into the project.

According to the thresholds of significance, substantial permanent increase in ambient noise levels for stationary noise sources is defined as an increase of 5 dBA or greater. However, the significance criteria do not define what a substantial temporary or periodic increase in noise levels would be. The EIR prepared for the City's General Plan (2008) indicates that construction noise has the potential to significantly impact off-site sensitive receptors, but that compliance with the City's noise ordinance construction hours would be required to reduce construction-related noise impacts to a less than significant level. Therefore, adherence to City standards for hours of construction would be required and would reduce construction related impacts. Mitigation Measures NOI-3 through NOI-8 (see Impact NOI-2) will require compliance with restrictions on permissible hours of noise producing construction activity, as well as implementation of construction noise reducing best management practices would reduce construction noise impacts to levels of less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM NOI-3 through MM NOI-8 are required.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Airport Noise Levels

Impact NOI-5:	**For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, the project would not expose people residing or working in the project area to excessive noise levels.**

The nearest airport to the project site is the privately owned Skylark Airport, located in southern Lake Elsinore approximately 6 miles from the proposed project site. The Skylark Airport is private, located more than 2 miles from the project site, and the Skylark Airport Influence Area does not include the project vicinity (Elsinore Area Plan 2003). Therefore, no impacts would occur.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Private Airstrip Noise Levels

Impact NOI-6:	**For a project within the vicinity of a private airstrip, the project would not expose people residing or working in the project area to excessive noise levels.**

Impact Analysis

The proposed project is not located within the vicinity of a private airstrip, precluding noise impacts to people in the project area. The nearest private airport or airstrip is the Skylark Airport, located approximately 6 miles northwest of the project site. Therefore, no impacts would occur.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

3.12 - Population and Housing

3.12.1 - Introduction

This section provides existing population and housing characteristics of the City of Wildomar, and evaluates potential population and housing impacts created by the project. Sources of demographic information used include the Southern California Association of Governments (SCAG), the United States Census Bureau (U.S. Census Bureau), and City records.

3.12.2 - Environmental Setting

This section discusses regional (Riverside County) and local (City of Wildomar) population and housing growth. As shown in Table 3.12-1, the growth of Wildomar is predicted to outpace the growth of Western Riverside County, as a whole.

Table 3.12-1: Forecast Populations- Western Riverside County and City of Wildomar

Year	Western Riverside County		City of Wildomar	
	Population	Percentage Growth	Population	Percentage Growth
2000	1,236,309	—	14,064	–
2010	1,733,694	40.23%	32,176	128.78%
2020	2,003,412	15.56%	42,475	32.01%
2035	2,466,332	23.11%	53,664	26.34%

Note:
Population of the Western Riverside subregion, defined by the WRCOG as 80% of the unincorporated population and 81% of the incorporated population of Riverside County as a whole.
Source: Western Riverside County Growth Forecasts 2010-2035, 2012.

Population

As shown in Table 3.12-2, the population of the City of Wildomar generally kept pace with the growth in the County of Riverside between 2007 and 2014, except for the year 2009 when growth in Wildomar occurred at a much higher rate than in the County.

Table 3.12-2: Riverside County/City of Wildomar Population Growth

Year	Riverside County				City of Wildomar			
	Population	Percentage Growth	Dwelling Units	Percentage Growth	Population	Percentage Change	Dwelling Units	Percentage Growth
2007	2,030,054	—	753,286	—	23,554	—	7,232	—
2008	2,077,183	2.32	772,480	2.55	24,447	3.79	7,455	3.08
2009	2,109,882	1.57	779,077	0.85	31,374	28.33	10,630	42.59

Table 3.12-2 (cont.): Riverside County/City of Wildomar Population Growth

Year	Riverside County				City of Wildomar			
	Population	Percentage Growth	Dwelling Units	Percentage Growth	Population	Percentage Change	Dwelling Units	Percentage Growth
2010	2,189,641	3.78	800,707	2.78	32,176	2.56	10,806	1.66
2011	2,205,731	0.73	804,913	0.53	32,414	0.74	10,840	0.31
2012	2,227,577	0.99	807,970	0.38	32,719	0.94	10,847	0.06
2013*	2,255,653	1.26	812,234	0.52	33,182	1.41	10,927	0.73
2014*	2,279,967	1.07	817,008	0.58	33,718	1.61	11,047	1.09

Sources:
* Table E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011–2014, with 2010 benchmark. Website http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php Accessed May 13, 2014.
All others: Western Riverside County Growth Forecasts 2010-2035, 2012.

Housing

Table 3.12-3 below summarizes the estimated characteristics of the existing regional and local housing in 2014. According to California Department of Finance estimates, there are currently 817,008 housing units in Riverside County. Single-family housing accounts for just over 74 percent of all housing units. Comparatively, of the total 11,047 housing units in Wildomar, approximately 69 percent are single-family homes. In 2014, approximately 86 percent of the housing units in the county were occupied, leaving approximately 14 percent vacant. In Wildomar, approximately 92 percent of the housing units were occupied, with less than 8 percent of the City's housing inventory vacant. Slightly more than three persons on average resided in each occupied housing unit in both Riverside County and Wildomar; the average is slightly higher in Wildomar (3.3 in Wildomar and 3.2 in Riverside County).

Table 3.12-3: Existing Regional and Local Housing Characteristics – Occupancy/Type (Year 2014)

Area	Total Units	Occupied Units	Vacant Units	Persons Per Household	Single-Family Units[1]	Multi-Family Units[2]	Mobile Homes
City of Wildomar	11,047	10,215	832	3.3	7,673	513	2,861
Riverside County	817,008	700,413	116,595	3.21	606,485	131,296	79,227

Notes:
[1] Single-Family includes Single Detached and Single Attached categories
[2] Multi-Family contains Two to Four and Five Plus categories
Source: Table E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011–2014, with 2010 benchmark. Website http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php Accessed May 13, 2014.

Onsite Conditions

In its existing condition, a 1,478-square-foot residential structure and 660-square-foot detached garage exists on the project site.

3.12.3 - Regulatory Framework

Federal and State

No federal or state regulations are applicable.

Local

Southern California Association of Governments

SCAG Regional Comprehensive Plan

The 2008 SCAG Regional Comprehensive Plan (RCP) provides the regional forecasts and policies for dealing with anticipated growth including population, housing, and employment throughout Southern California. Growth projections contained in the RCP are based on a compilation of county and local projections. RCP forecasts are used as the basis for formulation of regional plans dealing with regional air quality, housing, transportation and circulation, and other infrastructure issues.

Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan, and is a key tool for SCAG and its member governments to create a better balance of jobs and housing in communities, ensure the availability of decent affordable housing for all income groups and achieve sustainability through long term strategic land use planning.

The RHNA allows local jurisdictions to quantify the need for housing, allowing them to plan, consider, and decide how to address this need through the process of preparing Housing Elements for their general plans. The RHNA does not necessarily encourage or promote growth, but allows communities to anticipate and plan for growth in order to enhance quality of life, improve access to jobs, transportation, and housing, and avoid adverse environmental effects. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. The current RHNA planning period is October 2013 to October 2021.

The Regional Housing Needs Plan for the County of Riverside, developed by SCAG, allocates cities and counties their “fair share” of the region’s projected housing needs. This is also known as the RHNA Allocation. The Regional Housing Needs Plan allocates the RHNA Allocation based on household income groupings over the planning period for each specific jurisdiction’s Housing Element.

The RHNA consists of two measurements of housing need: existing and future need. The existing need assessment examines key variables from the most recent Census to measure ways in which the housing market does not meet the needs of current residents. The future need for housing is determined by the forecasted growth in a community’s household. Each new household results in a need for a housing unit. The anticipated housing needed for new households is then adjusted to

account for an ideal level of vacancy needed to promote housing choice, moderate cost increase, to avoid the concentration of lower income households and to provide for replacement housing (Southern California Association of Governments 2008).

City of Wildomar General Plan Housing Element

The City of Wildomar has currently adopted the County of Riverside's General Plan, which contains goals/policies regarding housing and population. In 2012, the City of Wildomar updated the Housing Element to pertain to the City's needs. The City's Housing Element identifies and establishes the City's policies with respect to meeting the needs of existing and future residents. Additionally, the Housing Element establishes policies that will guide City decision-making and sets forth an action plan to implement its housing goals (City of Wildomar Housing Element Final Draft November/December 2013).

The City of Wildomar incorporated in July 2008, after the final RHNA had been distributed by SCAG for the 2006–2014 planning period. The City of Wildomar coordinated with Riverside County, the Western Riverside Council of Governments, and SCAG to agree on an appropriate portion of the County's allocation to be allocated to the City of Wildomar. In October 2011, an agreement was reached that the City of Wildomar would take a total of 1,471 units for the remainder of the 2006–2014 planning period, as shown in Table 3.12-4 (City of Wildomar Housing Element Final Draft November/December 2013).

Table 3.12-4: 2006–2014 Regional Housing Need

Income Category	Income Range*	2006–2014 RHNA
Extremely Low	$0-$20,000	174
Very Low	$20,001-$33,350	175
Low	$33,351-$53,350	241
Moderate	$53,351-$75,000	272
Above Moderate	$75,000 or more	609
Total		**1,471**

Note:
* Based on four person household
Source: Table H-1 City of Wildomar Housing Element Final Draft November/December 2013.

The 1,471 units must be accounted for within in the City's Housing Element, in addition to the City's RHNA allocation for the current planning period (2014–2021). Table 3.12-5 shows the City's 5th round RHNA allocation.

Table 3.12-5: 2014–2021 Regional Housing Need

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	$78,000 or more	1,038
Total		**2,535**

Note:
* Based on four person household
Source: Table H-2, City of Wildomar Housing Element Final Draft, November/December 2013.

The City of Wildomar's Housing Element contains 24 policies related to energy conservation, equal housing opportunities, conservation, and improvement of housing stock, special needs groups, governmental constraints, and adequate housing.

3.12.4 - Methodology

Evaluation of potential population/housing/employment impacts is based upon demographic information provided by the U.S. Census Bureau website for the City of Wildomar. In addition, the Wildomar General Plan and Housing Element were referenced. For the purposes of determining population and housing impacts, a factor of 3.3 persons per household[1] in the City of Wildomar was used to estimate the population of the proposed project.

3.12.5 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts to population and housing are significant environmental effects.

Would the project:

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

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

[1] Source: Page 3.8-7 of the City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report August 2013. This document used an average household size of 3.3 residents.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

3.12.6 - Project Impact Analysis

Population Growth

Impact POP-1:	**The project would not induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).**

Impact Analysis

The project would potentially increase the population of the City of Wildomar by approximately 561 persons (based on development of 170 dwelling units with 3.3 persons per household), which equates to less than 2 percent of the City's population of 33,718, as estimated by the California Department of Finance (2014). This estimation is conservative in that it does not account for households that relocate to the project site from within Wildomar. Additionally, this growth is within the RHNA projections in the City's Housing Element. The project does not extend infrastructure to previously undeveloped areas, nor is the project of a magnitude that would cause significant numbers of people to relocate to the area solely for the purpose of being close to the project site for employment purposes. Although the project will generate temporary construction jobs, the project does not include any commercial or employment-generating uses. The high-density Gables Oak Creek apartment project is located directly south of the proposed project, across Prielipp Road. Because of the small percentage by which the project would incrementally increase the City's overall population, and the fact that the growth is within the RHNA projections within the Housing Element the City has already planned for, impacts related to this issue would be less than significant, and no mitigation is required.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Housing Displacement/Replacement Housing

Impact POP-2:	**The project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.**

Impact Analysis

The project site contains primarily undeveloped land, with one residential structure and detached garage totaling approximately 1,478 square feet and 660 square feet, respectively. The structures are located in the southeast corner of the project site and comprise approximately 5 percent of the total project site. A water well, a trailer, and an enclosed construction area are also present on-site.

FirstCarbon Solutions (FCS) conducted a site visit in August of 2014 and concluded that the residence was not occupied and in a dilapidated condition. Existing structures on-site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid waste standards. The project will result in the provision of 170 additional dwelling units, which will provide additional housing supply within the City. Therefore, the proposed project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere and thus would have a less than significant impact. No mitigation is warranted.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Population Displacement/Replacement Housing

Impact POP-3:	**The project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.**

Impact Analysis

As previously stated, the project site contains primarily undeveloped land, with one residential structure and detached garage totaling approximately 1,478 square feet and 660 square feet, respectively. The structures are located in the southeast corner of the project site, and comprise approximately 5 percent of the total project site.

FCS conducted a site visit in August 2014 and concluded that the residence was not occupied and in a dilapidated condition. Existing structures on-site, including the residential structure, would be demolished and the debris would be disposed of in accordance with local solid waste standards. The project will result in the provision of 170 additional dwelling units, which will provide additional housing supply within the City. Therefore, the proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere, and the proposed project would have a less than significant impact. No mitigation is warranted.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.13 - Public Services

3.13.1 - Introduction

This section describes the existing public services that would serve the Villa Siena project upon completion. The section includes an analysis of fire protection services, law enforcement services, public schools, parks and library facilities. The information contained in this section was collected from local public agencies and city departments. Other relevant public service data was assembled through official websites, email, and correspondence.

3.13.2 - Environmental Setting

Fire Services

The City of Wildomar provides fire protection under contract with the Riverside County Fire Department/CalFire. A full range of services are available, including structural and wildland fire protection, prevention, emergency medical response, hazardous materials response and disaster preparedness. The Fire Department operates from Station 61 on Gruwell Street in Wildomar. Through the department's integrated, cooperative regional fire protection program, several County of Riverside stations provide primary response to Wildomar calls, including Station 68 in Menifee, Station 75 in Bear Creek and Station 94 in Elsinore (City of Wildomar Fire Department 2014).

The majority of Riverside County fire stations have a minimum of two career firefighters on duty at all times; typically, a Captain and a firefighter. Volunteer firefighters typically augment the career firefighters on the first-roll engine. Additional volunteer firefighters may respond on a rescue squad or second-roll fire engine, which is exclusively staffed by volunteer firefighters (RCIP General Plan Final Program EIR Volume I).

The closest fire station to the project site is Station 75, located at 38900 Clinton Keith Road in Murrieta.[1] This fire station is located approximately 2.7 miles southwest of the project site.

There are several County fire stations within 8 miles of the project site, as listed below:

Station 75: Bear Creek, 38900 Clinton Keith Road, Murrieta
Approximate distance from the project site: 2.7 mi southwest

Station 61: Wildomar, 32637 Gruwell Street, Wildomar
Approximate distance from the project site: 4.3 mi northwest

Station 73: Rancho California, 27415 Enterprise Circle West, Temecula
Approximate distance from the project site: 7.3 mi southeast

Station 83: French Valley, 37500 Sky Canyon Drive, # 401, Murrieta
Approximate distance from the project site: 7.7 mi southeast

[1] http://www.rvcfire.org/stationsAndFunctions/FireStations/Pages/Fire-Stations-Map.aspx. Accessed May 6, 2014.

The Riverside County Fire Department provides fire protection and emergency medical services to approximately 7,000 square miles, including the City of Wildomar. The Riverside County Fire Department provides fire suppression, emergency medical, rescue, and fire prevention services while serving as the operational area coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The department consists of 1,200 career firefighters, 200 administrative support personnel, and 300 volunteer reserve firefighters who responded to 121,059 incidents in 2011, averaging 325 emergency responses per day (PMC 2013).

Sheriff Services

The City of Wildomar contracts with the Riverside County Sheriff's Department for law enforcement services. Law enforcement services are provided by the Riverside County Sheriff's Department with local policing directed from a Sheriff's station at 333 Limited Avenue in Lake Elsinore.[2] The Riverside Sheriff's Department is the second largest Sheriff's Office in California, managing five correctional facilities, Coroner-Public Administrator duties, and providing court services (Riverside County 2013b). As shown on the Sheriff Department's website, the project is within one of the communities served by the Lake Elsinore Sheriff's Station, which serves the following communities: Alberhill, El Cariso, Glen Eden, Glen Ivy Hot Springs, Good Hope, Lacresta, Lakeland Village, Meadowbrook, Ortega Hills, Temescal Canyon, and Warm Springs.

The Lake Elsinore Sheriff's Station is located approximately 8 miles northwest of the proposed project.

School Services

The Lake Elsinore Unified School District (LEUSD) provides school facilities for the project area, including the project site and portions of the City of Wildomar. The LEUSD operates 12 elementary schools (K–5), four middle schools (6–8), four high schools (9–12), and several alternative education facilities. Table 3.13-1 identifies each school, grades served, and most recent available enrollment figures.

Table 3.13-1: Lake Elsinore Unified School District Local School Facilities

School	Current Enrollment (2013–2014 School Year)
Elementary Schools (Grades K–5)	
Cottonwood Canyon Elementary	938
Donald Graham Elementary	504
Earl Warren Elementary	867
Elsinore Elementary	623
Machado Elementary	712
Railroad Canyon Elementary	607

[2] http://www.riversidesheriff.org/stations/elsinore.asp. Accessed May 6, 2014.

Table 3.13-1 (cont.): Lake Elsinore Unified School District Local School Facilities

School	Current Enrollment (2013–2014 School Year)
Rice Canyon Elementary	926
Ronald Reagan Elementary	713
Tuscany Hills Elementary	802
Wildomar Elementary	728
William Collier Elementary	625
Withrow Elementary	744
Middle Schools (Grades 6–8)	
Canyon Lake Middle	1,272
David A. Brown Middle	959
Elsinore Middle	742
Terra Cotta Middle	1,188
High Schools (Grades 9–12)	
Elsinore High	2,210
Lakeside High	1,942
Ortega High	607
Temescal Canyon High	2,139
Alternative Education Facilities	
District Non-Public Non-Sectarian Schools (grades 3–12)	27
Keith McCarthy Academy (grades 10–12)	179
Lakeland Village (grades K–8)	961
Luiseno (grades K–8)	1,007
Southern California Online Academy (grades K–12)	341
Sycamore Academy Of Science And Cultural Arts (grades K–6)	324
Sources: California Department of Education website, 2014; FCS, 2014.	

The project is within the attendance boundaries of the schools listed in Table 3.13-2, below.

Table 3.13-2: Impacted School Sites

Name of School[2]	Address[2]	Design Capacity[2]	Current Enrollment (2013–2014 school year)[2]	Current Capacity[1]
Ronald Reagan Elementary School	35445 Porras Road Wildomar	925	691	234
David A. Brown Middle School	21861 Grand Avenue Wildomar	1,296	972	324
Elsinore High School	21800 Canyon Drive Wildomar	2,943	2,098	845

Notes:
[1] Design capacity minus current enrollment = remaining capacity, i.e. number of students that can be added to each school before it reaches capacity.
Sources:
LEUSD school locator website, 2014.
[2] Sayers-Koonce, pers. comm.

Enrollment

Existing and Historical Enrollment

For the 2013–2014 academic year, the LEUSD had an enrollment of 22,316 students. Since 2004, the District's enrollment has grown from 19,711 for the 2003–2004 school year to 22,316 for the 2013–2014 school year, representing an approximate increase of 13 percent in student enrollment. As shown in Table 3.13-3, with the exception of some dips in enrollment during the 2008–2009, 2010–2011, and 2012–2013 school years, the enrollment within the district has increased over the last 10 years.

Table 3.13-3: Historical Lake Elsinore Unified School District Enrollment 2004–2014

Academic Year	Enrollment	Change in Number of Students from Previous Year
2003–2004	19,711	—
2004–2005	20,203	+492
2005–2006	20,652	+449
2006–2007	21,525	+873
2007–2008	22,109	+584
2008–2009	21,756	-353
2009–2010	22,216	+460
2010–2011	22,065	-151

Table 3.13-3 (cont.): Historical Lake Elsinore Unified School District Enrollment 2004–2014

Academic Year	Enrollment	Change in Number of Students from Previous Year
2011–2012	22,171	+106
2012–2013	22,137	-34
2013–2014	22,316	+179
Source: California Department of Education, 2014.		

Library Services

The Riverside County Library System comprises 35 branch libraries and two bookmobiles serving a population of more than 2 million residents. Library management offices are located at 5840 Mission Boulevard in Riverside. For over 85 years, Riverside County has contracted with the City of Riverside for library services. The library system was administered by a City-appointed Board of Library Trustees consisting entirely of City of Riverside residents. However, in 1990, because of fiscal changes, LSSI (a private firm) was selected to operate the County Library System. Riverside became the first public library system in the nation to outsource its library operations to a private firm.[3]

3.13.3 - Regulatory Framework

Federal and State

California Building Standards Code

The 2013 California Building Standards Code (CBC), contained in Part 2 of Title 24 of the California Code of Regulations (CCR), identifies building design standards, including those for fire safety. It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to further modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include the installation of sprinklers in multi-family buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Fire Code

The California Fire Code, contained in Part 9 of CCR Title 24, incorporates by adoption the International Fire Code of the International Code Council, with California amendments. The California Fire Code regulates building standards set forth in the CBC, fire department access, fire protection systems and devices, fire and explosion hazards safety, hazardous materials storage and use, and standards for building inspection. The California Fire Code is updated and published every 3 years by the California Building Standards Commission.

[3] http://www.lssi.com/communities/riverside-county-ca/. Accessed May 6, 2014.

Quimby Act

The Quimby Act authorizes local agencies, by ordinance, to require new residential subdivisions to dedicate land or pay an in lieu fee for the purpose of developing parkland. The Quimby Act sets a standard park space to population ratio of up to 3 acres of park space per 1,000 persons for residential subdivisions. Cities with a ratio of higher than three acres per 1,000 persons can set a standard of up to 5 acres per 1,000 persons for new residential subdivisions. The calculation of a city's park space to population ratio is based on a comparison of the population count of the last federal Census to the amount of City-owned parkland. The amount of land to be dedicated or fees to be paid must bear a reasonable relationship to the use of the park and recreational facilities by the future inhabitants of the subdivision.

California Government Code, Section 65995(b) and Education Code, Section 17620

Senate Bill (SB) 50 amended Section 65995 of the California Government Code, which contains limitations on Section 17620 of the Education Code, the statute that authorizes school districts to assess development fees within school district boundaries. Section 65995(b)(3) of the Government Code requires the maximum square footage assessment for development to be increased every two years, according to inflation adjustments. For 2014, the fees have been increased to a maximum of $3.36 per square foot for residential development, and $0.54 per square foot for commercial/industrial development (State Allocation Board 2014). School districts may levy higher fees if they apply to the SAB and meet certain conditions.

Mitigation Fee Act

Enacted as Assembly Bill 1600 on January 1, 1989, the Mitigation Fee Act (California Government Code 66000-66008) requires a local agency that is establishing, increasing, or imposing an impact fee as a condition of development to identify the purpose of the fee and the use for the fee. The agency also must demonstrate a reasonable relationship between the fee and the purpose for which it is charged, and between the fee and the type of development project on which it is to be levied.

Local

Disaster Operation and Relief Plan for the City of Wildomar

City of Wildomar Ordinance No. 44 was adopted on January 27, 2010 to amend Wildomar Municipal Code Chapter 2.08, and provide for the administration of disaster operation and relief in the City of Wildomar. The purpose of Ordinance No. 44 is to provide for the preparation and carrying out of plans for the protection of persons and property within the City in the event of an emergency; the direction of the emergency organization; and the coordination of emergency functions of the City with all other public agencies, corporations, organizations and affected private persons.

Riverside County Fire Department Strategic Plan

The Riverside County Fire Department Strategic Plan (2009–2029) contains the following elements:

- Organizational mission, vision and values
- Six goals
- Strategies for each goal
- Implementation action plan
- Supporting analysis of the organization and performance audit

The Department's six goals are:

- **Goal 1:** The RCFD seeks fiscal sustainability to ensure uninterrupted services.
- **Goal 2:** The RCFD seeks to have well-trained and certified individuals to enable the department to carry out its mission and all responsibilities.
- **Goal 3:** The RCFD seeks efficient and effective performance in its operations, measures its performance, and continuously improves its work methods.
- **Goal 4:** The RCFD is committed to maintaining a strong relationship with its cooperative partners and providing cost effective services while maintaining the highest level of customer service.
- **Goal 5:** The RCFD seeks to ensure that effective and efficient support services are in place to support the mission of the department.
- **Goal 6:** The RCFD seeks to have well maintained facilities, equipment, technology, and apparatus that enable personnel to perform their jobs safely and efficiently.

The draft implementation action plan in the Department's Strategic Plan contains key steps for implementing each of the strategies, identifies the individual responsible for completing the strategy and resources needed, as well as a timeline for completion and indicators of success (Riverside County Fire Department Strategic Plan November 2009).

Mutual Aid Agreements

The Riverside County Fire Department responds to calls for service through mutual and automatic aid agreements with the cities of Corona, Cathedral City, Hemet, Idyllwild Fire Protection District, Murrieta, Palm Springs, and Riverside.[4]

Fire Services

The RCFD is the Operational Area Coordinator for the California Fire and Rescue Mutual Aid System for all fire service jurisdictions in Riverside County. The RCFD also has several automatic aid agreements with other city jurisdictions as well as the adjacent National Forests. The County of Riverside contracts with the State of California for fire protection. Public Resources Code (PRC) 4142 affords legal authority for the California Department of Forestry and Fire Protection (CAL FIRE) to enter into agreements with local government entities to provide fire protection services with the approval of the Department of General Services. By virtue of this authority, CAL FIRE administers the RCFD (RCFD 2014).

According to information obtained from the County of Riverside GIS system, the proposed project is not located in a high fire area and is not in a state fire responsibility area. Fire policies and regulations governing the incorporated areas of Riverside County include the Riverside County Fire Protection Master Plan, California Public Resources Code Sec. 4290, the Uniform Fire Code, and the Uniform Building Code.

[4] http://www.rvcfire.org/ourDepartment/ServiceArea/Pages/default.aspx. Accessed June 2, 2014.

Sheriff Services

Riverside County Sheriff's Department has established the following criteria for its staffing requirements in unincorporated areas of the County (RCIP General Plan Final Program EIR Volume I):

- One sworn officer per 1,000 population
- One supervisor and one support staff employee per seven officers
- One patrol vehicle per three sworn officers
- One school resource officer per school

The proposed project is in the service area of the Lake Elsinore Station, located at 333 Limited Avenue in Lake Elsinore. Currently, average Sheriff response time in the City of Wildomar is approximately 6.87 minutes.

Wildomar General Plan

The Safety Element of the General Plan establishes the following policies regarding public services.

Land Use Element

Policies

- **LU 9.1:** Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.
- **LU 9.2**: Require a fiscal impact analysis for specific plans and major development proposals so as not to have a negative fiscal impact on the County.

City of Wildomar Municipal Code

Chapter 3.44 of the Wildomar Municipal Code was amended on February 12, 2014, and provides for imposition of development impact fees in amounts determined by the City Council, to finance infrastructure and other public improvements and facilities needed as a result of new development projects.

3.13.4 - Methodology

Evaluation of potential law enforcement, fire protection, and schools impacts is based on information provided by the Riverside County Sheriff's Department, the Riverside County Fire Department, and the LEUSD, respectively, as well as a review of the applicable fire codes and regulations, the Wildomar General Plan and Municipal Code, and other relevant sources.

3.13.5 - Thresholds of Significance

Public Services

Based on the CEQA Guidelines' Appendix G Environmental Checklist, the following questions are analyzed and evaluated to determine whether impacts to mineral resources are significant environmental effects.

Would the project:

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

a) Fire protection?
b) Police protection?
c) Schools?
d) Parks?
e) Other public facilities?

3.13.6 - Project Impact Analysis

Fire Protection

Impact PS-1:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection?**

Impact Analysis

As described in the environmental setting section above, the Riverside County Fire Department is contracted to provide fire protection services to the City of Wildomar; thus, the proposed project will be served by the Riverside County Fire Department. In 2013, the Riverside County Fire Department responded to 2794 calls in the City of Wildomar, an increase of 0.43 percent from 2012. There are four County fire stations within 8 miles of the proposed project site. Station 75 (Murieta) at 38900 Clinton Keith Road is the closest station at approximately 2.7 miles from the project site.

The proposed 170-unit apartment project is anticipated to incrementally increase population in the City of Wildomar by approximately 561 persons (based on development of 170 dwelling units with 3.3 persons per household). Upon buildout, the proposed project will represent an approximate 1.6 percent increase in the City of Wildomar's population, and an approximate 1.5 percent increase in the number of housing units in the City of Wildomar, which are negligible increases (United States Census Bureau 2014).

The project would cause a slight increase in the demand for fire services in the City of Wildomar. However, the project will comply with Wildomar General Plan Policy S-5.1, which pertains to the development and enforcement of construction and design standards to ensure that proposed development incorporates fire prevention features. In addition, the project will be designed to meet safety equipment standards, and will provide adequate emergency access, fire hydrants, and adequate water pressure in compliance with RCFD requirements. Furthermore, the project will be required to pay all applicable fair-share development impact fees, in compliance with General Plan Policy LU 9.1.

As a result, the proposed project is not anticipated to result in the need for new or altered fire protection facilities. Therefore, the impacts to fire services are considered less than significant, and no mitigation is required.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Sheriff Services

Impact PS-2:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for sheriff services?**

Impact Analysis

The Riverside County Sheriff's Department (RCSD) is contracted with the City of Wildomar to provide law enforcement services to the City. To maintain adequate funding for law enforcement facilities, the City of Wildomar has implemented the Development Impact Fee Program, which will apply to the proposed project. Currently, the average Sheriff response time in the City of Wildomar is approximately 6.87 minutes.

The proposed 170-unit apartment project is anticipated to minimally increase the demand on law enforcement services. For the purposes of determining population and housing impacts, a factor of 3.3 persons per household[5] in the City of Wildomar was used to estimate the population of the proposed project. The project would increase the population of the City of Wildomar by approximately 561 persons (based on development of 170 dwelling units with 3.3 persons per household). Upon buildout, the proposed project will represent an approximate 1.6 percent increase in the City of Wildomar's population and an approximate 1.5 percent increase in the number of housing units in the City of Wildomar (United States Census Bureau 2014). These incremental increases are not anticipated to result in a demand for construction of new Sheriff or law enforcement facilities.

The proposed project will be located on a site that currently contains one dwelling unit and is in a portion of the City that is developed and currently served by law enforcement. Because the project site is located in an already developed portion of the City of Wildomar (across the street from the existing Oak Creek apartment complex), the Sheriff's Department is not anticipated to need to

[5] Source: Page 3.8-7 of the City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report, August 2013. This document used an average household size of 3.3 residents.

expand its service area, or construct or alter governmental facilities as a result of the proposed project. Thus, the proposed project is anticipated to have a less than significant related impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Schools

Impact PS-3: **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools?**

Impact Analysis

The proposed residential project is anticipated to generate students who would increase the demand for school facilities. Students generated from the proposed project would attend schools within the LEUSD, because the proposed project falls within this school district's boundaries.

The LEUSD provided the following student generation rates for multi-family housing, by grade level.

Table 3.13-4: Estimated Project Student Generation by Grade Level

Grade	Student Generation Rate for Multi-Family Housing[1]	Estimated Number of Students from the Proposed Project [2]
Elementary School	0.1823	31
Middle School	0.0760	13
High School	0.0904	16
Total Estimated Students		60

Notes:
[1] Source of student generation rate: Koski, pers. comm.
[2] Derived from multiplying the student generation rate by the proposed 170 units, for each grade level. Numbers were rounded up to the next whole number.
Source: FCS, 2014

Current enrollment and capacity of the local schools is shown in Table 3.13-5.

Table 3.13-5: Local School Summary

Name of School	Current Capacity[1]	Estimated Number of Students from the Proposed Project	Remaining Capacity with Estimated Students from the Proposed Project
Ronald Regan Elementary School	234	31	203
David A. Brown Middle School	324	13	311
Elsinore High School	845	16	829

Note:
[1] From Table 3.13-2, Impacted School Sites
Source: FCS, 2014.

Based on correspondence from the LEUSD, the District may not have adequate facilities within the project's school attendance boundaries to accommodate all existing students in addition to those students generated by the proposed project. The LEUSD is currently undergoing a major attendance boundary analysis, and the boundaries have the potential to change based on the committee's recommendations and District's Governing Board approval. Using the LEUSD's 2013–2014 attendance boundaries, new students from the proposed project would be enrolled at the schools listed in the table above. There are no improvements or additions planned for the above-referenced schools that serve the project area. The LEUSD will continue to accept enrollments from new students in the proposed project, however, the District cannot guarantee that new students will actually be able to attend the above listed facilities due to increasing enrollment. Enrollment of all new students within the LEUSD is subject to availability of space at their home school (Sayers-Koonce, pers. comm.).

The LEUSD imposes Level 1 residential development impacts fees of $3.31 per square foot. Additionally, SB 50 mandates that school-related impacts be covered by lawful payment of required school impact fees. The project will be required to pay these fees, and with payment of all applicable fees, impacts to school facilities would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Parks

Impact PS-4: **The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks?**

Impact Analysis

The Community Services Department for the City of Wildomar provides a variety of programs and services to meet the diverse needs of the community, including overseeing the development and maintenance of local parks (City of Wildomar Community Services Department 2014).

In 2009, three parks were granted to the City of Wildomar from Riverside County. These three parks include Marna O'Brien Park, Regency-Heritage Park, and Windsong Park. Funding was removed for the park maintenance in 2010 and this resulted in park closures. During November 2012, the residents of the City of Wildomar approved Measure "Z," which restored the park maintenance and recreation services through a $28.00 annual parcel tax. With the restoration of the funding, the City parks re-opened on April 12, 2014 (City of Wildomar Parks 2014). A summary of the park and open space acreages in Wildomar is shown in Table 3.13-6.

Table 3.13-6: Nearby Park and Recreation Facilities

Park Name	Location	Amenities	Acreage
Marna O'Brien Park	20505 Palomar St.	Children's playground, basketball court, restroom facilities, baseball fields, walkways, tot-lots, picnic areas and gazebo.	9.66
Regency Heritage Park	20171 Autumn Oaks Pl.	Two basketball courts, walkway, picnic shelters and park benches, dog park	3.26
Windsong Park	35459 Prairie Rd.	Concrete walkway, picnic tables and picnic pavilion, and a tot lot.	2.12
Total Acres			**542.89**
Source: www.cityofwildomarparks.org. Accessed May 2014.			

As outlined within Table 3.13-6, there are approximately 15.04 acres of parkland in the City of Wildomar. The City's standard for parkland is 3 acres per 1,000 residents. As of 2013, according to the U.S. Census Bureau,[6] Wildomar's estimated population was 33,192. The City does not currently have enough parkland to meet its goal of 3 acres per 1,000 residents.

The project involves the construction of a 170-unit apartment homes and would increase the population of the City of Wildomar by approximately 561 persons (based on development of 170

6 Ibid.

dwelling units with 3.3 persons per household). Based on a parkland demand factor of 3 acres per 1,000 residents, project implementation would generate a demand for approximately 1.68 acres of parkland. As the project will be required to either dedicate 1.68 acres of parkland or pay an in lieu fee, or a combination thereof, the project will not increase the use of the existing City parks. Consequently, with the addition of the project's requirement of 1.68 acres of parkland, related impacts would be less than significant.

In addition, the City of Wildomar's Municipal Code Section 16.20.020, Park and recreation fees and dedications establishes procedures for requiring park and recreational facilities in conjunction with residential subdivisions. The project proposes a clubhouse with offices totaling 1,906 square feet, a pool and spa, as well as 99,913 square feet (approximately 25 percent of the site) of open space/common areas. These planned amenities comply with the City's goals to increase and improve existing parks and recreational facilities. The project would therefore meet the requirement of the City ordinance and the Quimby Act. As a result of the planned improvements proposed, impacts to parks and other public facilities are considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Other Public Facilities

Impact PS-5:	**The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?**

Impact Analysis

Because of the limited size of the proposed project, it is not anticipated that development of the proposed project would have a negative impact on other public facilities, such as courts, libraries, and hospitals within the project area. Based on the nominal increase in population (estimated to be 556 persons total based on a per-unit rate of 3.3 persons per household[7]) the project will not result in the need for new or expanded courts, libraries, or hospitals to serve the future residents of the proposed project. The population increase associated with the proposed project was accounted for in the City of Wildomar General Plan. The estimated population of the proposed project comprises approximately 1.7 percent of the City of Wildomar's estimated 2012 population of 33,192, which represents a negligible increase. The project applicant will be required to pay any applicable library

[7] Source: Page 3.8-7 of the City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report August 2013. This document used an average household size of 3.3 residents.

impact fees. Thus, the project will have a less than significant impact regarding other public facilities.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.14 - Recreation

3.14.1 - Introduction

This section describes the existing setting for recreation and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Multipurpose Open Space Element of the Wildomar General Plan and the City of Wildomar Parks, trails and recreation.

3.14.2 - Environmental Setting

Riverside County Regional Parks

Riverside County includes a wide range of open space, parks, and recreational areas, including Joshua Tree National Park and major state parks such as Anza-Borrego, the Salton Sea State Recreation Area, and Chino Hills State Park. County parks also serve residents and visitors in the western portion of the County, as well as in the desert, mountain, and Colorado River regions. Riverside County maintains 35 Regional Parks, encompassing roughly 23,317 acres. Local parks are under the jurisdiction of County Recreation and Park Districts and serve the following areas: the Beaumont- Cherry Valley area; the Coachella Valley area; the Jurupa area; the Valleywide area incorporating the San Jacinto Valley, the Winchester area, the Menifee Valley, and the Anza Valley (Multipurpose Open Space Element of the City of Wildomar General Plan).

Recreational Facilities in the Project Vicinity

Parks

In 2009, three parks were granted to the City of Wildomar from Riverside County. These three parks include Marna O'Brien Park, Regency-Heritage Park, and Windsong Park. Funding was removed for the park maintenance in 2010 and this resulted in park closures. During November 2012, the residents of the City of Wildomar approved Measure "Z" which restored the park maintenance and recreation services through a $28.00 annual parcel tax. With the restoration of the funding, the City parks re-opened on April 12, 2014. A summary of the park and open space acreages in Wildomar is shown in Table 3.14-1.

Table 3.14-1: Nearby Park and Open Space Facilities

Park Name	Location	Amenities	Acreage
Marna O'Brien Park	20505 Palomar St.	Children's playground, basketball court, restroom facilities, baseball fields, walkways, tot-lots, picnic areas and gazebo.	9.66
Regency Heritage Park	20171 Autumn Oaks Pl.	Two basketball courts, walkway, picnic shelters and park benches, dog park	3.26
Windsong Park	35459 Prairie Rd.	Concrete walkway, picnic tables and picnic pavilion, and a tot lot.	2.12
Total Acres			**15.04**
Source: www.cityofwildomarparks.org. Accessed May 2014.			

Trails

The City of Wildomar contains regional roadside, countryside and creekside multi-use trails, community roadside multi-use trails and historic and patron trails. The Jon Rodarme Regional Trail, located approximately 0.65 mile west, and the Daniel Ray Parker Memorial Trail, located approximately 0.45 mile northwest, are the closest trails to the project site.

3.14.3 - Regulatory Framework

State Regulations

Quimby Act

Since the passage of the Quimby Act (California Government Code Section 66477) in 1975, counties and cities have been authorized to pass ordinances requiring developers to set aside land, donate conservation easements, or pay fees for park improvements. Quimby Act generated revenues cannot be used for the operation and maintenance of park facilities. The Quimby Act was originally designed to ensure "adequate" open space acreage in jurisdictions adopting Quimby Act standards (i.e., 3 to 5 acres per 1,000 residents). According to the California Department of Parks and Recreation's overview of the Quimby Act, the Quimby Act was substantially amended in 1982 to further define acceptable uses of or restrictions on Quimby funds, provide acreage/population standards and formulas for determining the exaction, and indicate that the exactions must be closely tied (i.e., have a nexus) to a project's impacts as identified through traffic studies required by the California Environmental Quality Act (California Department of Parks and Recreation 2002).

Local Regulations

City of Wildomar Ordinance

City of Wildomar Ordinance 93, adopted in February 2014, updates Municipal Code Section 16.20.020, Park and recreation fees and dedications. In accordance with Ordinance 93, this section is adopted pursuant to Section 66477 of the Government Code, which authorizes the legislative body of a city to require, by ordinance, the dedication of land or the payment of fees in lieu thereof, or a combination of both, for park and recreational facilities as a condition of approval of a tentative map or parcel map.[1] More specifically, Section 16.20.0020 Park and Recreation Fees and Dedication, specifies that:

> . . . wherever land is proposed to be subdivided for residential use, the property owner shall be required, as a condition of approval of the subdivision, to dedicate to the City for park purposes three acres of land for every 1,000 residents of the subdivision or pay an equivalent fee, or a combination of both consistent with this section.
>
> 1. For subdivisions containing 50 parcels or less, only the payment of fees may be required; provided however, that when a condominium project, stock cooperative or community apartment project exceeds 50 dwelling units, the dedication of land may be required even though the number of parcels may be less than 50.

[1] http://qcode.us/codes/wildomar/revisions/93.pdf. Accessed May 19, 2014.

2. Nothing in this section shall prevent the City from accepting the voluntary dedication of land by a developer for a subdivision containing less than 50 parcels if the dedication meets the other requirements of this section.

3.14.4 - Methodology

Evaluation of potential recreation impacts was based on research of parks and recreational facilities in the project area. Information was obtained from the County of Riverside and the City of Wildomar.

3.14.5 - Thresholds of Significance

Recreation

Based on the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to recreation are significant, the following questions are analyzed and evaluated.

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

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

3.14.6 - Project Impact Analysis

Increased Use of Parks

Impact REC-1:	**The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Impact Analysis

As outlined within Table 3.14-1, there is approximately 15.04 acres of parkland in the City of Wildomar. The City's standard for parkland is 3 acres per 1,000 residents. As of 2013, according to the U.S. Census Bureau,[2] Wildomar's estimated population was 33,192. The City does not currently have enough parkland to meet its goal of 3 acres per 1,000 residents.

The project involves the construction of a 170-unit apartment homes and would increase the population of the City of Wildomar by approximately 561 persons (based on development of 170 dwelling units with 3.3 persons per household). Based on a parkland demand factor of 3 acres per 1,000 residents, project implementation would generate a demand for approximately 1.68 acres of parkland. Therefore, the project will be required to either dedicate 1.68 acres of parkland or pay an in lieu fee, or a combination thereof. Consequently, with the addition of the project's requirement of 1.68 acres of parkland, related impacts would be less than significant.

In addition, the City of Wildomar's Municipal Code Section 16.20.020, Park and recreation fees and dedications establishes procedures for requiring park and recreational facilities in conjunction with

[2] Ibid.

residential subdivisions. The project proposes a clubhouse with offices totaling 1,906 square feet, a pool and spa, as well as 99,913 square feet (approximately 2.3 acres, or 25 percent of the site) of open space/common areas. These planned amenities comply with the City's goals to increase and improve existing parks and recreational facilities. The project would therefore meet the requirement of the City ordinance and the Quimby Act. As a result of the planned improvements proposed, impacts to parks and other public facilities have been properly mitigated; and thus are considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Recreational Facilities Physical Effect on Environment

Impact REC-2:	**The project would not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**

Impact Analysis

The project proposes construction of a clubhouse with offices totaling 1,906 square feet, a pool and spa, as well as 99,913 square feet (approximately 25 percent of the site) of open space/common areas. The proposed recreational amenities as well as development of open space/common area throughout the site, would improve recreational opportunities in the area, and will be in accordance with the City of Wildomar's policies and goals. The project would not necessitate further expansion of recreational facilities that might have an adverse effect on the environment. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

3.15 - Transportation and Traffic

3.15.1 - Introduction

This section describes the existing transportation and traffic conditions and potential effects from project implementation on surrounding roads and intersections. Descriptions and analysis in this section are based on information contained in the project specific Traffic Impact Analysis prepared by Trames Solutions, Inc. (2015), included in this Draft EIR as Appendix H.

3.15.2 - Environmental Setting

Project Study Area and Intersections Analyzed

The project site is generally located north of Prielipp Road, between Elizabeth Lane and Jana Lane in the City. The study area includes the following intersections:

1. Inland Valley Drive north-south road (NS)/Clinton Keith Road east-west road (EW)
2. Inland Valley Drive (NS)/Prielipp Road (EW)
3. Yamas Drive (NS)/Prielipp Road (EW)
4. Elizabeth Lane (NS)/Clinton Keith Road (EW)
5. Elizabeth Lane (NS)/Prielipp Road (EW)
6. Project main driveway - Gables Oak Creek driveway (NS)/Prielipp Road (EW)
7. Nutmeg Street (NS)/Jackson Avenue (EW)

Exhibit 3.15-1 shows the existing traffic controls and intersection geometrics in the vicinity of the project.

Existing (2013) Traffic

Existing intersection level of service (LOS) calculations are based upon manual AM and PM peak-hour turning movement counts collected in August, September, and October 2013. Existing average daily traffic (ADT) volumes are shown on Exhibit 3.15-2.

The City has established LOS D as the maximum allowable threshold for the intersection operations. Therefore, LOS E or F is considered unacceptable. LOS for study intersections under the existing conditions are summarized in Table 3.15-1. The study area intersections currently operate at an acceptable level of service (LOS D or better) during the peak hours.

Table 3.15-1: Intersection Analysis for Existing (2013) Conditions

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
1. Inland Valley Drive/Clinton Keith Road	16.7	20.9	B	C
2. Inland Valley Drive/Prielipp Road	9.3	11.9	A	B
3. Yamas Drive/Prielipp Road	10.5	10.9	B	B

Table 3.15-1 (cont.): Intersection Analysis for Existing (2013) Conditions

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
4. Elizabeth Lane/Clinton Keith Road	17.1	26.4	C	D
5. Elizabeth Lane/Prielipp Road	10.9	11.3	B	B
6. Project main driveway - Gables Oak Creek driveway/Prielipp Road	10.0	10.5	A	B
7. Nutmeg Street/Jackson Avenue	28.2	27.5	C	C

Note:
LOS=level of service
Source: Trames Solutions, Inc., 2015.

Transit Service

The Riverside Transit Agency (RTA) Routes 23, 217, and 79 currently service the study area.

3.15.3 - Regulatory Framework

Federal and State

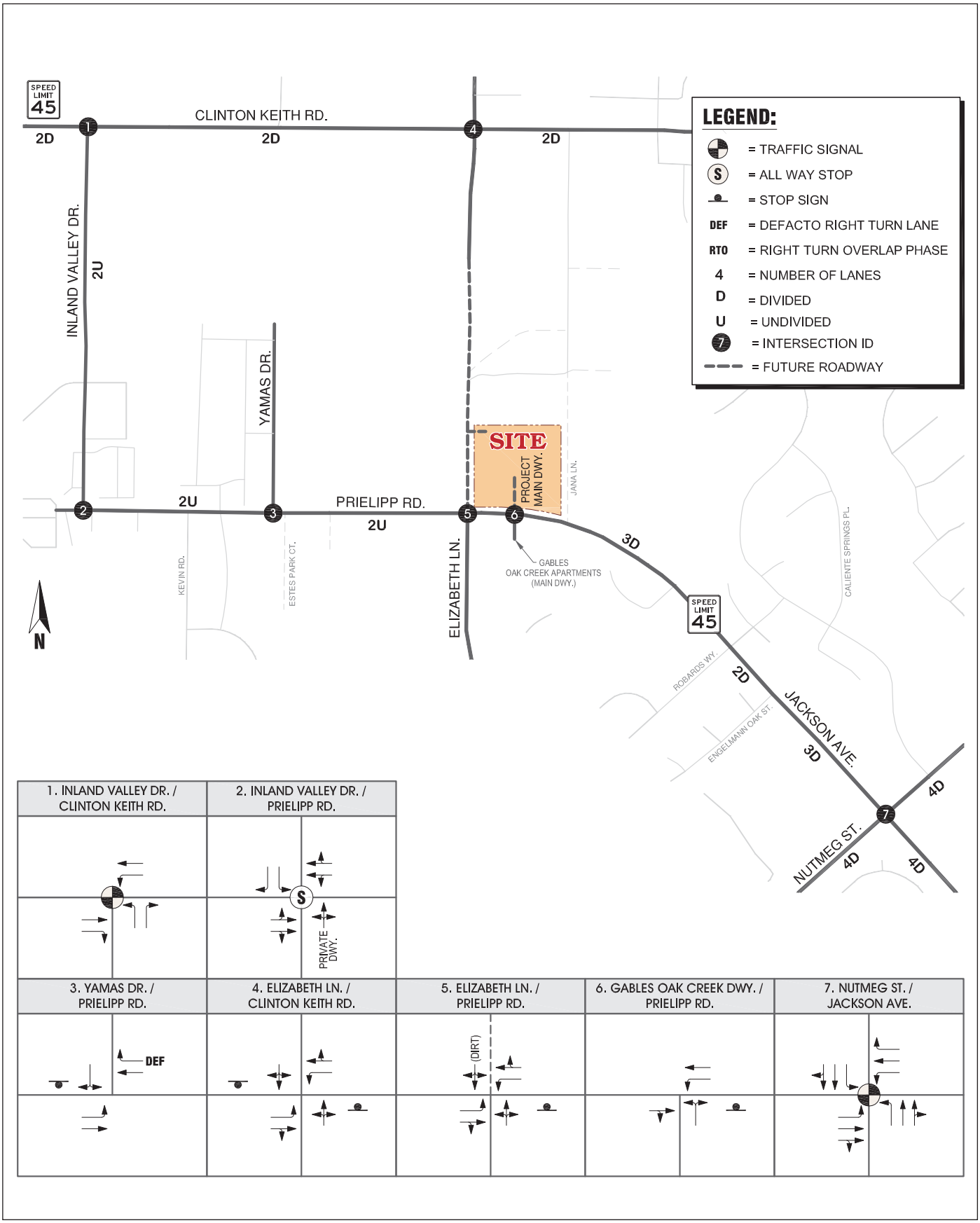
Each county in California is required to develop a Congestion Management Program (CMP) that analyzes the links between land use, transportation, and air quality. The Riverside County Transportation Commission (RCTC) is the County of Riverside's Congestion Management Agency. The RCTC prepares and periodically updates the County's CMP to meet federal Congestion Management System guidelines and state CMP legislation (RCTC 2014).

According to the Riverside County Congestion Management Program (2011), Table 2-1, CMP System of Highways and Roadways, the roads adjacent to the project site (Prielipp Road, Elizabeth Lane, and Clinton Keith Road) are not listed as part of the CMP System of Highways and Roadways.

Local

Transportation Uniform Mitigation Fee (TUMF) Program

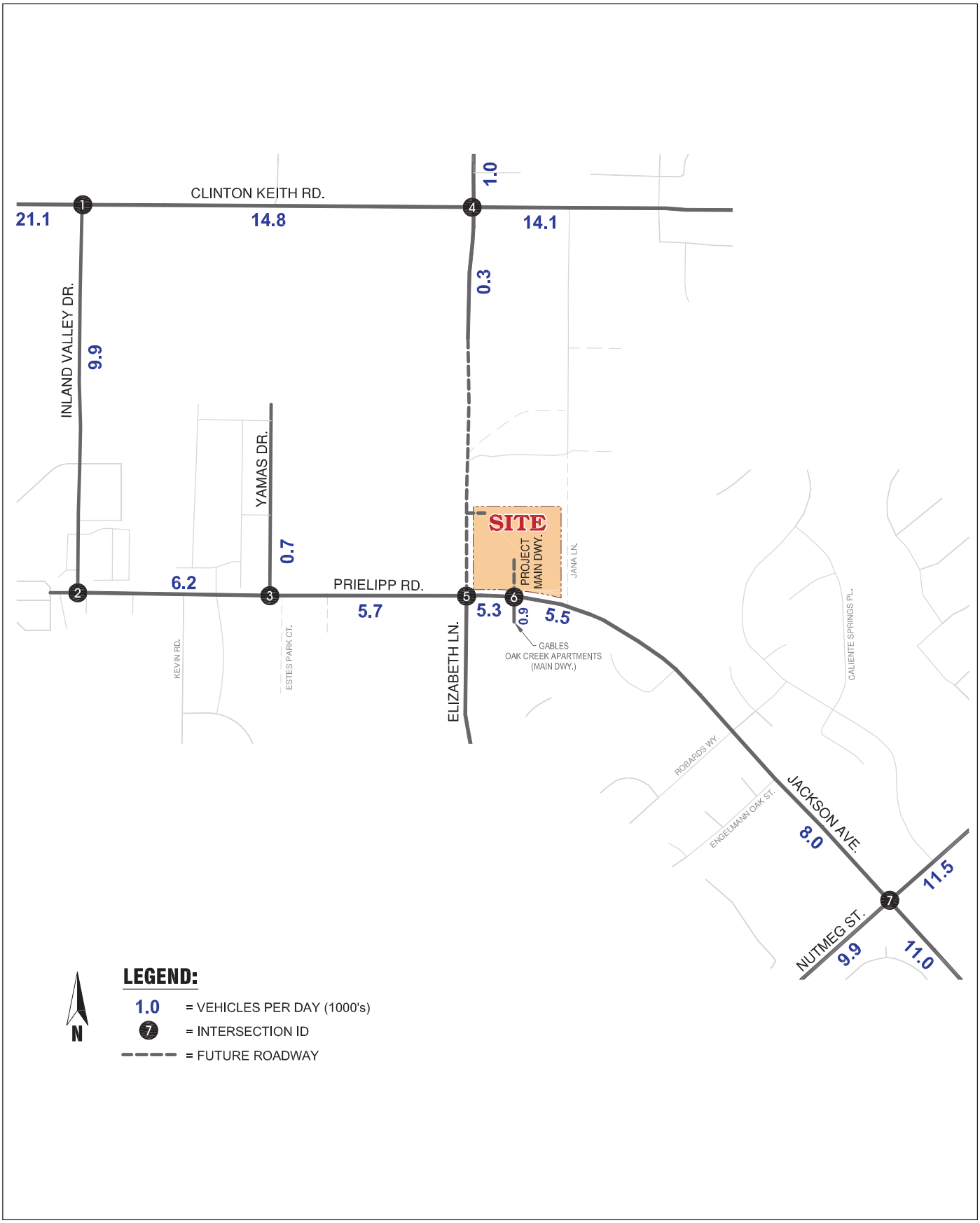
The TUMF program is administered by Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in early 2003 and updated in 2009 to address major changes in right of way acquisition and improvement cost factors. TUMF identifies a network of backbone and local roadways that are needed to accommodate growth through 2035. This regional program was put into place to ensure that all new development pays its fair share for regional facilities and that funding is in place for construction of facilities needed to maintain the requisite LOS and that are critical to mobility in the region. TUMF is a truly regional mitigation fee program, and is imposed and implemented in every jurisdiction in Western Riverside County except the City of Beaumont (where a locally implanted program duplicates the regional program).



Source: Trames Solutions Inc., October 2013.

Exhibit 3.15-1
Existing Traffic Controls and Intersection Geometrics

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Trames Solutions Inc., October 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.15-2
Existing (2013) Average Daily Traffic

THIS PAGE INTENTIONALLY LEFT BLANK

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance, and fees are collected at the building or occupancy permit stage. The current fee for residential use is $ 7,054.00 per multi-family residential unit.[1] In addition, inflation adjustments are considered on an annual basis. In this way, TUMF fees are adjusted on a regular basis to ensure that the development impact fees collected keep pace with construction and labor costs, etc.

After the TUMF fees are collected, they are placed in a separate interest-bearing account pursuant to the requirements of Government Code sections 66000, et seq. The TUMF fees go towards funding specific local and regional projects in the arterial system. Local area projects receive about 48.7 percent of all funds. These local funds are programmed into five localized zones, and fund the construction of eligible localized projects that are prioritized by the affected local jurisdictions within each zone.

The facilities planned through the TUMF program are constructed prior to the time at which the identified facility is expected to deteriorate to an inadequate LOS. Western Riverside Council of Governments has a successful record of funding and overseeing the construction of improvements funded through the TUMF program. In total, the TUMF program is anticipated to generate nearly $5 billion in transportation projects for Western Riverside County.

Measure "A" Funds

In 1988, the voters of Riverside County approved Measure "A," a half-cent sales tax for transportation projects, including but not limited to infrastructure improvements, commuter rail, public transit, and other identified improvements. Between 1989 and 2009, the Riverside County Transportation Commission has spent over $1 billion raised by Measure "A" on identified roadway and transportation improvements. Funds are allocated to each of three districts: Western Riverside County, the Coachella Valley, and the Palo Verde area, in proportion to the amount of sales tax generated within each sub-region. In 2002, Measure "A" was extended by Riverside County voters and will continue to fund numerous transportation improvements through the year 2039.

While Measure "A" is a self-executing sales tax administered by the Riverside County Transportation Commission (as opposed to a fee mitigation program imposed upon individual projects), It is relevant here because the funds raised through Measure "A" have funded and will continue to fund new transportation facilities in Riverside County. The Riverside County Transportation Commission has successfully implemented numerous projects that have been funded by Measure "A," and Measure "A" will continue to fund additional projects in the future.

Wildomar Circulation Element

According to the Wildomar General Plan Circulation Element, the City contains various transportation options, including automobile, rail and air transportation, a transit oasis system, bicycling, hiking, and walking, which serve as vital inter- and intra-regional linkages for the movement of people and goods. The policies below address land use issues related to circulation.

[1] http://www.clerkoftheboard.co.riverside.ca.us/ords/800/824.2.pdf. Accessed May 27, 2014.

- **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.
- **LU 12.2:** Locate employment and service uses in areas that are easily accessible to existing or planned transportation facilities.
- **LU 12.3:** Locate transit stations in community centers and at places of public, employment, entertainment, recreation, and residential concentrations.
- **LU 12.4:** Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate.
- **LU 12.5:** Allow traffic-calming elements, such as narrow streets, curb bulbs, textured paving, and landscaping, where appropriate.
- **LU 12.6:** Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use.
- **LU 12.7:** Review projects for consistency with the County's Transportation Demand Ordinance.

Elsinore Area Plan

As discussed in Section 3.10.1, the project site lies within the Elsinore Area Plan, which is a component of the City of Wildomar General Plan that provides area-specific policies and requirements to address local conditions and issues. Below are policies from the Circulation section of the Elsinore Area Plan.

- **ELAP 11.1:** Design and develop the vehicular roadway system per Figure 7, Circulation, [in the Elsinore Area Plan] and in accordance with the functional classifications and standards specified in the Planned Circulation Systems section of the General Plan Circulation Element.
- **ELAP 11.2:** Maintain the County's roadway LOS standards as described in the LOS section of the General Plan Circulation Element.

The policy below relates to the Elsinore Area Plan trail system.

- **ELAP 12.1:** Implement the Trails and Bikeway System, Figure 8 [in the Elsinore Area Plan], through such means as dedication or purchase, as discussed in the Trails and Greenways section of the General Plan Multipurpose Open Space Element and in the Non-motorized Transportation section of the General Plan Circulation Element.

The policy below relates to scenic highways designated within the Elsinore Area Plan area.

- **ELAP 13.1:** Protect Interstate 15 and State Route 74 from change that would diminish the aesthetic value of adjacent properties through adherence to the Scenic Corridors sections of the General Plan Land Use and Circulation Elements.

3.15.4 - Methodology

Trips generated by the project were estimated using the rates provided by the Institute of Transportation Engineers. The project would generate approximately 1,197 trip-ends per day, with 92 vehicles per hour during the AM peak-hour, and 112 vehicles per hour during the PM peak-hour. The following traffic scenarios were analyzed in the Traffic Impact Analysis prepared for the project:

1. **Existing (2013) Traffic.** Existing traffic was counted to determine current conditions.
2. **Existing (2013) plus Project Traffic.** Traffic generated by the project was added to existing traffic counts to identify and analyze impacts on the circulation system.
3. **Cumulative (existing, ambient, and cumulative).** Traffic conditions prior to the time that the project development is completed has been estimated by increasing the existing traffic counts by an appropriate growth rate provided by City Engineering Department staff, projected to the year that the project is estimated to be completed. Traffic generated by other approved projects in the study area was identified. The cumulative traffic was added on to existing traffic counts with the appropriate growth rate applied. This is the basis for determining cumulative-specific impacts, mitigation, and conditions of approval. This scenario was analyzed, and a determination made if improvements funded through an approved funding mechanism (TUMF, DIF, CFD, etc.) can accommodate the cumulative traffic at the target LOS (LOS) identified in the General Plan.
4. **Cumulative with project (existing, ambient, cumulative, and project).** Traffic generated by the project was added to the cumulative traffic identified in Scenario 2, and the impacts on the circulation system were analyzed. This is the basis for determining project-specific impacts, mitigation, and conditions of approval.

Level of Service

The definitions of LOS for uninterrupted flow (flow unrestrained by the existence of traffic control devices) from the project's traffic report are:

- **LOS A** – completely free-flow conditions. The operation of vehicles is virtually unaffected by the presence of other vehicles, and operations are constrained only by the geometric features of the highway and by driver preferences. Maneuverability within the traffic stream is good. Minor disruptions to flow are easily absorbed without a change in travel speed.
- **LOS B** – free flow conditions, although the presence of other vehicles becomes noticeable. Average travel speeds are the same as in LOS A, but drivers have slightly less freedom to maneuver. Minor disruptions are still easily absorbed, although local deterioration in LOS will be more obvious.
- **LOS C** – the influence of traffic density on operations becomes marked. The ability to maneuver within the traffic stream is clearly affected by other vehicles. Minor disruptions can cause serious local deterioration in service, and queues will form behind any significant traffic disruption.
- **LOS D** – the ability to maneuver is restricted due to traffic congestion. Travel speed is reduced by the increasing volume. Only minor disruptions can be absorbed without extensive queues forming and the service deteriorating.
- **LOS E** – operations at or near capacity, an unstable level. Vehicles are operating with the minimum spacing for maintaining uniform flow.
- **LOS F** – forced or breakdown flow. It occurs either when vehicles arrive at a rate greater than the rate at which they are discharged or when the forecast demand exceeds the computed

capacity of a planned facility. Although operations at these points—and on sections immediately downstream—appear to be at capacity, queues form behind these breakdowns. Operations within queues are highly unstable, with vehicles experiencing brief periods of movement followed by stoppages.

The City has established LOS D as the maximum allowable threshold for the intersection operations. Therefore, LOS E or F is considered unacceptable and requires improvement measures.

Traffic Analysis

The current technical guide to the evaluation of traffic operations is the 2000 Highway Capacity Manual (HCM). The HCM defines LOS as a qualitative measure, which describes operational conditions within a traffic stream, generally in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. The criteria used to evaluate LOS conditions vary based on the type of roadway and whether the traffic flow is considered interrupted or uninterrupted. The HCM 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. For signalized intersections, average total delay per vehicle for the overall intersection, was used to determine LOS (Trames Solutions, Inc. 2015).

The study area intersections that are stop sign controlled with stop control only on the minor street were analyzed using the unsignalized intersection methodology of the HCM. For these intersections, the calculation of LOS is dependent on the occurrence of gaps occurring in the traffic flow of the main street. The LOS criteria for this type of intersection analysis are based on average total delay per vehicle for the worst minor street movement(s) (Trames Solutions, Inc. 2015).

For all-way stop-controlled intersections, the ability of vehicles to enter the intersection is not controlled by the occurrence of gaps in the flow of the main street. These intersections were evaluated using the HCM methodology for this type of multi-way stop-controlled intersection configuration. The LOS criteria for this type of intersection analysis are based on average total delay per vehicle (Trames Solutions, Inc. 2015). The levels of service are defined for the various analysis methodologies are shown in Table 3.15-2.

Table 3.15-2: Level of Service

Level of Service	Average Total Delay per Vehicle (seconds)	
	Signalized	Unsignalized
A	0 to 10.00	0 to 10.00
B	10.01 to 20.00	10.01 to 15.00
C	20.01 to 35.00	15.01 to 25.00
D	35.01 to 55.00	25.01 to 35.00
E	55.01 to 80.00	35.01 to 50.00
F	80.01 and up	50.01 and up
Source: Trames Solutions, Inc. 2015.		

Ambient Growth Rate

Some traffic volume increases on roadways can be attributed to vehicles originating outside of the study area. These trips either end within the study area or pass through to an outside destination. Therefore, to account for these trips attributed to ambient growth, a 2 percent ambient growth rate that has been used to account for traffic not attributed to the project or other planned developments within the study area, consistent with City practice (Trames Solutions, Inc. 2015).

3.15.5 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether transportation and traffic impacts are significant, the following questions are analyzed and evaluated. Would the project:

a) 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?

b) 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?

c) 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?

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

e) Result in inadequate emergency access?

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

3.15.6 - Project Impact Analysis

Impact TRANS-1:	**The project would potentially 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

Project Trip Distribution and Generation

The project's trip distribution patterns are based on the proximity of the residential units to the proposed driveway locations, the surrounding trip attractors (employment bases, commercial opportunities, schools, recreation centers, etc.), and the regional freeway interchanges. Elizabeth

Lane is anticipated to be extended from its current terminus, south of Clinton Keith Road, to Prielipp Road by 2015. Therefore, two distribution patterns for the project have been prepared—one with, and one without—the Elizabeth Lane extension.

Trip generation represents the amount of traffic that is attracted and produced by a development. The trip generation for the project is based upon the specific land use that has been planned for this development, in this case, apartment units. The Traffic Impact Analysis evaluated 180 units, though only 170 units are proposed. Thus, the Traffic Impact Analysis results in a more conservative analysis of the traffic impact of the project, because fewer than 180 units will be constructed with the project. Trip generation rates for the project are shown in Table 3.15-3 below. The rates are based upon data provided by the Institute of Transportation Engineers.

Table 3.15-3: Trip Generation Rates for Apartment Land Use

ITE LU Code	No.	AM Peak-hour			PM Peak-hour			Daily
		Inbound	Outbound	Total	Inbound	Outbound	Total	
220	180 du	0.10	0.41	0.51	0.40	0.22	0.62	6.65

Notes:
du=dwelling units, ITE=Institute of Traffic Engineers
Source: Trames Solutions, Inc. 2015.

The daily and peak-hour trip generations for the project are shown on Table 3.15-4. The proposed development is projected to generate a total of approximately 1,197 trip-ends per day with 92 vehicles per hour during the AM peak-hour and 112 vehicles per hour during the PM peak-hour.

Table 3.15-4: Trip Generation Summary

Land Use	AM Peak-hour			PM Peak-hour			Daily
	Inbound	Outbound	Total	Inbound	Outbound	Total	
Apartment with 180 du	18	74	92	72	40	112	1,197

Notes:
du=dwelling units, ITE=Institute of Traffic Engineers
Source: Trames Solutions, Inc. 2015.

Existing plus Project Conditions

For existing plus project traffic conditions, the study area intersections are projected to continue to operate at an acceptable LOS during the peak-hours with existing geometry. Refer to Exhibit 3.15-3, which shows the existing plus project trip distribution. Table 3.15-5 shows the intersection analysis for existing plus project conditions.

Table 3.15-5: Intersection Analysis for Existing Plus Project Conditions

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
1. Inland Valley Drive/Clinton Keith Road	17.6	21.8	B	C
2. Inland Valley Drive/Prielipp Road	9.9	13.9	A	B
3. Yamas Drive/Prielipp Road	11.0	11.5	B	B
4. Elizabeth Lane/Clinton Keith Road	17.4	27.4	C	D
5. Elizabeth Lane/Prielipp Road	11.5	12.9	B	B
6. Project main driveway - Gables Oak Creek driveway/Prielipp Road	10.7	11.3	B	B
7. Nutmeg Street/Jackson Avenue	28.2	27.6	C	C

Note:
LOS=level of service
Source: Trames Solutions, Inc. 2015.

As shown in Table 3.15-5, the study area intersections are projected to operate at an acceptable LOS (LOS D or better) during the peak-hours.

Cumulative Conditions

Cumulative development project in the project vicinity are identified in Table 3.15-6, and illustrated in Exhibit 3.15-4. Trips for the land use associated with each project have been identified (see Table 3.15-7), and are projected to generate a total of a total of approximately 30,845 trip-ends per day with 1,360 vehicles per hour during the AM peak hour and 2,698 vehicles per hour during the PM peak hour.

Table 3.15-6: Cumulative Projects Trip Generation

TAZ No.	Project Name	Land Use	Quantity	AM	PM	Daily
1	Strata/Prielipp PAR	Residential Condo/Townhouse	180 du	80	94	1,046
2	Lennar Residential	SFR	67 du	51	67	638
3	Rancon Medical/ Retail Center	Medical-Dental Office	36.70 TSF	248	334	4,045
		Shopping Center	19.25 TSF			
		Fast Food w/Drive Thru	3 TSF			
4	Clinton Keith Mixed-Use Development	Apartment	112 du	125	235	4,233
		Senior Adult Housing	80 du			
		Shopping Center	40.00 TSF			
5	Inland Valley Medical	Medical-Dental Office	39.00 TSF	90	135	1,409

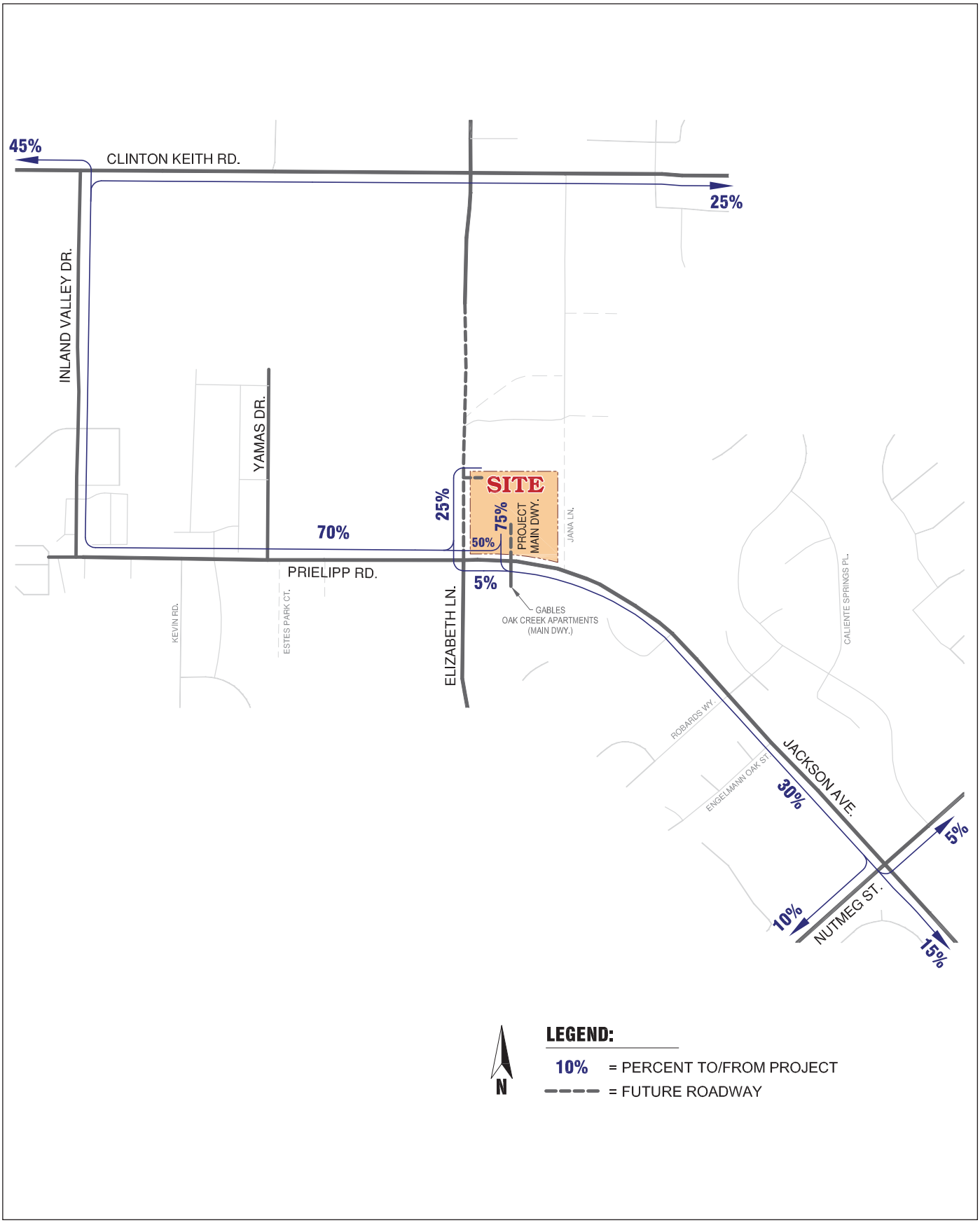
Table 3.15 6 (cont.): Cumulative Projects Trip Generation

TAZ No.	Project Name	Land Use	Quantity	AM	PM	Daily
6	Westpark Promenade	Apartment	322 du	284	707	7,946
		Shopping Center	86 TSF			
7	Wildomar Square Retail Center	Shopping Center	46.60 TSF	187	671	7,768
	Stable Lanes Retail Center	Shopping Center	30.199 TSF			
	Autozone Retail	Shopping Center	30 TSF			
8	Mc Vicar	SFR	49 du	295	395	3,760
	Meritage Homes	SFR	74 du			
	C.V. Communities	SFR	102 du			
	C.V. Communities	SFR	84 du			
	Lennar Homes Andalusia I	SFR	42 du			
	Lennar Homes Andalusia II	SFR	44 du			
Grand Total				1,360	2,698	30,845

Notes:
SFR= single family residential, TSF = thousand square feet, du = dwelling units
Source: Trames Solutions, Inc. 2015.

Cumulative (2015) without Project Conditions

Table 3.15-7 identifies the intersection LOS for the existing and ambient 2015, without the project traffic conditions. Under this scenario, the study area intersections are projected to operate at acceptable levels of service during the peak-hours in 2015, except at the following location: Elizabeth Lane/Clinton Keith Road without planned improvements.



Source: Trames Solutions Inc., October 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.15-3
Project (Existing Plus Project) Trip Distribution

THIS PAGE INTENTIONALLY LEFT BLANK

Source: Trames Solutions Inc., October 2013.

FirstCarbon® SOLUTIONS

Exhibit 3.15-4
Cumulative Projects Location Map

THIS PAGE INTENTIONALLY LEFT BLANK

Table 3.15-7: Intersection Analysis for Cumulative 2015 without Project

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
1. Inland Valley Drive/Clinton Keith Road	24.6	43.2	C	D
2. Inland Valley Drive/Prielipp Road	10.3	14.2	B	B
3. Yamas Drive/Prielipp Road	11.3	12.7	B	B
4. Elizabeth Lane/Clinton Keith Road • Without improvements • With Improvement	 62.7 23.2	 >100 33.8	 **F** C	 **F** C
5. Elizabeth Lane/Prielipp Road	12.6	14.6	B	B
6. Project main driveway - Gables Oak Creek driveway/Prielipp Road	10.8	11.6	B	B
7. Nutmeg Street/Jackson Avenue	29.5	28.0	C	C

Note:
LOS=level of service
Source: Trames Solutions, Inc. 2015.

Cumulative (2015) with Project Conditions

To assess cumulative project traffic conditions, project traffic is combined with existing traffic, area-wide growth and other future developments that are approved or being processed concurrently in the study area. Developments which are being processed concurrently in the study area have been provided by the City staff.

Table 3.15-8 identifies the intersection LOS for the existing and ambient 2015, with the project, traffic conditions. As shown in the table below, the only deficient intersection is Elizabeth Lane and Clinton Keith Road. However, this condition would persist with, or without the project. Nonetheless, without mitigation, this is a potentially significant impact.

Table 3.15-8: Intersection Analysis for Cumulative 2015 with Project

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
1. Inland Valley Drive/Clinton Keith Road	20.1	46.2	B	D
2. Inland Valley Drive/Prielipp Road	10.3	14.2	B	B
3. Yamas Drive/Prielipp Road	11.3	12.7	B	B
4. Elizabeth Lane/Clinton Keith Road • Without improvements • With Improvement	 >100 23.9	 >100 33.2	 **F** C	 **F** D
5. Elizabeth Lane/Prielipp Road	13.3	16.9	B	B
6. Project main driveway - Gables Oak Creek driveway/Prielipp Road	11.7	12.8	B	B

Table 3.15-8 (cont.): Intersection Analysis for Cumulative 2015 with the Project

Intersection	Delay (seconds)		LOS	
	AM	PM	AM	PM
7. Nutmeg Street/Jackson Avenue	28.7	28.1	C	C

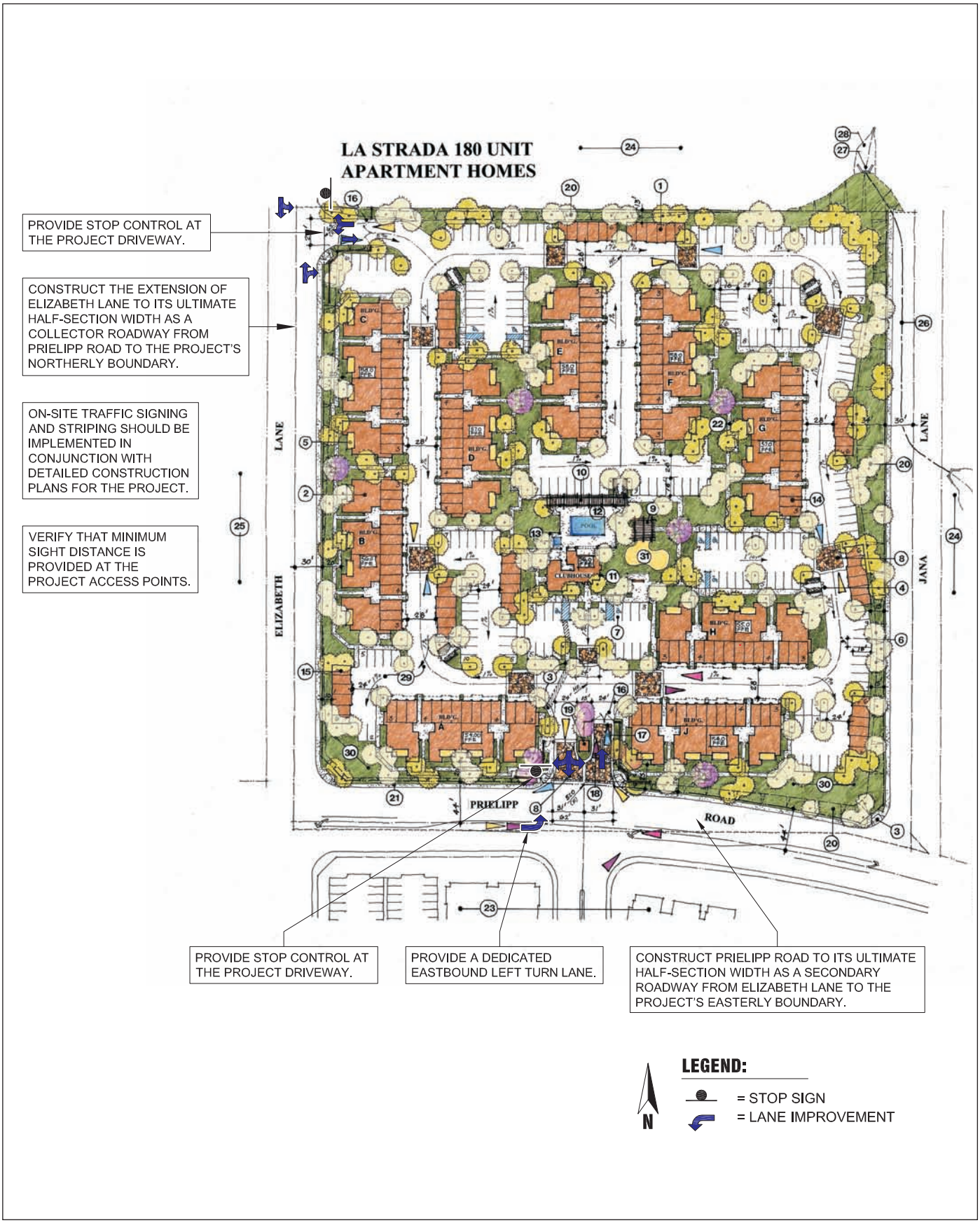
Note:
LOS=level of service
Source: Trames Solutions, Inc. 2015.

Traffic Signal Warrants

A traffic signal warrant analysis was conducted for the project, using the signal warrant criteria presented in the Federal Highway Administration's Manual on Uniform Traffic Control Devices. Based on the results of the analysis, new traffic signals are not warranted for the existing traffic conditions (Trames Solutions, Inc. 2015). For existing (2013), with project conditions, no traffic signals are warranted. For cumulative (2015) without project conditions, the following unsignalized intersection warrants the installation of a traffic signal: Elizabeth Lane/Clinton Keith Road. For cumulative (2015) with project conditions, there are no new unsignalized intersections that are anticipated to be warranted in addition to the intersection of Elizabeth Lane/Clinton Keith Road.

The traffic analysis for the project contains recommended on-site and off-site improvements that have been incorporated as mitigation measures. Table 3.15-8 shows that traffic resulting from regional growth will also impact the study area intersections and will cause the intersection of Elizabeth Lane/Clinton Keith Road to operate at an unacceptable level of service without the proposed improvements. The required improvement is designed to address the proposed project's impacts and consequently reduces delay at the intersection of Elizabeth Lane/Clinton Keith Road caused by the project. As shown in Table 3.15-8, implementation of the proposed improvement reduces the delay at the Elizabeth Lane/Clinton Keith Road intersection to an acceptable LOS C (AM peak period), and LOS D (PM peak period). With implementation of the intersection improvement discussed above, Table 3.15-8 shows that Cumulative 2015 with Project impacts to study area intersections would be less than significant.

However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will also pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain, as Table 3.15-8 demonstrates. As shown in the table, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in mitigation measure MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable. Refer to Exhibit 3.15-5, which shows the circulation recommendations from the project's Traffic Impact Analysis.



Source: Trames Solutions Inc., October 2013.

FirstCarbon SOLUTIONS

Exhibit 3.15-5
Circulation Recommendations

THIS PAGE INTENTIONALLY LEFT BLANK

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Off-Site Mitigation

Based on the Traffic Impact Analysis for the project a traffic signal is warranted at the intersection of Elizabeth Lane/Clinton Keith Road prior to project opening (2015). Since the traffic signal is required for cumulative conditions without the project, the project shall be responsible for installing the improvement or contributing a pro-rata share.

MM TRANS-1 Prior to the issuance of a certificate of occupancy for the project, the project applicant shall install or contribute toward the pro-rata share for the installation of a traffic signal at the intersection of Elizabeth Lane and Clinton Keith Road.

Timing/Implementation: As a condition of project approval, and implemented prior to the issuance of a certificate of occupancy.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

On-site Mitigation

MM TRANS-2 Construction of on-site improvements shall occur in conjunction with adjacent project development activity or as needed for project access purposes. Prior to issuance of a certificate of occupancy, the project applicant shall do the following, consistent with Figure 6-1, Circulation Recommendations, in the project Traffic Impact Analysis by Trames Solutions, Inc. (2015) for the project:

- Provide stop sign at the project driveways to control traffic leaving the project site.
- Provide a dedicated eastbound left turn lane at the project's main driveway along Prielipp Road.
- Construct the extension of Elizabeth Lane to its ultimate half-section width as a collector roadway from Prielipp Road to the project's northerly boundary.
- Construct Jana Lane to its ultimate half-section width as a collector roadway from Prielipp Road to the Project's northerly boundary.
- Construct Prielipp Road to its ultimate half-section width as a secondary roadway from Elizabeth Lane to the project's easterly boundary.
- On-site traffic signing and striping shall be incorporated into construction plans for the project.
- Verify that minimum sight distance is provided at the project driveways.

Timing/Implementation: As a condition of project approval, and implemented prior to the issuance of a certificate of occupancy.

Enforcement/Monitoring: City of Wildomar Engineering and Planning Departments

Level of Significance After Mitigation

Implementation of mitigation measures MM TRANS-1 and MM TRANS-2 will ensure that the intersection of Elizabeth Lane and Clinton Keith Road continues to operate at an acceptable level of service. However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain, as Table 3.15-8 demonstrates. As shown in the table, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable.

Level of Service Standards

Impact TRANS-2:	**The project would not 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.**

Impact Analysis

Interstate 15 (I-15) is located approximately 0.7 mile west of the project site. The I-15 from the San Bernardino County Line to the San Diego County Line is listed in Table 2-1, CMP System of Highways and Roadways. Impacts to I-15 were not considered in this analysis, as it is anticipated that the number of trips would fall below the City's threshold of 50 trips during peak hours. Additionally, roads that provide access to the project site and roads within the vicinity of the project site are not listed as being part of the CMP System of Highways or Roadways in the Riverside County CMP (2011). Therefore, the project would not conflict with the Riverside County CMP and potential impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Air Traffic Patterns

Impact TRANS-3:	**The project would not 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.**

Impact Analysis

The project is not expected to affect air traffic either in terms of operations or passenger use, because trips associated with the project would be vehicle trips, and would not impact air traffic. The closest airport to the project site is the LA/Ontario International Airport, which is located approximately 39 miles northwest of the project site. There are no private airfields located within 2 miles of the project site, as the two closest air fields, Skylark Field Airport is located approximately 4.8 miles northwest of the project site and McConville Airstrip is located approximately 12 miles northwest of the site (AirNav 2014; Google Earth 2014). Because of the project's distance from the nearest airport, the project would not have an impact on air traffic.

Level of Significance Before Mitigation

No impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

No impact.

Hazards

Impact TRANS-4:	**The project would potentially substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Impact Analysis

The project involves the conversion of land to an apartment project. The project would result in an increase in traffic compared to existing conditions. The project would have one full access driveway along Prielipp Road and another full access driveway along Elizabeth Lane (future roadway).

Off-site and on-site recommended improvements from the Traffic Impact Study have been incorporated as mitigation measures (MM TRANS-1 and MM TRANS-2) to reduce potentially significant impacts regarding hazards to a less than significant level. For example, the project will need to provide stop sign controls, a dedicated eastbound left turn lane, and meet minimum site distance standards. With implementation of mitigation measures from the Traffic Impact Analysis (MM TRANS-1 and MM TRANS-2), potential impacts related to hazards will be reduced to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measures TRANS-1 and TRANS-2.

Level of Significance After Mitigation

Less than significant impact.

Emergency Access

Impact TRANS-5: The project would not result in inadequate emergency access.

Impact Analysis

The project would include improvements on streets adjacent to the project site and would include a full access driveway along Prielipp Road, and a full access driveway along Elizabeth Lane (future roadway). Considering the temporary nature of project construction, and established City requirements for traffic control on public roadways during construction, the project would have a less than significant impact on emergency access during construction. Regarding emergency access after the project has been constructed, emergency access throughout the project site will be developed in accordance with applicable ordinances, standard conditions of approval, and permits related to emergency access. Thus, the project would have a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Conflict with Alternative Transportation

Impact TRANS-6: The project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Impact Analysis

The Riverside Transit Authority (RTA) Routes 23, 217, and 79 currently service the study area. As this project and the surrounding area develop, the Riverside Transit Authority RTA may reassess the potential demand for these facilities in the area, and may establish new routes near the project area. Development coordination with RTA will determine the need for future bus turnouts. The design of the project includes curbs and sidewalks where required, thereby encouraging alternate methods of transportation for future development and will be consistent with Policies LU12.1, LU12.4, and LU12.6 of the City's Circulation Element. Development of the project would comply with the development standards for the City. All access would be in compliance with Americans With Disabilities Act standards for accessibility. Therefore, potential impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

3.16 - Utilities and Service Systems

3.16.1 - Introduction

This section describes the existing and proposed utility systems setting and potential effects from implementation of the proposed project. Descriptions and analysis in this section are based on information from the Elsinore Valley Municipal Water District website, the July 2011 (Final) Elsinore Valley Municipal Water District Urban Water Management Plan, the City of Wildomar General Plan (2008), the City of Wildomar, Southern California Gas Company, Southern California Edison, Waste Management, CalRecycle, the Water Quality Management Plan prepared by Pacific Coast Land Consultants (August 2013) for the proposed project, correspondence with utility providers, and the California Department of Water Resources.

Environmental Setting

The Elsinore Valley Municipal Water District (EVMWD) was created in December 1950 and is a public non-profit agency that was created under the Municipal Water District Act of 1911. The EVMWD is a Special District, and, as such, it provides public water service, water supply development and planning, wastewater treatment and disposal, and recycling. Currently, the EVMWD has over 35,000 water, wastewater, and agricultural service connections. EVMWD is a sub-agency of the Western Municipal Water District and is a member agency of the Metropolitan Water District of Southern California (Metropolitan) (About EVMWD 2014).

The Urban Water Management Plan (UWMP) prepared for the EVMWD addresses its Elsinore and Temescal Divisions. The Elsinore Division comprises the majority of the service area and contains approximately 39,000 accounts and 96 square miles. The Temescal Division is isolated from the Elsinore Division and is located to the northwest of the Elsinore Division. The Temescal Division covers approximately 2.5 square miles and contains approximately 500 accounts. The residents within the EVMWD boundary are served by one of three water service agencies:

1. EVMWD
2. Elsinore Water District (EWD)
3. The Farm Mutual Water Company (MWH 2011)

Estimates developed by the Riverside County Center for Demographics Research were used to forecast growth within EVMWD's service area. These projections are provided in Table 3.16-1.

Table 3.16-1: Population, Employment, and Housing Forecasts for EVMWD's Service Area

Year	2015	2020	2025	2030	2035
Population	136,133	149,852	162,626	174,579	185,102
Employment	24,699	27,458	32,272	37,086	41,900
Housing	46,388	51,297	55,774	59,921	63,888
Source: Table ES-1 of the EVMWD 2011 UWMP.					

Population within the EVMWD service area is projected to increase from 136,133 in 2015 to 185,102 in 2035 at a rate of 2.0 percent per annum. Employment is projected to increase from 24,699 in 2015 to 41,900 in 2035 at a rate of 4.6 percent per annum. Housing is projected to increase from 46,388 in 2015 to 63,888 in 2035 at a rate of 2.1 percent per annum. The above population forecasts were used to develop demand projections for EVMWD's service area (MWH 2011).

Existing Water Demands

Approximately 37,250 potable service connections are served by EVMWD, which has a normalized average annual potable demand of approximately 32,000 acre-feet per year. Additionally, EVMWD has recycled water customers in the Canyon Hills, Canyon Lake, and Horsethief Canyon regions. Approximately 450 acre-feet per year are used for irrigation. Recycled water is also currently used for maintaining lake levels in Lake Elsinore and is discharged to Temescal Wash for environmental enhancement (MWH 2011).

Water Demand Projections

Future potable water demands are calculated based on population projections and the water use target (240 gallons per capita daily) for EVMWD's service area. Potable demands are expected to double by 2035. Projected wholesale potable water sales to the Farm Mutual Water Company are included in Table 3.16-2, as well as recycled water use within EVMWD's service area. The future average recycled water demand is projected to be approximately 2,430 acre-feet per year in the Wildomar area (MWH 2011). Table 3.16-2 shows the total potable and recycled water demand for EVMWD's service area (MWH 2011).

Table 3.16-2: Total Potable and Recycled Water Demand

Year	2015	2020	2025	2030	2035
Total Water Deliveries	36,791	39,796	43,189	46,363	49,158
Sales to Other Water Agencies[1]	501	542	588	631	669
Additional Water Uses and Losses[2]	14,015	14,906	15,431	15,431	15,431
Total	**51,306**	**55,244**	**59,208**	**62,426**	**65,258**

Notes:
[1] Sales to other water agencies are taken into account for in the calculation of "Total Water Delivery."
[2] System losses are taken into account for in the calculation of "Total Water Delivery."
Source: Table ES-2 of the EVMWD 2011 UWMP.

Existing Supplies

Potable water supplies for the EVMWD include imported water from Metropolitan, local surface water from Canyon Lake, and local groundwater from the Elsinore Basin. EVMWD has access to groundwater from Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto-Colton Basin, and Riverside-North Basin. Nearly all of the groundwater production used for potable uses occurs in the Elsinore Basin. Imported water supply is purchased from the Metropolitan via Eastern Municipal Water District and Western Municipal Water District. The Regional Water Reclamation

Facility (WRF), Railroad Canyon WRF, and Horsethief WRF are the sources of existing recycled water for the EVMWD (MWH 2011).

Future Supplies

Additional water supply sources are necessary to meet future growth within the EVMWD service area. Future supplies include the construction of a pump station that would increase the Temescal Valley Pipeline capacity, and plans to address Elsinore Groundwater Basin's overdraft condition through the implementation of the Back Basin Groundwater Storage Project as part of the Elsinore Basin Ground Water Management Plan. EVMWD also plans to complete three groundwater projects between 2011 and 2024: Terra Cotta well, Cereal 1 and Corydon well blending pipeline, and Palomar well replacement. The available water supply from these projects under different hydrologies is presented in the table below (MWH 2011).

Table 3.16-3: Available Water Supply

Project Name[2]	Projected Start Date	Projected Completion Date	Potential Project Constraints	Normal-year Supply	Single-Dry Year Supply	Multiple-dry Year Supply
20-inch Diameter Blending Pipeline (Cereal 1 and Corydon)	2011	2012	None	0[1]	2,000	1,600
Palomar Well Replacement	2015	2015	None	0[1]	1,000	800
Temescal Valley Pipeline Pumping Station	2013	2015	None	12,900	12,900	12,900
Back Basin Groundwater Storage Phase II	2024	2025	None	0(1)	4,200	3,900
North Basin Aquifer Storage and Recovery	2024	2025	None	0(1)	1,400	1,300
Total	**12,900**		**21,500**		**20,500**	

Notes:
[1] It is assumed that groundwater production will not exceed the natural recharge volume for the Elsinore Basin. Therefore, it is assumed that the addition of new groundwater wells will not increase groundwater production during normal years.
[2] These projects are identified in EVMWD's Water Resources Management Plan (MWH 2007)
Source: Table ES-3 of the EVMWD 2011 UWMP

The table below summarizes water supplies from various sources under a normal year hydrology.

Table 3.16-4: Water Supplies – Current and Projected

Water Supply Sources Projected Start Date						
Water purchased from	Wholesaler supplied Volume (yes/no)	2015	2020	2025	2030	2035
Metropolitan	Yes	48,100	48,100	48,100	48,100	48,100
Supplier-produced groundwater[1]		6,750	6,750	6,750	6,750	6,750

Table 3.16 4 (cont.): Water Supplies – Current and Projected

Water Supply Sources Projected Start Date						
Water purchased from	Wholesaler supplied Volume (yes/no)	2015	2020	2025	2030	2035
Supplier-produced surface water[2]		4,900	4,900	4,900	4,900	4,900
Recycled Water[3]		1,014	1,905	2,430	2,430	2,430
Lake Replenishment and Discharge to Temescal Wash		8,401	8,401	8,401	8,401	8,401
Total		**69,165**	**70,056**	**70,581**	**70,581**	**70,581**

Notes:
1. Assumes that groundwater pumping in the Elsinore and the Coldwater Basins will not exceed the natural recharge in the basins. Natural recharge in the Elsinore Basin is 5,500 acre-feet per year, while natural recharge in the Coldwater Basin is 1,250 acre-feet per year.
2 Represents production from the Canyon Lake WTP during a median year hydrology (MWH 2009)
3 Assumes that all recycled water produced at EVMWD's Regional Plant is used for replenishment of water levels in Lake Elsinore and discharged along Temescal Wash for environmental enhancement.

Source: Table ES-4 of the EVMWD 2011 UWMP

Water Supply Sufficiency

EVMWD's water supplies are surface water from Canyon Lake, groundwater pumping, and imported water from Metropolitan Water District of Southern California (Metropolitan) via the Temescal Valley Pipeline and Auld Valley Pipeline. As shown in Table 3.16-5, water supply from these sources is predicted to be fully reliable through 2030.

As shown in Table 3.16-5, Table 3.16-6, and Table 3.16-7, sufficient water supply exists to meet demands over various hydrologies (normal year, single dry year, and multiple dry-year events). Dry year demands are assumed to be about 9 percent higher than normal year demands (MWH 2011).

Table 3.16-5: Supply and Demand Comparison- Normal Year

Supply/Demand	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%

Source: EVMWD, 2011 UWMP.

Table 3.16-6: Supply and Demand Comparison- Single Dry Year

Supply/Demand	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%
Source: EVMWD, 2011 UWMP.					

Table 3.16-7: Supply and Demand Comparison- Multiple Dry-Year Events

Supply/Demand	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: EVMWD, 2011 UWMP.					

Potable Water

The EVMWD provides potable water service in the vicinity of the project. The proposed project's water and sewer service will be provided by EVMWD because the project falls within the boundaries of the service area for the EVMWD. EVMWD has an existing 12-inch water line and a parallel 36-inch water line located in Prielipp road (Quinones, pers. comm.).

Wastewater

The EVMWD currently has 310 miles of sewer pipeline that collect and convey wastewater generated by homes and businesses within its service area to one of three state-of-the-art tertiary level treatment facilities (EVMWD WW Operations 2014). According to correspondence with the EVMWD, there is an existing 12-inch sewer gravity main line located along Prielipp Road that runs north along Jana Lane. Additionally, there are existing, 8-inch PVC sewer lines that are located south of the project site at the existing high-density residential project located across Prielipp Road from the proposed project site. The Regional Wastewater Treatment Plant, which would serve the project site, has a maximum capacity of 8 million gallons per day (mgd), with daily effluent of 5.5 mgd. Thus, the Regional Wastewater Treatment Plant has a current excess capacity of approximately 2.5 mgd (Quinones, pers. comm.).

Storm Drainage

The regional flood management authority for the western portion of Riverside County is the Riverside County Flood Control and Water Conservation District. This District is a Special District, and, as such, its jurisdiction does not extend over the entire County but only the western 40 percent. The responsibility for drainage in the eastern part of the County is borne by a combination of the County Transportation Department, the Coachella Valley Water District, the various cities, and local entities. The District's mission is to protect people, property, and watersheds from damage or destruction from flood and storm waters and to conserve, reclaim, and save such waters for beneficial use (Riverside County Flood Control District 2014).

Solid Waste

Solid waste collection and disposal in the City of Wildomar is provided by CR&R Waste and Recycling Services (CR&R) and Waste Management. CR&R serves the area to the west of the Interstate 15 (I-15) Freeway and Waste Management serves the areas east of the I-15 Freeway (City of Wildomar 2014). Services include collection of solid waste from residences and businesses, and collection and demolition recycling. CR&R runs its own material recovery facility, which receives and processes recyclables. The proposed project is located east of the I-15 freeway and as such would be served by Waste Management.

Landfill Capacity

Waste Management would provide solid waste services for the proposed project. The landfill where solid waste from the proposed project would be transported is the Badlands Sanitary Landfill, located approximately 25 miles northeast of the proposed project site in Moreno Valley (Ongeano, pers. comm.). Table 3.16-8 below provides details regarding this landfill.

Table 3.16-8: Landfill Summary

Name	Location	Maximum Daily Throughput (tons per day)	Approximate Remaining Capacity (cubic yards)	Closure Date
Badlands Sanitary Landfill	31125 Ironwood Avenue Moreno Valley, CA 92555	4,000	14,730,025 (as of June 1, 2010)	01/01/2024
Source: SWIS, 2014.				

Energy

Southern California Edison (SCE) provides electricity and Southern California Gas Company (SCGC) provides natural gas service to the City of Wildomar. Below is a discussion of each energy source.

Electricity

SCE provides electricity service to the project area (Southern California Edison Service Area 2014). SCE has delivered electricity to Southern and Central California for more than 125 years and is one of the nation's largest electric utilities. A 12-kilovolt line runs in front of the proposed project site. A

representative from SCE confirmed that the proposed project is within its service territory and that SCE will serve the proposed project and that SCE has the capacity to serve the project site. The representative indicated that the proposed project is not anticipated to impact SCE's ability to provide electrical service (Judy, pers. comm.).

Natural Gas

SCGC, a Sempra Energy utility, provides natural gas service to the project area. SCGC is the nation's largest natural gas distribution utility and provides energy to 20.9 million consumers through 5.8 million meters in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles in throughout Central and Southern California (SCGC 2014). SCGC is a subsidiary of Sempra Energy. SCGC has gas lines and gas facilities in the project area and has capacity to serve the project site (Vargas, pers. comm.).

3.16.2 - Regulatory Framework

Federal and State

Senate Bill 610

Under Senate Bill (SB) 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 (a)) subject to the CEQA. As detailed in Water Code 10912 (a), a "project" means any of the following:

1. Proposed residential development of more than 500 dwelling units.
2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.
3. A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A proposed hotel or motel, or both, having more than 500 rooms.
5. A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.
6. A mixed-use project that includes one or more of the projects specified in this subdivision.
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Assembly Bill 341

Assembly Bill (AB) 341 requires all businesses and organizations in California that generate four cubic yards or more of waste per week and multi-family units of 5 or more, to recycle. A business shall take at least one of the following actions in order to reuse, recycle, compost, or otherwise divert commercial solid waste from disposal:

- Source separate recyclable and/or compostable material from solid waste and donate or self-haul the material to recycling facilities.
- Subscribe to a recycling service with their waste hauler.
- Provide recycling service to their tenants (if commercial or multi-family complex).
- Demonstrate compliance with the requirements of California Code of Regulations Title 14.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code Sections 10610-10656) requires that all urban water suppliers with at least 3,000 customers prepare urban water management plans and update them every 5 years. The act requires that urban water management plans include a description of water management tools and options used by that urban water supplier to maximize resources and minimize the need to import water from other regions. Specifically, urban water management plans must:

- Provide current and projected population, climate, and other demographic factors affecting the supplier's water management planning;
- Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier;
- Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage;
- Describe plans to supplement or replace that source with alternative sources or water demand management measures;
- Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis (associated with systems that use surface water);
- Quantify past and current water use;
- Provide a description of the supplier's water demand management measures, including schedule of implementation, program to measure effectiveness of measures, and anticipated water demand reductions associated with the measures; and
- Assess water supply reliability.

The EVMWD UWMP was last updated in 2010 and projects water demand and supply through 2040.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance was adopted by the Office of Administrative Law in September 2009 and requires local agencies to implement water efficiency measures as part of their review of landscaping plans. Local agencies can either adopt the Model Water Efficient Landscape Ordinance or incorporate provisions of the ordinance into local code requirements for landscaping. For new landscaping projects of 2,500 square feet or more that require a discretionary or ministerial approval, the applicant is required to submit a detailed Landscape Documentation Package that

discusses water efficiency, soil management, and landscape design elements (Department of Water Resources 2013).

Additionally, the City of Wildomar adopted its own ordinance in 2010 (Ordinance No. 46), restating Chapter 17.276 of the Wildomar Municipal Code regarding the establishment of new water efficient landscape regulations (Wildomar Water Ordinance 2010). According to Chapter 17.276 of the Wildomar Municipal Code, the purpose of this chapter is to "establish water efficient landscape regulations that are at least as effective in conserving water as the State Model Water Efficient Landscape Ordinance in the context of conditions in the City in order to ensure that landscapes are planned, designed, installed, maintained, and managed in a manner that uses water efficiently, encourages water conservation, and prevents water waste."

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. In 2007, SB 1016, Wiggins, Chapter 343, Statutes of 2008, introduced a new per capita disposal and goal measurement system that moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: a jurisdiction's population (or in some cases employment) and its disposal as reported by disposal facilities.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers' safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings.

First adopted in 1977, the Standards have been periodically updated approximately on a three-year cycle. The most recent update, the 2013 Building Energy Efficiency Standards, went into effect on July 1, 2014. A copy of the 2013 Energy Efficiency Standards are available online at the website: http://www.energy.ca.gov/title24/. The 2013 Energy Efficiency Standards may also be reviewed at the Energy Efficiency Division, California Energy Commission, 1516 Ninth Street, MS-29, Sacramento, California 95814-5512.

According to the CEC, reducing energy use has been a benefit to all. Building owners save money, Californians have a more secure and healthy economy, the environment is less negatively impacted, and our electrical system can operate in a more stable state. 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.

Local

The City of Wildomar was incorporated in July of 2008; at that point, the City adopted the County of Riverside General Plan (as well as the Elsinore Area Plan). The City used the County's General Plan as the Wildomar General Plan. In 2013, the City decided to create an updated General Plan, which is in the process of being developed.[1] As such, the County of Riverside's General Plan still currently applies to the City of Wildomar.

Below are policies from the Land Use Element (LU) and the Multipurpose Open Space (OS) Element of the County of Riverside General Plan that relate to utilities and service systems.

Policies

- **OS 1.1:** Balance consideration of water supply requirements between urban, agricultural, and environmental needs so that sufficient supply is available to meet each of these different demands.
- **LU 5.2:** Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.
- **LU 5.3:** Review all projects for consistency with individual urban water management plans.

Below are policies from the Safety Element of the County of Riverside General Plan that relate to utilities and service systems.

- **S 4.10:** Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.
- **S 4.18:** Require that the design and upgrade of street storm drains be based on the depth of inundation, relative risk to public health and safety, the potential for hindrance of emergency access and regress from excessive flood depth, and the threat of contamination of the storm drain system with sewage effluent. In general, the 10-year flood flows shall be contained within the top of curbs and the 100-year flood flows within the street right-of-way.

[1] http://www.cityofwildomar.org/uploads/files/minutes/04-02-14-pa-packet/Item%203.2%20Attach%20A%20Draft%20Admin%20Gen%20Plan.pdf. Accessed April 29, 2014.

3.16.3 - Methodology

To determine the potential impact the proposed project may have on local water supplies, information regarding water use and demand was obtained from the 2011 EVWMD UWMP. The proposed project has also been reviewed by the EVMWD, which found that an adequate wastewater treatment capacity and adequate water supply for the proposed project such that that no significant upgrade of EVMWD facilities would be necessary to provide wastewater service or water to the project.

3.16.4 - Thresholds of Significance

Based on the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether impacts to utilities and service systems are significant, the following questions are analyzed and evaluated. Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

b) 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?

c) 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?

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

e) 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?

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

g) Comply with federal, state, and local statutes and regulations related to solid waste?

3.16.5 - Project Impact Analysis

Wastewater Treatment

Impact USS-1:	**The project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.**

Impact Analysis

The proposed project is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB). This Regional Board administers the National Pollutant Discharge Elimination System permits. The proposed 170-unit project, with an estimated population of 556 persons, would increase the wastewater generated by an estimated 60,604 gallons per day or 0.06 mgd (556 persons x 109 gallons per day) by 2020. The Regional Wastewater Treatment Plant, which

would serve the project site has a maximum capacity of 8 mgd, with daily effluent of 5.5 mgd. Thus, the Regional Wastewater Treatment Plant has a current excess capacity of approximately 2.5 mgd. Correspondence from the Lake Elsinore Municipal Water District (Quinones, pers. comm.) states that existing wastewater treatment facilities are sufficient to maintain an adequate level of service for the project. Additionally, LEMWD does not foresee any adverse impacts as a result of the proposed project. Therefore, the project will have less than significant impacts regarding exceeding wastewater treatment requirements of the RWQCB with jurisdiction over the proposed project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Water or Wastewater Treatment Facilities

Impact USS-2:	**The project would not 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.**

Impact Analysis

The UWMP for the EVMWD states that there is sufficient water supply to serve existing and future water demands. The proposed 170-unit project, with an estimated population of 556 persons, would increase the wastewater generated within the EVMWD's service area by an estimated 60,604 gallons per day or 0.06 mgd (556 persons *x* 109 gallons per day) by 2020. The 0.06 mgd wastewater demand generated by the proposed project would comprise an insignificant fraction of the projected average dry weather flow for 2020. Since the existing Waste Water Treatment Plant (WWTP) has the capacity to treat approximately 8 mgd, the proposed project is anticipated to have a related less than significant impact.

Thus, the proposed project would not require or result in the construction of new water or wastewater facilities or expansion of existing facilities and as such, the project will have a related less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Stormwater Drainage Facilities

Impact USS-3: The project would not 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

There is a significantly deep natural drainage course in the southeast corner of the site that receives water from the adjacent property to the east, and terminates on the project site. This portion of the site will receive as much as 20 feet of fill and the offsite drainage will require interception and transmission to the natural offsite drainage course that currently accepts these flows. A pipe will be installed at the north property line, within the existing drainage course and will be designed to outlet beyond the project within the downstream portion of the existing drainage course. An outlet structure and rock rip-rap will be installed to control the outflow and disperse the resulting flow to control potential erosion and degradation of the natural drainage course. Surface flows within the project site will transmit flows from catch basins and pipe systems into underground storage/ filtration devices in accordance with regulatory requirements. Flows will be transferred from the underground areas to locations that historically formed the pre-development drainage courses (Pacific Coast Land Consultants 2014). Additionally, roof drains will be directed to landscape areas, where practical. In areas where this is not practical, roof drains will spill onto impervious surfaces and become part of the surface flows collected and treated in the storm drain system (Pacific Coast Land Consultants 2013).

The project meets Condition C of the Riverside County Water Quality Management Plan for urban runoff dated October 22, 2012, because the greater of 2 year 24-hour or 10 year 24-hour storm event flows are mitigated on-site and reduced to below or near existing conditions prior to release in the or storm drain system. A series of on-site storm drain systems will be constructed. Downstream manholes will be fitted with restrictor plates to limit outlet flows to no more than the pre-development condition (Pacific Coast Land Consultants 2013).

Construction of the stormwater drainage facilities discussed above is considered part of the project and, as such, the environmental effects of its construction and operation have been assessed in the previous sections of this document. Therefore, the project would result in a less than significant impact related to the construction of new stormwater drainage facilities.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Water Supplies

Impact USS-4: The project would have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Impact Analysis

The EVMWD anticipates 100 gallons of water per day per capita for apartment land uses. For the purposes of determining population and housing impacts, a factor of 3.3 persons per household[2] in the City of Wildomar, was used to estimate the population of the proposed project. As such, with an estimated population of approximately 561 persons, the project is estimated to create a water demand of 56,100 gallons, which as described below, can be met by the EVMWD. According to the UWMP for the EVMWD, for normal year, single dry year, and multiple dry-year events, the EVMWD supply would exceed demand. Under normal year conditions, supply will exceed demand by 5,323-acre feet per year for the year 2035. Under Single Dry Year conditions supply will exceed demand by 7,919-acre feet per year for the year 2035. Under Multiple Dry-Year events, supply will exceed demand by 6,919-acre feet per year for the year 2035. See Table 3.16-5, Table 3.16-6, and Table 3.16-7 for details. Therefore, the proposed project will have a less than significant impact, because increased demand for water (such as that from the proposed project) is accounted for in the District's future demand projections and the construction of new water facilities is not required. Additionally, per correspondence from the EVMWD, the District does not anticipate a significant or unavoidable impact to existing or future development. The project proponent will be required to extend the existing 12-inch water line from Prielipp Road to across the frontage of the parcel on Jana Lane before water service is available to the proposed project. The District does not anticipate any adverse impacts as a result of providing service to the proposed project (Quinones, pers. comm.).

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Wastewater Treatment Capacity

Impact USS-5: The project would not 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

According to the EVMWD UWMP, EVMWD currently operates three wastewater treatment facilities: the Regional WWTP, Horsethief Canyon WWTP, and Railroad Canyon WWTP. Additionally, flow in the

[2] Source: Page 3.8-7 of the City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report August 2013. This document used an average household size of 3.3 residents.

southern part of EVMWD's service area is treated at the Santa Rosa WRF operated by the Rancho California Water District. These four treatment plants serve four major service areas within the EVMWD's wastewater collection system. Each service area consists of gravity collectors, trunk lines, lift stations, and force mains, which convey flow to the treatment plants.

According to the Draft Environmental Impact Report for the City of Wildomar Housing Element update (2013-2021), the EVMWD will serve a population of 151,901 persons, 31,797 employees, and 51,961 dwelling units by 2020 (City of Wildomar 2013). The proposed 170-unit apartment project comprises approximately 0.4 percent of the population and approximately 0.5 percent of the housing projected in the EVMWD service area by 2020. This increase in both population and housing will generate an increased demand for wastewater treatment services by the EVMWD.

The EVMWD is projected to have an average dry weather wastewater flow of 15.3 mg based on population, which equates to a wastewater generation rate of 109 gallons per day per capita (City of Wildomar 2013). Based on this wastewater generation rate, the proposed 170-unit project, with an estimated population of 556 persons, would increase the wastewater generated within the EVMWD's service area by an estimated 60,604 gallons per day or 0.06 mgd (556 persons *x* 109 gallons per day) by 2020.

The 0.06-mgd wastewater demand generated by the proposed project would comprise an insignificant fraction of the projected average dry weather flow for 2020. Since the existing WWTP has the capacity to treat approximately 8 mgd, the proposed project is anticipated to have a related less than significant impact. Additionally, the proposed project, as well as future development is required to pay development impact fees and connection fees, which would fund future expansion of the WWTP. Thus, the proposed project will have a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Landfill Capacity

Impact USS-6:	**The project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.**

Impact Analysis

Waste Management will provide waste disposal service for the proposed project (Ongeano, pers. comm.). Solid waste would be generated by short-term construction activities and long-term operational activities.

Construction Waste Generation

Development of the proposed project would include the construction of 170 apartment units contained within nine separate buildings. Limited demolition would occur onsite, as there is one existing residential structure and garage on-site that will be torn down before project construction begins. Using construction debris waste generation rates published by the U.S. Environmental Protection Agency, an estimate of the total construction debris generated by the proposed project is provided in Table 3.16-9.

Table 3.16-9: Estimated Construction and Demolition Waste Generation for the Proposed Project

Activity	Type	Waste Generation Rate[1]	Square Footage	Total (pounds)
Demolition	Residence/Garage	111 pounds/square foot	2,078[2]	230,658
Construction	Residential	4.38 pounds/square foot	250,457[3]	1,097,002
Construction	Clubhouse/Offices	3.89 pounds/square foot	1,906	7,415

Notes:
1. The construction waste generation rate for residential and non-residential development is from page 2-3 and demolition waste is from page 2-6 of the U.S. Environmental Protection Agency's 1998 report, Characterization of Building-Related Construction and Demolition Debris in the United States.
2. The square footage of the existing residence (1,478 square feet) and garage (600 square feet) on-site is from the Phase I Environmental Site Assessment of a Residential Property 36485 Jana Lane in Wildomar, California, dated June 30, 2013 by Earth-Strata Inc.
3. Includes 250,457 square feet for nine buildings

Source: U.S. Environmental Protection Agency, 1998; FirstCarbon Solutions, 2014.

Implementation of the proposed project is estimated to generate approximately 1,104,417 pounds of construction debris and 230,658 pounds of demolition debris. This amount of debris would be spread out over the length of construction activities and the actual volumes of construction waste disposed of at any one time are not expected to be more than several tons of debris. Regional landfill capacity would be available to accommodate this amount of solid waste because the Badlands landfill can accommodate a maximum daily throughput of 4,000 tons of waste per day and a total remaining capacity of over 14,000,000 cubic yards.

Operational Waste Generation

The daily and annual operational solid waste generation estimate is provided in Table 3.16-10. The table below is developed from the solid waste generation rates provided on the CalRecycle website for office and residential land uses.

Table 3.16-10: Projected Solid Waste Generation

Land Use	Solid Waste Generation Rate	Estimated Waste Generation at buildout (pounds/day)	Pounds/year
170 apartment units	12.23 pounds/DU/day	2,080	759,200
Clubhouse with offices (1,906 square feet)	6 pounds/thousand square feet per day	12	4,380
TOTAL	**Not Applicable**	**2, 092**	**763,580**
Note: DU= Dwelling Unit Source: CalRecycle, 2014.			

The proposed project is estimated to generate a total of approximately 2,092 pounds of solid waste on a daily basis and approximately 763,580 pounds or 381 tons on an annual basis. Landfill capacity would be available to accommodate this amount of solid waste because the Badlands landfill has an estimated remaining capacity of over 14,000,000 cubic yards or approximately 8,987,000 tons. Thus, the proposed project is anticipated to have a less than significant impact related to operational waste disposal because there is adequate landfill capacity to meet the disposal needs of the proposed project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Compliance with Solid Waste Regulations and Statutes

Impact USS-7: The project would comply with federal, state, and local statutes and regulations related to solid waste.

Impact Analysis

AB 939 requires that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The Countywide Integrated Waste Management Plan was prepared in accordance with the California Integrated Waste Management Act of 1989, Chapter 1095 (AB 939). The proposed project is not anticipated to conflict with the City of Wildomar policies, other mandatory policies such as AB 341, or the Countywide Integrated Waste Management Plan, because it will comply with requirements regarding solid waste disposal and the project site will be served by a solid waste disposal provider. Additionally, the proposed project will comply with City of Wildomar requirements set forth in Chapter 8.104 Solid Waste Collection and Disposal of the City's Municipal Code. Chapter 8.104 states that "Every tenant, occupier, operator or owner of a residence or

construction or demolition site shall, not less than once a week, cause to be removed all solid waste created, produced or brought upon the property to an approved disposal facility." Construction/ demolition and waste from project operations will be properly removed via Waste Management to an appropriate disposal site. Thus, the proposed project will have a less than significant impact.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

3.17 - Greenhouse Gases

3.17.1 - Introduction

This section describes the existing greenhouse gas conditions and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information contained in the Air Quality and Global Climate Change Impact Analysis prepared in March 2014 by Kunzman Associates, Inc., included in this Draft EIR as Appendix B, and other sources as cited throughout the section.

3.17.2 - Environmental Setting

Climate Change

Climate change is a change in the average weather of the earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of greenhouse gases needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, given six scenarios, could range from 1.1 degrees Celsius (°C) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios (IPCC 2007a). The report also concluded that "[w]arming of the climate system is unequivocal," and that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

Consequences of Climate Change in California

In California, climate change may result in consequences such as the following (from CCCC 2006 and Moser et al. 2009).

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter,

drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.

- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as greenhouse gases. The effect is analogous to the way a greenhouse retains heat. Common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit greenhouse gases. The presence of greenhouse gases in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Climate change is driven by forcings and feedbacks. Radiative forcing is the difference between the incoming energy and outgoing energy in the climate system. Positive forcing tends to warm the surface while negative forcing tends to cool it. Radiative forcing values are typically expressed in watts per square meter. A feedback is a climate process that can strengthen or weaken a forcing. For example, when ice or snow melts, it reveals darker land underneath which absorbs more radiation and causes more warming. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. The global warming potential of a gas is essentially a measurement of the radiative forcing of a greenhouse gas compared with the reference gas, carbon dioxide.

Individual greenhouse gas compounds have varying global warming potential and atmospheric lifetimes. Carbon dioxide, the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a greenhouse gas is a measure of how much a given mass of a greenhouse gas is estimated to contribute to global warming. To describe how much global warming a given type and amount of greenhouse gas may cause, the carbon dioxide equivalent is used. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing greenhouse gas emissions since it normalizes various greenhouse gas emissions to a consistent reference gas, carbon dioxide. For example, methane's warming potential of 21 indicates that methane has 21 times greater warming affect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential. Greenhouse gases defined by Assembly Bill (AB) 32 (see the Regulatory Environment section for a description) include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. They are described in Table 3.17-1.

Table 3.17-1: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (laughing gas) is a colorless greenhouse gas. It has a lifetime of 114 years. Its global warming potential is 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Methane	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 21.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.
Carbon dioxide	Carbon dioxide (CO_2) is an odorless, colorless, natural greenhouse gas. Carbon dioxide's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Chlorofluorocarbons	These are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). Global warming potentials range from 3,800 to 8,100.	Chlorofluorocarbons were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. They destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987.
Hydrofluorocarbons	Hydrofluorocarbons are a group of greenhouse gases containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	Hydrofluorocarbons are synthetic manmade chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.

Table 3.17-1 (cont.): Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Perfluorocarbons	Perfluorocarbons have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200.	Two main sources of perfluorocarbons are primary aluminum production and semiconductor manufacturing.
Sulfur hexafluoride	Sulfur hexafluoride is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Sources: Compiled from a variety of sources, primarily Intergovernmental Panel on Climate Change 2007a and 2007b.		

Other greenhouse gases include water vapor, ozone, and aerosols. Water vapor is an important component of our climate system and is not regulated. Ozone and aerosols are short-lived greenhouse gases; global warming potentials for short-lived greenhouse gases are not defined by the IPCC. Aerosols can remain suspended in the atmosphere for about a week and can warm the atmosphere by absorbing heat and cool the atmosphere by reflecting light.

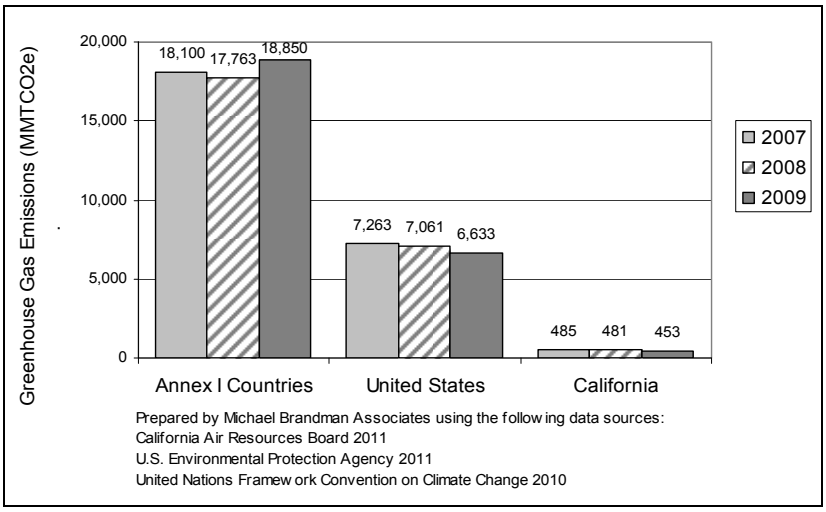
Black carbon is formed by incomplete combustion of fossil fuels, biofuels, and biomass. Sources of black carbon within a jurisdiction may include exhaust from diesel trucks, vehicles, and equipment, as well as smoke from biogenic combustion. Biogenic combustion sources of black carbon include the burning of biofuels used for transportation, the burning of biomass for electricity generation and heating, prescribed burning of agricultural residue, and natural and unnatural wildfires. Black carbon is not a gas but an aerosol—particles or liquid droplets suspended in air. Black carbon only remains in the atmosphere for days to weeks, as opposed to other greenhouse gases that can remain in the atmosphere for years. Black carbon can be deposited on snow, where it absorbs sunlight, reduces sunlight reflectivity, and hastens snowmelt. Direct effects include absorbing incoming and outgoing radiation; indirectly, black carbon can also affect cloud reflectivity, precipitation, and surface dimming (cooling).

Although there could be health effects resulting from changes in the climate and the consequences that can bring about, inhalation of greenhouse gases at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (particulate matter). The potential health effects of ozone and particulate matter are discussed in criteria pollutant analyses. At very high indoor concentrations (not at levels existing outside), carbon dioxide, methane, sulfur hexafluoride, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen (CDC 2010 and OSHA 2003).

Emissions Inventories

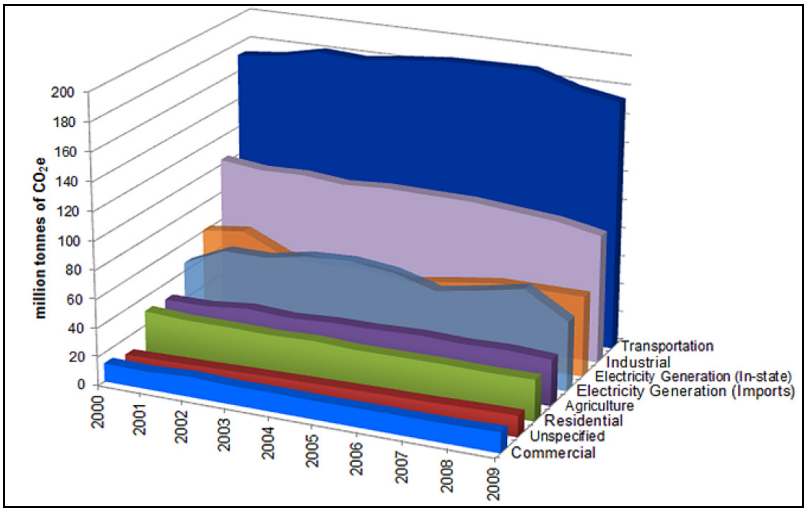
Emissions worldwide were approximately 49,000 million metric tons of carbon dioxide equivalents (MMTCO2e) in 2004 (IPCC 2007b). Greenhouse gas emissions in 2007, 2008, and 2009 are shown in Exhibit 3.17-1. Annex I parties refer to countries that joined the United Nations Framework Convention on Climate Change.

Exhibit 3.17-1: Greenhouse Gas Emissions Trends



As shown in Exhibit 3.17-2, the main contribution of greenhouse gas emissions in California between years 2000 and 2009 was transportation. The second highest sector was industrial, which includes sources from refineries, general fuel use, oil and gas extraction, cement plants, and cogeneration heat output.

Exhibit 3.17-2: Greenhouse Gas Emission Trends by Sector in California



Source: ARB 2011a.

3.17.3 - Regulatory Framework

International

Climate change is a global issue involving greenhouse gas emissions from all around the world; the programs discussed below have made an effort to reduce greenhouse gases globally.

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the Intergovernmental Panel on Climate Change to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nations Framework Convention on Climate Change (Convention). On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on greenhouse gas emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas emissions at average of five per cent against 1990 levels over the five-year period 2008-2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2°C above pre-industrial levels, subject to a review in 2015. .The UN Climate Change Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings are gradually gaining consensus among participants on individual climate change issues.

National

Prior to the last decade, there have been no concrete federal regulations of greenhouse gases or major planning for climate change adaptation. The following are actions by the federal government regarding greenhouse gases and fuel efficiency.

Greenhouse Gas Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the

EPA regulate four greenhouse gases, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing greenhouse gas emissions standards for vehicles, as discussed in the section “Clean Vehicles” below.

The EPA denied ten petitions for Reconsideration of the Endangerment and Cause or Contribute Findings in 2010. Some of the petitioners included the Ohio Coal Association, Peabody Energy Company, and the State of Texas.

In September 2011, the EPA Office of Inspector General evaluated the EPA’s compliance with established policy and procedures in the development of the endangerment finding, including processes for ensuring information quality. The evaluation concluded that the technical support document should have had more rigorous EPA peer review.

In June 2012, a federal appeals court rejected a lawsuit by thirteen states against the EPA. The suit alleged that the EPA violated the law by relying almost exclusively on data from the United Nations Intergovernmental Panel on Climate Change rather than doing its own research or testing data according to federal standards. The states include Virginia, Texas, Alabama, Florida, Hawaii, Indiana, Kentucky, Louisiana, Mississippi, Nebraska, North Dakota, Oklahoma, South Carolina, South Dakota, and Utah. EPA's authority to regulate GHGs under the Clean Air Act was unanimously affirmed by the Court in this case. EPA has moved forward to finalize more stringent GHG emission standards for motor vehicles for model year 2017–2025 as described below.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation’s National Highway Safety Administration announced a joint final rule establishing a

national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States. A petition for writ of certiorari to the United States Court of Appeals for the District of Columbia Circuit Court was denied by the Supreme Court on October 15, 2013.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012 (EPA 2012c). The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of carbon dioxide (CO_2) in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce greenhouse gas emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, effective November 14, 2011. For combination tractors, engine and vehicle standards that began in the 2014 model year will achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, separate gasoline and diesel truck standards, which began phase-in with the 2014 model year achieve up to a 10 percent reduction for gasoline vehicles and 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, engine and vehicle standards starting in the 2014 model year, achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by 2018 model year. President Obama is directing the EPA and the DOT's National Highway Traffic Safety Administration (NHTSA) to develop and issue the next phase of medium- and heavy-duty vehicle fuel efficiency and greenhouse gas standards by March 2016.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory greenhouse gas reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires reporting of greenhouse gas emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial greenhouse gases, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of greenhouse gas emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010 that establishes thresholds for greenhouse gases that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial

facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the federal code of regulations, EPA states:

> This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

EPA estimates that facilities responsible for nearly 70 percent of the national greenhouse gas emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest greenhouse gas emitters—power plants, refineries, and cement production facilities.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the NOx Budget Trading Program in the northeast. There is no federal cap and trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Regional Greenhouse Gas Initiative is an effort to reduce greenhouse gases among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps carbon dioxide emissions from power plants, auctions carbon dioxide emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional greenhouse gas emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Its cap and trade program is estimated to be fully implemented in 2015.

State

Title 24

Although Title 24 regulations are not specifically enacted to reduce greenhouse gases, they increase energy efficiency for new buildings, thus indirectly reducing greenhouse gas emissions. The standards are updated periodically to allow consideration and possible incorporation of new energy

efficient technologies and methods. The newest version of Title 24 was adopted by the California Energy Commission (CEC) on May 31, 2012 and was scheduled to become effective on January 1, 2014. On December 11, 2013, the CEC extended the compliance date to July 1, 2014. The 2013 Standards are estimated to be 30 percent more efficient than the 2008 Standards for nonresidential development, and 25 percent more efficient for residential development. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases greenhouse gas emissions.

California Green Building Standards

On January 12, 2010, the State Building Standards Commission unanimously adopted updates to the California Green Building Standards Code, which went into effect on January 1, 2011. The Code is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. The Code was last updated as part of the 2013 building code cycle with changes effective on January 1, 2014.

The California Green Building Standards Code does not prevent a local jurisdiction from adopting a more stringent code, as state law provides methods for local enhancements. The Green Building Standards Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to local ordinances so long as they contain a minimum 50-percent waste diversion requirement. The Green Building Standards Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The Green Building Standards Code provides the minimum standard, which buildings need to meet in order to be certified for occupancy. Enforcement is generally through the local building official.

The California Green Building Standards Code contains the following requirement which are applicable to projects:

- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling.
- Construction waste. A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and-75 percent for new homes and 80-percent for commercial projects. All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.
- Wastewater reduction. Each building shall reduce the generation of wastewater by one of the following methods:
  1. The installation of water-conserving fixtures or
  2. Using nonpotable water systems.
- Water use savings. 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30-, 35- and 40-percent reductions.
- Water meters. Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day.
- Irrigation efficiency. Moisture-sensing irrigation systems for larger landscaped areas.

Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. The regulation was stalled by automaker lawsuits and by the EPA's denial of an implementation waiver. On January 21, 2009, the ARB requested that the EPA reconsider its previous waiver denial. On January 26, 2009, President Obama directed that the EPA assess whether the denial of the waiver was appropriate. On June 30, 2009, the EPA granted the waiver request. On September 8, 2009, the U.S. Chamber of Commerce and the National Automobile Dealers Association sued EPA to challenge its granting of the waiver to California for its standards. California assisted EPA in defending the waiver decision. The U.S. District Court for the District of Columbia denied the Chamber's petition on April 29, 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009-2012) standards will result in about a 22-percent reduction compared with the 2002 fleet, and the mid-term (2013-2016) standards will result in about a 30-percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

Low Carbon Fuel Standard - Executive Order S-01-07

Governor Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to ARB for consideration as an "early action" item under AB 32. The ARB adopted the Low Carbon Fuel Standard on April 23, 2009. The Low Carbon Fuel Standard was challenged in the United States District Court in Fresno County. The court's ruling issued on December 29, 2011 included a preliminary injunction against ARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the ARB to continue to implement and enforce the regulation. In January 2014, the appeals court refused to accept a petition to rehear the case.

Executive Order S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for greenhouse gas emissions:

- By 2010, reduce greenhouse gas emissions to 2000 levels.
- By 2020, reduce greenhouse gas emissions to 1990 levels.
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

AB 32

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. ARB is the state agency charged with monitoring and regulating sources of greenhouse gases. AB 32 states the following:

> Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.

The ARB Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) on December 6, 2007 (ARB 2007). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 $MMTCO_2e$. Emissions in 2020 in a "business as usual" scenario are estimated to be 596 $MMTCO_2e$, which do not account for reductions from AB 32 regulations (ARB 2008c).

Under AB 32, the ARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. ARB has developed programs and regulations to implement all discrete early action measures. The 44 early action measures apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. The ARB estimates that the 44 measures will result in reductions of at least 42 $MMTCO_2e$ by 2020, representing approximately 25 percent of the 2020 target.

The ARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 (ARB 2008). The Scoping Plan identifies recommended measures for multiple greenhouse gas emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 greenhouse gas target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;

- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related greenhouse gas emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional greenhouse gas emission reductions.

The Scoping Plan was first approved by the Board in 2008 and must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 greenhouse gas reduction goal. The ARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update provides a status report on progress toward achieving the 2020 target and identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 greenhouse gas limit, but also sets a path toward long-term, deep GHG emission reductions. The Update indicates that regulations and programs currently in place are expected to achieve the 2020 target on schedule. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities Climate for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long term 2050 goal of Executive Order S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050 (ARB 2014b).

SB 375

Passing the Senate on August 30, 2008, SB 375 was signed by Governor Schwarzenegger on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of greenhouse gas emissions, which emits over 40 percent of the total greenhouse gas emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning

organizations to include sustainable community strategies in their regional transportation plans for reducing greenhouse gas emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies. The Southern California Association of Governments has adopted emissions reductions for per capita light duty vehicles from 2005 levels of 7 percent by 2020 and 13 percent by 2035.

Concerning CEQA, SB 375, section 21159.28 states that CEQA findings determinations for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that the ARB accepts as achieving the greenhouse gas emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

SB 1368

In 2006, the State Legislature adopted Senate Bill (SB) 1368, which was subsequently signed into law by Governor Schwarzenegger. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for greenhouse gas emissions 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 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent 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's energy demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out-of-state producers that cannot satisfy the performance standard for greenhouse gas emissions required by SB 1368. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007.

SB 97 and the CEQA Guidelines Update

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code.

The Amendments became effective on March 18, 2010. The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

A new section, CEQA Guidelines Section 15064.4, was added to assist agencies in determining the significance of greenhouse gas emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, little guidance is offered on the crucial next step in this assessment process—how to determine whether the project's estimated greenhouse gas emissions are significant or cumulatively considerable.

Also amended were CEQA Guidelines Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. Greenhouse gas mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze greenhouse gas emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable, however it does not answer the question of when emissions are cumulatively considerable.

Section 15183.5 permits programmatic greenhouse gas analysis and later project-specific tiering, as well as the preparation of Greenhouse Gas Reduction Plans. Compliance with such plans can support a determination that a project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b).

In addition, the amendments revised Appendix F of the CEQA Guidelines, which focuses on Energy Conservation and is discussed in detail in Section 6 of this EIR. The sample environmental checklist in Appendix G was amended to include greenhouse gas questions.

Executive Order S-13-08

Executive Order S-13-08 indicates that:

> . . . climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources.

Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the " . . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Renewable Electricity Standards

On September 12, 2002, Governor Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08,

which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB Board approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

Regional Regulations

The project is within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

South Coast Air Quality Management District Recommendations for Significance Thresholds

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 used on an interim basis until ARB (or some other state agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential; non-residential; industrial; etc. However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for industrial projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) as a screening numerical threshold for industrial projects.

SCAQMD Regulation XXVII, Climate Change

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified greenhouse gas emission reductions in the SCAQMD.
- Rule 2702, Greenhouse Gas Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a Greenhouse Gas Reduction Program for greenhouse gas emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

Local

The City of Wildomar does not have an adopted or draft Climate Action Plan; however, the City is a partner in the Western Riverside County Subregional Climate Action Plan. Western Riverside Council of Governments (WRCOG) approved the Final Climate Action Plan in September 2014. The City's

General Plan contains the following greenhouse gas related goals and policies that are applicable to the proposed project.

- **General Plan Air Quality Policy 4.2:** Encourage the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces, and boiler units.
- **General Plan Air Quality Policy 4.4:** Require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code.
- **General Plan Air Quality Policy 4.7:** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.
- **General Plan Air Quality Policy 5.1:** Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.
- **General Plan Air Quality Policy 5.2:** Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.
- **General Plan Air Quality Policy 5.4:** Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

3.17.4 - Methodology

The analysis and methodology in this section are based on information contained in the Air Quality and Global Climate Change Impact Analysis prepared in March 2014 by Kunzman Associates, Inc., included in this Draft EIR as Appendix B.

3.17.5 - Thresholds of Significance

Greenhouse Gas Emissions

According to the CEQA Guidelines' Appendix G Environmental Checklist, to determine whether greenhouse emissions impacts are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

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

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

3.17.6 - Project Impact Analysis

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Greenhouse Gas Emissions

Impact GHG-1: Although the project would generate greenhouse gas emissions, either directly or indirectly, those emissions would not have a significant impact on the environment.

Impact Analysis

A variety of agencies have developed greenhouse gas emission thresholds and/or have made recommendations for how to identify a threshold. However, the thresholds for projects in the jurisdiction of the SCAQMD remain in flux. The California Air Pollution Control Officers Association (CAPCOA) explored a variety of threshold approaches, but did not recommend one approach. The ARB recommended approaches for setting interim significance thresholds (MBA 2013a); however, the ARB has not approved those thresholds and has not published any guidance since then. The Bay Area Air Quality Management District and the San Joaquin Valley Air Pollution Control District have both developed greenhouse gas thresholds. However, those thresholds are not applicable to the project since the project is under the jurisdiction of the SCAQMD. The SCAQMD is in the process of developing thresholds, as discussed below.

SCAQMD Threshold Development

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD permit threshold). However, the SCAQMD is not the lead agency for this project. Therefore, the five permit threshold tiers do not apply to the proposed project.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration ("SCAQMD draft local agency threshold"); however, the SCAQMD Board has not approved the thresholds as of the date of the NOP (SCAQMD 2010). The current draft thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
  - All land use types: 3,000 MTCO2e per year
  - Based on land use type:
    - Residential: 3,500 MTCO2e per year;
    - Commercial: 1,400 MTCO2e per year; or
    - Mixed use: 3,000 MTCO2e per year

- Tier 4 has the following options:
  - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3:
    - 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO2e/SP/year for projects and 6.6 MTCO2e/SP/year for plans; or
    - 2035 target: 3.0 MTCO2e/SP/year for projects and 4.1 MTCO2e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing global climate.

Thresholds of Significance for this Project

To determine whether the project is significant, this project uses the SCAQMD draft local agency tiered threshold. The threshold is as follows:

- Tier 1: The project is not exempt under CEQA; go to Tier 2.
- Tier 2: There is no greenhouse gas reduction plan applicable to the project; go to Tier 3.
- Tier 3: project greenhouse gas emissions compared with the "all land use types" threshold: 3,000 $MTCO_2e$ per year (see analysis below).

Section 15064.4(b) of the CEQA Guideline amendments for greenhouse gas emissions state that a lead agency may take into account the following three considerations in assessing the significance of impacts from greenhouse gas emissions.

- **Consideration #1**: The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.
- **Consideration #2**: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- **Consideration #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 regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that 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.

Greenhouse Gas Inventory

This analysis is restricted to greenhouse gases identified by AB 32, which include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The project

would generate a variety of greenhouse gases during construction and operation, including several defined by AB 32 such as carbon dioxide, methane, and nitrous oxide.

The project may also emit greenhouse gases that are not defined by AB 32. For example, the project may generate aerosols. Aerosols are short-lived particles, as they remain in the atmosphere for about one week. Black carbon is a component of aerosol. Studies have indicated that black carbon has a high global warming potential; however, the Intergovernmental Panel on Climate Change states that it has a low level of scientific certainty (IPCC 2007a). The project would emit black carbon through emissions of diesel PM during construction. However, procedures to quantify changes due to black carbon emissions have not been widely accepted or thoroughly researched (IPCC 2007; Wilson and Walters 2012). Therefore, impacts to climate change from black carbon are speculative at this time and no further discussion is necessary. Water vapor could be emitted from evaporated water used for landscaping, but this is not a significant impact because water vapor concentrations in the upper atmosphere are primarily due to climate feedbacks rather than emissions from project-related activities. The project would emit nitrogen oxides and volatile organic compounds, which are ozone precursors. Ozone is a greenhouse gas; however, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and can be reduced in the troposphere on a daily basis. Stratospheric ozone can be reduced through reactions with other pollutants.

Certain greenhouse gases defined by AB 32 would not be emitted by the project. Perfluorocarbons and sulfur hexafluoride are typically used in industrial applications, none of which would be used by the project. Therefore, it is not anticipated that the project would emit perfluorocarbons or sulfur hexafluoride.

An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the project. Upstream emission sources for the project include but are not limited emissions from the manufacture of cement, emissions from the manufacture of steel, and/or emissions from the transportation of building materials to the seller. The upstream emissions were not estimated because they are not within the control of the project and to do so would be speculative. Additionally, the California Air Pollution Control Officers Association White Paper on CEQA and Climate Change supports this conclusion by stating, “The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for . . . and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level” (CAPCOA 2008). Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream /life cycle emissions are speculative and no further discussion is necessary.

Construction and Operation

Greenhouse gas emissions from project construction and operation were estimated using CalEEMod version 2013.2.2, as described in Appendix B.

The project would emit greenhouse gases from upstream emission sources and direct sources (combustion of fuels from worker vehicles and construction equipment). Construction activities include grading, building construction, paving, and application of architectural coatings. For assumptions used in estimating these emissions, please refer to Appendix B. As recommended by

SCAQMD, the project's construction-generated greenhouse gas emissions were annualized over 30 years, and added to project operational emissions to determine the project's potential impact.

Operational or long-term emissions occur over the life of the project. The CalEEMod modeling for operational activities includes emissions from area sources, energy usage, mobile sources, waste generation, water consumption. In addition, the emissions modeling incorporated carbon sequestration from 360 trees to be planted as part of the project design. The following modifications to modeling defaults were incorporated in the analysis:

- 2014 Title 24 standards are 25 percent more efficient than the 2008 Title 24 Standards for residential development
- Green Building Mandatory Measures include water efficiency requirements.

Greenhouse gas emissions from project construction and operation are shown in Table 3.17-2. As shown in Table 3.17-2, the project's emissions would not exceed the SCAQMD's draft threshold of significance for greenhouse gas emissions.

Table 3.17-2: Project-Generated Greenhouse Gas Emissions

Source	$MTCO_2e$ per year
Area Sources	42.24
Energy Usage	275.68
Mobile Sources	1,784.92
Solid Waste	37.67
Water	68.89
Construction (averaged over 30 years)	18.19
Total Project Emissions	2,227.58
SCAQMD Draft Threshold	3,000
Does project exceed threshold?	No

Notes:
$MTCO_2e$ = metric tons carbon dioxide equivalent
Source: Kunzman 2014

The total emissions of greenhouses gases from the project site would approximately be 2,227.58 $MTCO_2e$ per year. A cumulative global climate change impact would occur if the GHG emissions created from the on-going operations would exceed 3,000 $MTCO_2e$ per year. As such, operation of the proposed project would not contribute to a significant cumulative impact to global climate change.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

Conflict with Plan, Policy, or Regulation that Reduces Emissions

Impact GHG-2: The project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Impact Analysis

The City of Wildomar does not currently have a Climate Action Plan; therefore, the project and project-related GHG emissions have been compared to the goals of ARB's adopted Scoping Plan.

The California State Legislature adopted AB 32 in 2006. AB 32 focuses on reducing greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, the ARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan called for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for every man, woman and child in California down to about 10 tons per person by 2020. The First Update to the ARB Scoping Plan reports that slower growth experienced since the 2008 recession resulted in lower growth projections for 2020 and fewer emissions required to achieve the 2020 target. ARB estimates that a reduction of 21.7 percent from business-as-usual is required to meet the State's 2020 target compared with the 30 percent stated in the 2008 Scoping Plan (ARB 2014b). In addition, ARB reports that the State is on target to achieve the 2020 target with adopted measures. The First Update to the ARB Scoping Plan does not include commitments to adopt additional measures, but outlines a strategy that would provide a trajectory for achieving the goal of reducing emissions to 80 percent below 1990 levels by 2050. New legislation is in process in the state legislature that would mandate ARB to develop a plan to achieve interim targets with enforceable measures beyond 2020.

The Scoping Plan contains a variety of strategies to reduce the State's emissions. As shown in Table 3.17-3, the project is consistent with the applicable strategies and the project would result in a less than significant impact.

Table 3.17-3: Project Comparison to ARB's Scoping Plan Measures

Scoping Plan Reduction Measure	Project Compliance with Measure
1. California Cap-and-Trade Program Linked to Western Climate Initiative. Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.	Not applicable. The cap-and-trade system applies to specific industrial and energy projects. The project is not subject to cap-and-trade requirements.
2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.	Consistent. These are ARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy
3. Energy Efficiency. Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
4. Renewable Portfolio Standard. Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.	Not applicable. Southern California Edison, which would provide power to the project, is in the process of increasing the percent of renewable energy in its portfolio. It is required to increase this percentage by the year 2020 pursuant to various regulations.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are ARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.	Not applicable. The project is not related to developing greenhouse gas emission reduction targets.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.	Consistent. These are ARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.

Table 3.17-3 (cont.): Project Comparison to ARB's Scoping Plan Measures

Scoping Plan Reduction Measure	Project Compliance with Measure
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.	Not Applicable. The project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
9. Million Solar Roofs Program. Install 3,000 MW of solar-electric capacity under California's existing solar programs.	Not Applicable. This measure is to increase solar throughout California through implementation of funding programs, which is being done by various electricity providers and existing solar programs.
10. Medium/Heavy-Duty Vehicles. Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are ARB enforced standards; vehicles that access the project that are required to comply with the standards will comply with the strategy.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.	Not applicable. The project is not an industrial land use.
12. High Speed Rail. Support implementation of a high-speed rail system.	Not Applicable. This is a statewide measure that cannot be implemented by a project applicant or lead agency.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes standards on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
14. High Global Warming Potential Gases. Adopt measures to reduce high global warming potential gases.	Consistent. ARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project that are required to comply with the measures will comply with the strategy.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as City's recycling and waste reduction program, which comply, with the 50 percent reduction required in AB 939.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.	Consistent. The project site is in an open non-forested condition. No forested lands exist onsite. The project would plant and maintain an approximate 260 trees.

Table 3.17-3 (cont.): Project Comparison to ARB's Scoping Plan Measures

Scoping Plan Reduction Measure	Project Compliance with Measure
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.	Not Applicable. The project site is in an open, non-agriculture condition. No grazing, feedlot, or other agricultural activities that generate manure occur onsite or are proposed to be implemented by the project.
Source of ARB Scoping Plan Reduction Measure: California Air Resources Board 2008. Source of Project Consistency or Applicability: Kunzman 2014 and FirstCarbon Solutions 2014.	

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation measures are required.

Level of Significance After Mitigation

Less than significant impact.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 4: CUMULATIVE EFFECTS

4.1 - CEQA Requirements

CEQA Guidelines Section 15130 requires the consideration of cumulative impacts within an Environmental Impact Report (EIR) when a project's incremental effects are cumulatively considerable. Cumulatively considerable means ". . .the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." In identifying projects that may contribute to cumulative impacts, the CEQA Guidelines allow the use of a list of past, present, and reasonably anticipated future projects, producing related or cumulative impacts, including those that are outside of the control of the lead agency.

In accordance with CEQA Guidelines Section 15130(b), ". . .the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great [a level of] detail as is provided for the effects attributable to the project alone." The discussion should be guided by standards of practicality and reasonableness, and it should focus on the cumulative impact to which the identified other projects contribute rather than on the attributes of other projects that do not contribute to the cumulative impact. For the purposes of this analysis, a list approach is being used to analyze cumulative impacts of the project.

4.2 - Cumulative Impact Setting

As established in the CEQA Guidelines, related projects consist of "closely related past, present, and reasonably foreseeable probable future projects that would likely result in similar impacts and are located in the same geographic area" (CCR, Title 14, Division 6, Chapter 3, Section 15355). As part of the Traffic Impact Analysis (Appendix H) prepared for the project, a cumulative project list was developed. Table 4-1 summarizes projects in the vicinity of the project that have the potential to create cumulatively considerable effects in conjunction with the project.

The projects listed in Table 4-1 are illustrated in Exhibit 4-1. The table below shows the project name, land use, and density/intensity of development for each of the cumulative projects. Refer to Table 4-4 in the Traffic Impact Analysis for information regarding the trip generation associated with the cumulative projects included below.

Table 4-1: Cumulative Development

Project Name	Land Use	Quantity
Strata/Prielipp PAR	Residential Condo/ Townhouse	180 DU
Lennar Residential	SFDR	67 DU

Table 4-1 (cont.): Cumulative Development

Project Name	Land Use	Quantity
Rancon Medical/Retail Center	Medical-Dental Office	36.70 TSF
	Shopping Center	19.25 TSF
	Fast Food w/Drive Thru	3 TSF
Clinton Keith Mixed-Use Development	Apartment	112 DU
	Senior Adult Housing	80 DU
	Shopping Center	40.00 TSF
Inland Valley Medical	Medical-Dental Office	39.00 TSF
Westpark Promenade	Apartment	322 DU
	Shopping Center	86 TSF
Wildomar Square Retail Center	Shopping Center	46.60 TSF
Stable Lanes Retail Center	Shopping Center	30.199 TSF
Autozone Retail	Shopping Center	30 TSF
Mc Vicar	SFDR	49 DU
Meritage Homes	SFDR	74 DU
C.V. Communities	SFDR	102 DU
C.V. Communities	SFDR	84 DU
Lennar Homes Andalusia I	SFDR	42 DU
Lennar Homes Andalusia II	SFDR	44 DU

Notes:
SFDR= Single Family Detached Residential TSF = Thousand Square Feet; DU = Dwelling Units
Source: Trames Solutions, Inc., 2013.

4.3 - Cumulative Impact Analysis

The cumulative impact analysis below is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact consists of an impact, which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR should not discuss impacts that do not result in part from the project evaluated in the EIR.
- When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, an EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.

Source: Trames Solutions Inc., October 2013.

FirstCarbon® SOLUTIONS

Exhibit 4-1
Cumulative Projects Location Map

THIS PAGE INTENTIONALLY LEFT BLANK

- An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant if the project is required to implement or fund its fair-share of a mitigation measure or measures designed to alleviate the cumulative impact.

The cumulative impact analysis that follows relies on the principles above as the basis for determining the significance of the project's cumulative contribution to various impacts.

4.3.1 - Aesthetics, Light, and Glare

The geographic scope of the cumulative aesthetics analysis is the area surrounding the project site. From Prielipp Road, foreground views of the eastern portion of the project site are dominated by sandy slopes, telephone poles, and trees associated with the single-family residence; middle ground views are dominated by trees, shrubs, residential structures, and other features associated with the residence (tanks, doghouse, etc.); and background views include hills, sky and more distant trees. Further west, the elevation of the site matches the road, allowing more expansive background views. In particular, fore-and middle ground views are dominated by dirt roads, grassy slopes, varied topography and telephone poles; background views are dominated by trees, mountains, and sky with interspersed developed features (tanks, buildings, etc.).

Foreground views from the project site to the north and east are similar to that of the residential portion of the site, dominated by trees, with residential structures and features; to the west by open grassy land and dirt roads; and to the south by a contemporary apartment complex. Middle-ground views from the project site capture more recent residential development to the west, east, and south. Background views include these features, as well as mountains and sky.

The immediate setting of the site is rural; however, a conversion from a landscape of large-lot rural residential to suburban residential development (apartments and subdivisions) is emerging in the vicinity.

As determined in the discussion of direct project impacts in Section 3.1, potential aesthetic impacts would be less than significant. The project site is not located within a City- or County-designated scenic vista. Foreground and middle-ground views from adjacent properties would change from sandy slopes, trees, and residential structures to a more organized, developed landscape associated with the new development that is consistent with other recent development changes associated with development of apartments and subdivisions in the area. No roadways in the project vicinity are designated as a State or County Scenic Highway. In addition, the project site is not visible from I-15, and, as such, the project would not have any impact on this State Scenic Highway. Therefore, as indicated in Section 3.1, the project would not directly or cumulatively significantly impact scenic vistas or scenic resources, or substantially degrade the visual character or quality of the site or its surroundings.

The change in land use is consistent with recent development in the area, including apartments to the south and subdivisions to the east and west. Additionally, the land use change is consistent with the emerging development pattern for the area, which is trending from rural to suburban overall.

With conformance to lighting requirements the project would not adversely affect nighttime views in the area, including those for the Mt. Palomar Observatory. Other future projects would be required to comply with the same lighting regulations and implement necessary mitigation for aesthetic impacts. Therefore, the project, in conjunction with other planned or approved projects, would not have any cumulatively considerable aesthetic impacts.

4.3.2 - Agricultural Resources and Forestry Resources

The geographic scope of the cumulative agriculture and forestry resources analysis is the area surrounding the project site, as well as the general project area as a whole. The project site is not currently used for agriculture. Additionally, while historically rural in nature, the general project area has recently experienced urbanization and development activities, which have resulted in land use changes. The Farmland Mapping and Monitoring Program agricultural land categorized the project site as "Other Land," and as such is not considered Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Furthermore, the project site is not currently used for agriculture.

The City of Wildomar General Plan designates land to the north of the project site as Medium High Density Residential, land to the west as Business Park, land to the south as Very High Density Residential, and land to the east as Medium High Density Residential. The City's General Plan does not designate any land in the project vicinity as having an agricultural land use designation.

The project site is not under a Williamson Act contract, or within a Riverside County Agricultural Preserve (Riverside County GIS 2014). None of the area immediately surrounding the project site is currently used for agriculture. The nearest property under the Williamson Act contract is located less than one mile south of the project site. However, the proposed residential land use would not conflict with existing or potential agricultural zoning on-site or off-site, as analyzed in Section 3.2. The project will not involve the conversion of forest land because the project site does not contain any forest land. Therefore, the project, in conjunction with other planned or approved projects, would not have cumulatively considerable impacts on agriculture and forestry resources.

4.3.3 - Air Quality

The geographic scope of the cumulative air quality analysis is the South Coast Air Basin. In combination with carbon monoxide (CO) emissions from other regional emission sources, the project would not result in an exceedance of the CO ambient air quality standard at project-impacted intersections. Therefore, the project would not result in cumulative health effects from CO exposure.

The project would not impede attainment of air quality standards, because its emissions would not exceed the South Coast Air Quality Management District (SCAQMD) regional significance thresholds. SCAQMD deems projects that comply with its regional significance thresholds as not having a cumulatively considerable impact. Therefore, impacts would be less than significant, and the project would not have cumulatively considerable air quality impact resulting from VOC, NO_x, CO, SO_2, $PM_{10,}$ and $PM_{2.5}$ emissions during project construction or operations. Thus, the project would not result in cumulatively considerable air quality impacts due to construction or operational emissions.

4.3.4 - Biological Resources

The cumulative setting includes the project site as well as the undeveloped areas surrounding the proposed project site where the impacts of urbanization and threats to biological diversity and sensitive biological resources are considered most serious. The impacts on biological resources are primarily the result of urbanization of the area, habitat fragmentation, water pollution, and conversion of natural land to residential, commercial, and recreational use. Although the development of the proposed project will continue the urbanization of the area that began long before incorporation of the City, the project's contribution to cumulative Biological Resources impacts will not be cumulatively considerable with implementation of mitigation.

The geographic scope of the cumulative biological resources analysis is the Wildomar area. The City, along with other jurisdictions in western Riverside County, participates in the Multi-Species Habitat Conservation Plan (MSHCP). The MSHCP is designed to protect over 150 species and conserve over 500,000 acres in western Riverside County. In part, the MSHCP was enacted to offset and control cumulative impacts to biological resources within western Riverside County. Project compliance with the MSHCP and the Stephens' Kangaroo Rat Habitat Conservation Plan (HCP) is deemed to fully mitigate direct and cumulative impacts to covered species, and ensures that large segments of natural communities in western Riverside County will be preserved. The project would pay the applicable mitigation fees in accordance with the Stephen's Kangaroo Rat HCP and the MSHCP.

Additionally, the site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Burrowing Owl Survey Area. Mitigation Measure BIO-1 is proposed to reduce potential impacts on burrowing owl to a less than significant level. Because of the presence of several stands of large trees on-site, the proposed project shall also implement Mitigation Measure BIO-2 to mitigate any potential impacts to nesting birds.

The General Biological Resources Assessment for the project indicates that the project would not conflict with or have any adverse impact on any local policies or ordinances. The project would be developed in accordance with the Western Riverside MSHCP requirements. Therefore, the project is not considered cumulatively considerable.

In addition, the project would not have any significant impacts on fish or wildlife movement and would not conflict with locally adopted biological policies and ordinances. A drainage swale that occupies approximately 0.1 acre, located on the eastern site of the project site supports riparian/riverine habitat as described under the MSHCP (RCA Associates 2015). Therefore, the project is required to implement Mitigation Measures BIO-3 through BIO-6, which would reduce impacts to less than significant levels.

In summary, the project's impacts to Biological Resources can all be mitigated to less than significant. It is reasonable to assume that other future development projects would be required to mitigate for impacts to Biological Resources in a manner similar to the project. Therefore, the project, in conjunction with other projects, would not result in a cumulatively considerable impact to Biological Resources.

4.3.5 - Cultural Resources

The geographic scope of the cumulative cultural resources analysis is the City of Wildomar. A modern ranch complex, reportedly postdating 1979 (Keller 2005), was noted in the southeastern corner of the project area during the pedestrian survey; however, no buildings, structures, objects, sites, features, or artifacts more than 50 years old were encountered throughout the course of the fieldwork. Therefore, no significant historical resources are located on the project site. No previously recorded archaeological sites are located within the project boundaries. Additionally, no archaeological resources were encountered during the archaeological field survey. The previous archaeological studies of the project site indicate that the project would have no impact regarding substantial adverse changes in the significance of an archaeological resource. However, it is always possible that unknown archaeological resources, paleontological resources, or human remains could be uncovered during grading. To ensure that the project has a less than significant impact on previously undiscovered archaeological resources, mitigation is proposed to address the inadvertent discovery of such resources. Together, Mitigation Measures CR-1 through CR-6 would reduce any potential impacts to unknown historic, archaeological, and paleontological resources, and human remains to less than significant.

No resources have been found near the project site, and there is a low probability that such resources will be encountered in the surrounding area. In addition, other future development projects would be required to evaluate potential impacts to cultural resources and comply with state law and incorporate mitigation where necessary. Therefore, the project, in conjunction with other projects, would not result in a cumulatively considerable impact to cultural resources.

4.3.6 - Geology, Soils, and Seismicity

The geographic scope of the cumulative geology/soils analysis is the project site, because geology issues are localized in nature. As identified in Section 3.6, Geology, Soils, and Seismicity, with implementation of Mitigation Measure GEO-1, the project's impacts related to Geology, Soils, and Seismicity would be less than significant. In addition, all potential impacts are site specific and limited to on-site conditions, and thus would not affect off-site locations or projects. Similarly, other cumulative development within the City of Wildomar and the project area would be required to comply with California Building Code requirements and provide mitigation as appropriate to address potential impacts to geology and soils. Therefore, the project, in conjunction with other projects, would not have a cumulatively considerable impact to geology and soils.

4.3.7 - Hazards and Hazardous Materials

The geographic scope for evaluation of cumulative hazards and hazardous materials impacts is the City of Wildomar. The project area is mostly undeveloped, with the exception of the existing on-site residential structure and garage, with rural land uses in the vicinity. All demolition that could result in the release of lead and/or asbestos must be conducted according to Cal/OSHA standards. Implementation of Mitigation Measure HAZ-1 would reduce potential short-term construction impacts to less than significant. Additionally, implementation of Mitigation Measure HAZ-2 would reduce potential operational impacts to less than significant levels.

The project, as well as future development projects, would be required to comply with all applicable federal, state, and local hazardous materials handling and storage requirements. Therefore, the project, in conjunction with other future development projects, would not have a cumulatively considerable impact to hazards and hazardous materials.

4.3.8 - Hydrology and Water Quality

The analysis area for evaluation of cumulative impacts to hydrology and water quality includes the Santa Margarita River Watershed. The on-site runoff would be collected in a series of catch basins and transmitted to underground storage facilities on the northwest and southwest ends of the site. Treatment through infiltration would occur in the storage facilities, and flows would be released to adjacent properties at their pre-developed rates and along the same drainage course as they currently follow (Pacific Coast Land Consultants 2014a). Thus, the project would not result in substantial erosion or siltation on- or off-site.

The project meets Condition C of the Riverside County Water Quality Management Plan for urban runoff, as the greater of 2-year, 24-hour or 10-year, 24-hour storm event flows would be mitigated on-site and reduced to below or near existing condition prior to release in the storm drain system. The project would have a less than significant impact to runoff water because post-development conditions would not result in a significant increase in runoff from the project site.

The cumulative effect of runoff from land uses in a region can have significant impacts on surface water quality, with both point- and non-point-source discharges contributing contaminants to surface waters. Development activities associated with the project may impact water quality. Because construction activities could result in increased pollutants to surface water, construction of the project could potentially result in a short-term degradation to surface water quality. Accordingly, prior to the issuance of grading or construction permits, the project applicant will prepare a Stormwater Pollution Prevention Plan that conforms to the State Water Resources Control Board National Pollutant Discharge Elimination System permit, to ensure that the project will result in a less than significant impact to water quality.

Long-term operations of the project would increase the potential for stormwater runoff to transport contaminants from roadway surfaces, parking lots, roofs and other exposed structural and landscape surfaces into the storm drain system. The project's runoff flow rate, volume, velocity, and duration for the post-development condition would not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition would be achieved by minimizing impervious area on the site and incorporating other site design features that mimic pre-development conditions. With implementation of Mitigation Measure HWQ-1, water quality impacts from long-term operations of the project would be reduced to a less than significant level.

Other future development projects in the project area would be required to comply with similar permitting requirements and/or implement similar mitigation. Therefore, the project, in conjunction with other future development projects, would not have cumulatively considerable impacts to hydrology and water quality.

4.3.9 - Land Use and Planning

The analysis area for evaluation of cumulative impacts on land use is the City of Wildomar. Most of the City contains urban development. As outlined within Section 3.9, Land Use and Planning, the project's contemplated land uses were found to be consistent with the City of Wildomar General Plan Policies, Zoning Ordinance, SCAG's Regional Transportation Plan (RTP)/Sustainable Communities Strategy (RTP/SCS) Goals. Future development projects would be required to demonstrate consistency with General Plan policies and Zoning Ordinance policies and ensure that they do not create land use conflicts with adjacent properties. Therefore, the proposed project, in conjunction with other future development projects, would not have cumulatively considerable impacts on land use.

4.3.10 - Mineral Resources

The geographic scope of the cumulative mineral resources analysis is the Wildomar area. The City's General Plan does not identify any significant mineral resources on the project site or in the project vicinity. The City of Wildomar General Plan shows the project site as being located within an area designated by the State as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data). The project site is designated Medium High Density Residential (MHDR) by the City of Wildomar General Plan, and Industrial Park (I-P) in the City of Wildomar Zoning Ordinance. Therefore, the project site is not recognized by the City of Wildomar or County of Riverside as an important mineral resource recovery site. Other future development projects would be required to evaluate impacts on mineral resources and incorporate mitigation where necessary. Therefore, the project, in conjunction with other projects, would not have cumulatively considerable impacts to mineral resources.

4.3.11 - Noise

As a result of the project and related projects, an increase in traffic noise levels along roadway segments in the project site vicinity is likely. Roadway noise impacts would be considered significant if the project increases traffic noise levels at a noise sensitive land use by 3 dBA CNEL, and either (1) the existing noise levels already exceed the applicable land use compatibility standard for "conditionally compatible" (i.e., 65 dBA CNEL for residential land uses), or (2) the project increases noise levels from below the "conditionally compatible" standard to exceed the "conditionally compatible" compatibility standard for the affected land use.

Cumulative buildout noise levels were modeled using SoundPLAN, which utilizes the algorithms found in the Federal Highway Administration's (FHWA's) Traffic Noise Model. The roadway segment that would experience the greatest increase in traffic noise levels above levels existing without the project is the segment along Prielipp Road from Yamas Drive to Elizabeth Lane. The future CNEL traffic noise contours at 50 feet from the centerline of this segment would range up to approximately 65 dBA CNEL. These future buildout traffic noise levels are less than 2 dBA above existing CNEL traffic noise contours along this roadway segment and would not exceed the "conditionally compatible" standard for adjoining land uses. Therefore, the project would not result in a significant contribution to the cumulative noise condition, and the impact would be considered less than significant.

4.3.12 - Population and Housing

The geographic scope of the cumulative population and housing analysis is the Wildomar area, as well as the cities of Lake Elsinore and Murrieta. The project would increase the population of the City of Wildomar by approximately 561 persons (based on development of 170 dwelling units with 3.3 persons per household). The project does not extend infrastructure to previously undeveloped areas or generate long-term employment opportunities, nor is the project of a magnitude that would cause significant numbers of people to relocate to the area solely for the purpose of being close to the project site for employment purposes. Other planned and approved projects would be required to evaluate the potential for growth inducement and, if necessary, to mitigate such impacts. Therefore, the project, in conjunction with other projects, would not result in a cumulatively considerable impact to population and housing.

4.3.13 - Public Services

The geographic scope for evaluation of cumulative impacts to public services is the Wildomar area. The project would not create any significant impacts with respect to public services. The project would not substantially increase the need for new or expanded facilities for fire, police, schools and other public facilities. In addition, the project would pay into established development impact fee programs to offset incremental increases in demand for fire, police, and school facilities from the project.

Other future development projects would increase demands for fire protection, police protection, schools, and library facilities. Similar to the project, these projects would be required to pay development impact fees, to offset incremental increases in service demand. Therefore, the project, in conjunction with other future development projects, would not result in a cumulatively considerable impact to public services.

4.3.14 - Recreation

The geographic scope of the cumulative recreation analysis is the Wildomar area. There is a potential for the project to result in approximately 561 new residents to the project area. This increase is not expected to substantially increase demands on existing neighborhood or regional parks or other recreational facilities. The City's current recreation areas totaling 321.97 acres is currently well over the 99.6 acres of parkland required by the City's Municipal Code, based on the City's standard of 3 acres per 1,000 residents. Based on a parkland demand factor of 3 acres per 1,000 residents, project implementation would generate a demand for approximately 1.68 acres of parkland. The project also provides on-site recreation amenities, including a club house, a pool, a spa, and open space. Other planned and approved projects would be required to mitigate for potential impacts to recreational facilities, in accordance with City of Wildomar requirements. To maintain adequate funding for the creation and maintenance of new parks and recreation facilities, the City of Wildomar has implemented the Development Impact Fee Program, which will apply to the proposed project as well as other projects. Therefore, the project, in conjunction with other projects, would not result in a cumulatively considerable impact to parks and recreation facilities.

4.3.15 - Transportation and Traffic

The geographic scope of the cumulative transportation analysis is the Wildomar area. Cumulative transportation and traffic impacts are evaluated in Section 3.15, Transportation and Traffic (see discussion in Impact TRANS-1). Cumulative developments are projected to generate a total of approximately 30,845 trip-ends per day with 1,360 vehicles per hour during the AM peak hour, and 2,698 vehicles per hour during the PM peak hour. For Cumulative (2015) without Project conditions, the following unsignalized intersection warrants the installation of a traffic signal: Elizabeth Lane/Clinton Keith Road. For Cumulative (2015) with Project Conditions, there are no new unsignalized intersections that are anticipated to be warranted in addition to the intersection of Elizabeth Lane/Clinton Keith Road.

The traffic analysis for the project contains recommended on-site and off-site improvements that have been incorporated as Mitigation Measures (MMs) TRANS-1 and TRANS-2. Table 3.15-8, located within Section 3.15, Transportation and Traffic, shows that traffic resulting from regional growth will also impact the study area intersections and will cause the intersection of Elizabeth Lane/Clinton Keith Road to operate at an unacceptable level of service (LOS) without the proposed improvements. The required improvement is designed to address the proposed project's impacts and consequently reduces delay at the intersection of Elizabeth Lane/Clinton Keith Road caused by the project. As shown in Table 3.15-8, implementation of the proposed improvement reduces the delay at the Elizabeth Lane/Clinton Keith Road intersection to an acceptable LOS C (AM peak period), and LOS D (PM peak period). Table 3.15-8 shows that, with implementation of the intersection improvement discussed above, Cumulative 2015 with Project impacts to study area intersections would be less than significant.

However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain as shown in Table 3.15-8, that is, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains cumulatively significant and unavoidable to transportation and traffic.

4.3.16 - Utilities and Service Systems

The project's cumulative impacts to utility systems are discussed separately below.

Water

The Elsinore Valley Municipal Water District (EVMWD) anticipates 100 gallons of water per day per capita for apartment land uses. For the purposes of determining population and housing impacts, a

factor of 3.3 persons per household[1] in the City of Wildomar was used to estimate the population of the proposed project. As such, with an estimated population of approximately 561 persons, the project is estimated to create a daily water demand of 56,100 gallons. As discussed in Section 3.16, the EVMWD will have adequate water supplies to meet the additional demand created by the project.

In addition, EVMWD's water supplies are surface water from Canyon Lake, groundwater pumping, and imported water from Metropolitan Water District of Southern California (Metropolitan) via the Temescal Valley Pipeline and Auld Valley Pipeline. Water supply from these sources is predicted to be fully reliable through 2030. EVMWD's future supplies include the construction of a pump station that would increase the Temescal Valley Pipeline capacity, and plans to address Elsinore Groundwater Basin's overdraft condition through the implementation of the Back Basin Groundwater Storage Project as part of the Elsinore Basin Ground Water Management Plan. EVMWD also plans to complete three groundwater projects between 2011 and 2024: Terra Cotta well, Cereal 1 and Corydon well blending pipeline, and Palomar well replacement. The available water supply from these projects under different hydrologies is presented in Section 3.16 of this DEIR. Based upon correspondence with the EVMWD and the District's Urban Water Management Plan, cumulative impacts would be less than significant.

Wastewater

As discussed in Section 3.16, existing wastewater treatment facilities are sufficient to maintain an adequate level of service for the project. The Regional Wastewater Treatment Plant that would serve the project site has a maximum capacity of 8 million gallons per day, with daily effluent of 5.5 million gallons per day. Thus, the Regional Wastewater Treatment Plant has a current excess capacity of approximately 2.5 million gallons per day. The project, in conjunction with other future development projects, would not have cumulatively considerable impacts on wastewater, as there is available capacity to meet current and future wastewater needs.

Storm Drainage

As discussed in Section 3.16, storm event flows will be mitigated on site and will be reduced to below or near existing conditions, and the proposed project will have a less than significant impact regarding the construction of new stormwater drainage facilities or expansion of existing facilities.

Other future development projects would be required to demonstrate no net increase in storm drainage or provide drainage impoundment facilities that would detain runoff prior to discharge into the storm drain facilities. Therefore, the project, in conjunction with other future development projects, would not have a cumulatively considerable impact on storm drainage.

Solid Waste

Implementation of the proposed project is estimated to generate approximately 1,104,417 pounds of construction debris and 230,658 pounds of demolition debris. Regional landfill capacity would be

[1] Source: Page 3.8-7 of the City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report August 2013. This document used an average household size of 3.3 residents.

available to accommodate this amount of solid waste, with a remaining capacity of over 14,000,000 cubic yards. Thus, the project is anticipated to have a less than significant impact on operational waste disposal because there is adequate regional landfill capacity to meet the disposal needs of the project and other future planned projects. Therefore, the project, in conjunction with other future development projects, would not have a cumulatively considerable impact on solid waste.

4.3.17 - Greenhouse Gases

The geographic scope for cumulative greenhouse gas impacts is global. Climate change is an inherently cumulative effect. An individual project cannot generate enough greenhouse gas emissions to effect a discernable change in global climate. However, the proposed project may participate in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on global climate change.

As detailed in the Air Quality and Global Climate Change Impact Analysis for the proposed project (Appendix B), the total emissions of greenhouses gases from the project site would be approximately 2,227.58 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year. A cumulative global climate change impact would occur if the greenhouses gas emissions created from the ongoing project operations would exceed the SCAQMD threshold of 3,000 $MTCO_2e$ per year. As such, operation of the proposed project would not create a significant cumulative impact to global climate change. Likewise, the project is consistent with the applicable strategies of the ARB Climate Change Scoping Plan. Therefore, the project will not result in a cumulatively considerable impact related to greenhouse gas emissions.

SECTION 5: ALTERNATIVES

5.1 - Introduction

In accordance with CEQA Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the project. The primary purpose of this section is to provide decision makers and the public with a reasonable range of feasible project alternatives that could attain most of the basic project objectives, but would avoid or substantially lessen any of the significant effects of the project.

CEQA Guidelines Section 15126.6 states:

> Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project . . .

This analysis is guided by the following considerations set forth under CEQA Guidelines Section 15126.6:

- An EIR need not consider every conceivable alternative to a project;
- An EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- Reasons for rejecting an alternative include:
  - Failure to meet most of the basic project objectives;
  - Infeasibility; or
  - Inability to avoid significant environmental effects.

Alternatives to a project must be considered even if they would impede, to some degree, the attainment of project objectives or be more costly (CEQA Guidelines Section 15126.6(b)). However, the range of alternatives addressed in an EIR need not be exhaustive, and is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those that the lead agency determines could feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project. An EIR need not consider an alternative whose effects cannot be reasonably ascertained, whose implementation is remote and speculative, or an alternative that would not substantially lessen or avoid the significant effects of the project. CEQA Guidelines Section 15126.6(d) states that if an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternatives shall be discussed, but "in less detail than the significant effects of the project as proposed."

CEQA Guidelines Section 15364 defines feasibility as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The determination of the feasibility of project alternatives may include, but is not limited to, factors such as: site suitability, economic viability, infrastructure availability, general plan consistency, regulatory and jurisdictional limitations, and whether the project proponent can reasonably acquire, control or otherwise have access to an alternative project site (CEQA Guidelines Section 15126.6(f)(1)).

A comparison of impacts associated with the project and alternatives is provided within this Section. In several cases, the description and severity of the impact may be the same under each scenario when compared with the CEQA Thresholds of Significance (i.e., both scenarios would result in a less than significant impact). However, the actual degree of impact may be slightly different under each scenario, and this relative difference is the basis for a conclusion of greater or lesser impacts. In addition, the alternatives analysis includes the assumption that all applicable mitigation measures associated with the project would be implemented with a given project alternative (e.g. Reduced Intensity Alternative).

An evaluation of a No Project Alternative is required by CEQA Guidelines Section 15126.6(e), and is included in this section. In addition to the No Project Alternative, the following two alternatives are analyzed and compared with the project:

1. **No Project Alternative:** The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur.

   Under this alternative, the project site would retain its Medium High Density Residential (MHDR) General Plan designation and its Industrial Park (I-P) Zoning designation. The existing buildings on-site (residence and garage) would continue to exist in their current state. The only traffic associated with the site would be from the existing structures on-site.

2. **Reduced Density Alternative:** Under this alternative, fewer but larger dwelling units are proposed, and the building configurations would remain the same as the proposed project. The number of dwelling units would be reduced by 34 units from 170 to 136, for a 20% reduction in density. This would result in roughly the same lot coverage, but with a lower density and less required parking. As such, additional landscaped/open space area would be provided under this alternative.

3. **Reduced Size Alternative:** Under this alternative, the same number of dwelling units would be contained in fewer buildings, resulting in less lot coverage compared with the proposed project. Therefore, the buildings under this alternative would be 4-5 stories in height, and additional landscaped/open space area would be provided under this alternative.

5.1.1 - Significant, Adverse and Unavoidable Impacts

The traffic analysis for the project contains recommended on-site and off-site improvements that have been incorporated as Mitigation Measures (MMs) TRANS-1 and MM TRANS-2. Table 3.15-8, evaluated in Section 3.15, Transportation and Traffic, shows that traffic resulting from regional growth will also impact the study area intersections and will cause the intersection of Elizabeth Lane/Clinton Keith Road to operate at an unacceptable level of service (LOS) without the proposed improvements. The required improvement is designed to address the proposed project's impacts and consequently reduces delay at the intersection of Elizabeth Lane/Clinton Keith Road caused by the project. As shown in Table 3.15-8, implementation of the proposed improvement reduces the delay at the Elizabeth Lane/Clinton Keith Road intersection to an acceptable LOS C (AM peak period), and LOS D (PM peak period). Table 3.15-8 shows that, with implementation of the intersection improvement discussed above, Cumulative 2015 with Project impacts to study area intersections would be less than significant.

However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain as shown in Table 3.15-8, that is, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable.

5.1.2 - Project Objectives

The project objectives are listed below.

- **OBJ-1:** Provide housing for a growing population in a portion of the City of Wildomar where existing infrastructure is already in place.
- **OBJ-2:** Create an aesthetically pleasing living environment on the Project site.
- **OBJ-3:** Establish a viable, long-term and economically feasible use of the Project site.
- **OBJ-4:** Develop a very high-density residential development that is in keeping with the character of adjacent residences the south and east of the project site.
- **OBJ-5:** Provide a range of housing options to residents within the City of Wildomar by offering one, two, and three-bedroom units to accommodate a variety of family sizes and budgets.

5.2 - Alternative Considered and Withdrawn: Alternative Site

The use of an alternative project site was not considered feasible, because no other sites are owned or controlled by the project proponent. No other sites were identified that would support the project and meet the project objectives based on size, configuration, location, and proximity to existing infrastructure. Furthermore, the use of an alternative site would be expected to result in the

same or similar environmental impacts as the project, which can all be reduced to less than significant with mitigation. Accordingly, an alternative site alternative was rejected from further consideration.

5.3 - Alternatives for Further Study

This section analyzes the following alternatives: No Project Alternative, Reduced Density Alternative, and Reduced Size Alternative. Table 5-1 provides a summary comparison, by individual issue area, for each alternative to the project.

5.4 - Alternative 1: No Project Alternative

CEQA Guidelines Section 15126.6(e) requires the discussion and evaluation of a No Project Alternative. The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition, and no development would occur.

Impacts from the project are compared with the No Project Alternative for each of the 17 topical issue areas discussed in the EIR in the sections that follow.

Table 5-1: Alternatives Comparison

Environmental Issue	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Reduced Size Alternative
Aesthetics	LTS	L	E	G
Agriculture and Forestry Resources	NI	E	E	E
Air Quality	LTS	L	L	E
Biological Resources	LTS w/mit	L	E	E
Cultural Resources	LTS w/mit	L	E	E
Geology and Soils	LTS w/mit	L	E	E
Greenhouse Gas Emissions	LTS	L	L	E
Hazards and Hazardous Materials	LTS w/mit	L	E	E
Hydrology and Water Quality	LTS w/mit	L	L	L
Land Use and Planning	LTS	L	E	E
Mineral Resources	LTS	E	E	E
Noise	LTS w/mit	L	L	E

Table 5 1 (cont.): Alternatives Comparison

Environmental Issue	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Reduced Density Alternative	Alternative 3: Reduced Size Alternative
Population and Housing	LTS	L	L	E
Public Services	LTS	L	L	E
Recreation	LTS	L	L	L
Transportation and Traffic	SIG	L	L	E
Utilities and Service Systems	LTS	L	L	E

Notes:
L = Lesser impact than the proposed project
G = Greater impact than the proposed project
LTS = Less than significant
LTS w/mit= Less than significant with mitigation
E = Equivalent impact to the proposed project
SIG = Significant, adverse and unavoidable
NI = No impact
Source: FCS, 2014.

5.4.1 - Aesthetics, Light, and Glare

The EIR concluded that aesthetics and light and glare impacts would be less than significant. The No Project Alternative would allow the site to remain in its current condition. Therefore, the No Project Alternative would have reduced impacts on aesthetics, light, and glare compared with the project, although impacts under the project would also be less than significant.

5.4.2 - Agricultural Resources and Forestry Resources

Under the No Project Alternative, the site would remain in its present condition, and there would be no impacts related to agricultural or forestry resources. The Draft EIR determined that the project would have no impacts on agricultural resources, and no impacts to forestry resources. Therefore, impacts in these areas under the No Project Alternative would be the same as what would occur under the proposed project.

5.4.3 - Air Quality

The No Project Alternative would result in no development on the site, so there would be no air quality impacts from construction or operational emissions. The project would result in a less than significant air quality impact, as discussed in Section 3.3, Air Quality. These less than significant project impacts would be further reduced and avoided under the No Project Alternative.

5.4.4 - Biological Resources

The No Project Alternative would leave the site in its present condition and no development would occur. Impacts from the project to biological resources were found to be less than significant with mitigation, and the Draft EIR concluded that the project would not have significant impacts on biological resources. Therefore, the No Project Alternative would have reduced impacts on biological

resources compared with the project, although impacts under the project would also be less than significant with mitigation.

5.4.5 - Cultural Resources

The No Project Alternative would leave the site in its present condition, and no grading or ground disturbance would occur. The Draft EIR concluded that the project would not have significant impacts to cultural resources, with incorporation of mitigation. Therefore, the No Project Alternative would have reduced impacts on cultural resources compared with the project, although impacts under the project would also be less than significant with mitigation.

5.4.6 - Geology Soils, and Seismicity

Under the No Project Alternative, the site would remain in its present condition, and there would be no potential impacts to future structures from geotechnical hazards. The Draft EIR determined that all potential impacts related to geology soil caused by implementation of the project would be reduced to less than significant levels through the implementation of mitigation. Therefore, the No Project Alternative would have reduced impacts related to geology and soils compared with the project, although impacts under the project would also be less than significant with mitigation.

5.4.7 - Hazards and Hazardous Materials

Under the No Project Alternative, the site would remain in its present condition, and there would be no increased impacts from hazards or hazardous materials associated with construction or new land uses. Implementation of the project would have potential impacts related to lead/asbestos remediation and discovery of soil contamination. However, these potential impacts will be reduced to less than significant levels through implementation of the recommended mitigation measures. Therefore, the No Project Alternative would have reduced impacts related to hazards and hazardous materials compared with the project, although impacts under the project would be less than significant with mitigation.

5.4.8 - Hydrology and Water Quality

Under the No Project Alternative, the site would remain in its present condition, and there would be no potential impacts to existing drainages or water quality. Therefore, the No Project Alternative would have reduced impacts related to hydrology and water quality compared with the project, although impacts under the project would be less than significant with mitigation.

5.4.9 - Land Use and Planning

The site would remain in its present condition under the No Project Alternative, and there would be no need for a General Plan Amendment from Medium High Density Residential (MHDR) to Very High Density Residential (VHDR), or a change of zone from Industrial Park (IP) to General Residential (VHDR) to accommodate the proposed project. The Draft EIR concluded that the project would not result in significant land use and planning impacts, and no mitigation is required.

Therefore, the No Project Alternative would have reduced impacts related to land use and planning compared with the project, although impacts under the project would be less than significant without mitigation.

5.4.10 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. The site would remain undisturbed and in its present condition under the No Project Alternative, so no impacts to mineral resources would occur. The City of Wildomar General Plan shows the project site as being located within an area designated by the State as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data). The project site would not be a feasible candidate for mining operations because of the incompatible land uses in the vicinity. Therefore, although the project site is designated by the State as an area containing mineral deposits, the significance of these resources is unknown at this time and the site is considered unsuitable for mining. Thus, impacts from the proposed project to known mineral resources of value to the region or State would be less than significant. The No Project Alternative would have less than significant impacts on mineral resources similar to the project.

5.4.11 - Noise

The site would remain in its present condition under the No Project Alternative, and no construction noise or operational noise would occur. The Draft EIR concluded that with implementation of mitigation measures, the project would have less than significant impacts regarding noise. Therefore, the No Project Alternative would have reduced impacts related to noise compared with the project, although impacts under the project would be less than significant without mitigation.

5.4.12 - Population and Housing

The No Project Alternative would leave the site in its present condition and therefore would not result in increased population, housing, or employment. The Draft EIR concluded that the project would have a less than significant impact regarding population and housing. The No Project Alternative would have a lesser impact than the proposed project because no additional housing units or persons would be added to the site, as would occur under the proposed project.

5.4.13 - Public Services

The No Project Alternative would not involve any new development, and would therefore not result in an increased need for police, fire, schools, or public services. Therefore, this alternative would have fewer impacts than the project, which will necessarily result in the need for certain public services. However, the Draft EIR determined that with the required payment of development impact fees for public services, the project would not result in significant impacts to public services. Therefore, the No Project Alternative would have reduced impacts on public services compared with the project, although impacts under the project would also be less than significant.

5.4.14 - Recreation

The No Project Alternative would not involve any new residential development, and would therefore not result in an increased need for recreation/park services. Therefore, this alternative would have fewer impacts compared with the project. However, the Draft EIR determined that the project would also not produce significant impacts to recreation facilities, without the need for mitigation. Therefore, the No Project Alternative would have similar, although slightly reduced, impacts on recreation facilities compared with the project, which would also be less than significant.

5.4.15 - Transportation and Traffic

The No Project Alternative would allow the site to remain in its present condition, resulting in fewer traffic impacts on local roads and the I-15 Freeway. The Draft EIR determined that the transportation impacts of the project could be reduced to less than significant levels with implementation of recommended mitigation measures. In addition, there would be a less than significant cumulative traffic impact from the proposed project, because under the Existing + Ambient + Cumulative + Project (2015) traffic conditions, there are no new intersections anticipated to operate at an unacceptable levels of service in addition to the deficient location (Elizabeth Lane (NS)/Clinton Keith Road (EW)) identified under Existing + Ambient + Cumulative (2015) traffic conditions. However, the City cannot be certain that the other projects shown in Table 3.15-6 will be built and that others will pay to address their impacts at the intersection of Elizabeth Lane/Clinton Keith Road. Without certain funding, the City cannot guarantee that the proposed improvement will be constructed as proposed by MM TRANS-1. Because the City cannot be certain that the improvements will occur, the EIR must assume that the improvement may not occur and that the project impacts would remain as shown in Table 3.15-8. As shown in Table 3.15-8, the intersection analysis for Cumulative 2015 with Project would result in a significant impact to the intersection of Elizabeth Lane/Clinton Keith Road. While the City will collect fees representing the proportionate share of the proposed project's impact at the intersection identified in MM TRANS-1, for the reasons explained in this section, this impact remains significant and unavoidable. The No Project Alternative would avoid the significant traffic impacts that would occur under the proposed project.

5.4.16 - Utilities and Service Systems

Under the No Project Alternative, the site would remain in its present condition and there would be no potential impacts to existing or planned utility systems (i.e., no increase in the consumption of water or energy resources, or the additional production of wastewater or solid waste). With construction of planned improvements and payment of established development impact fees, the project is also not expected to produce any significant impacts on these systems. Therefore, the No Project Alternative would have reduced impacts on utilities and service systems compared with the project, although impacts under the project would also be less than significant.

5.4.17 - Greenhouse Gases

Under the No Project Alternative, no new development on the site would occur, and there would be no greenhouse gas impacts from construction or operations on the site. The project would result in a less than significant greenhouse gas emissions impact, as discussed in Section 3.17, Greenhouse

Gases. The less than significant project impacts would be further reduced or avoided under the No Project Alternative.

5.4.18 - Conclusion for No Project Alternative

The No Project Alternative would further reduce and/or avoid all of the potential impacts that would occur under the proposed project, which are all less than significant or can be mitigated to less than significant. The project's impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for Cumulative 2015 with Project. However, the No Project Alternative would not achieve any of the project objectives.

5.5 - Alternative 2: Reduced Density Alternative

Impacts from the project are compared with the Reduced Density Alternative for each of the 17 topical issue areas discussed in the EIR in the sections that follow.

5.5.1 - Aesthetics, Light, and Glare

The EIR concluded that the proposed project's aesthetics and light and glare impacts would be less than significant. Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as the proposed project. The Reduced Density Alternative would require less parking than the proposed project, and some of the parking area would instead be dedicated to additional landscaped/open space area. Therefore, the Reduced Density Alternative would have roughly equal impacts on aesthetics, light, and glare compared with the project, which would be less than significant.

5.5.2 - Agricultural Resources and Forestry Resources

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Under this alternative, there would be no impacts related to agricultural or forestry resources. Likewise, the Draft EIR determined that the project would have no impacts on agricultural resources, and no impacts to forestry resources. Therefore, impacts in these areas under the Reduced Density Alternative would be the same as what would occur under the proposed project.

5.5.3 - Air Quality

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Construction emissions would be similar to the proposed project, as the grading, earthwork, and construction activities would be roughly the same. However, the Reduced Density Alternative would have reduced air quality emissions compared with the proposed project, due to fewer daily vehicle trips associated with the reduced number of dwelling units. Therefore, the Reduced Density Alternative would have a slightly lesser impact on air quality compared with the project, due to the anticipated reduced operational emissions. The project would result in a less than significant air quality impact, as discussed in Section 3.3, Air Quality.

5.5.4 - Biological Resources

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Grading, earthwork, and construction activities would also be similar to the proposed project. The Reduced Density Alternative would require less parking than the proposed project, and some of the parking area would instead be dedicated to additional landscaped/open space area. However, no sensitive habitat was found to exist on the project site. Impacts from the project to biological resources were found to be less than significant with mitigation, and the Draft EIR concluded that the project would not have significant impacts on biological resources. Therefore, the Reduced Density Alternative would have roughly equal impacts on biological resources compared with the project, which are less than significant with mitigation.

5.5.5 - Cultural Resources

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. The Reduced Density Alternative would result in an amount of grading and ground disturbance similar would occur under the project. The Draft EIR concluded that the project would not have significant impacts to cultural resources, with mitigation. Similar mitigation measures would likely be incorporated under the Reduced Density Alternative; therefore, this alternative would result in roughly equal impacts to cultural resources.

5.5.6 - Geology, Soils, and Seismicity

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Similar grading, earthwork, and construction activities would occur under the Reduced Density Alternative. While the Draft EIR determined that implementation of the project would have various geotechnical impacts, they would be reduced to less than significant levels through compliance with the California Building Code and the implementation of recommended mitigation measures. Therefore, impacts related to geology and soils under both the Reduced Density Alternative and the project would be roughly equal and less than significant.

5.5.7 - Hazards and Hazardous Materials

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Implementation of the project would have potential impacts related to lead/asbestos remediation and potential discovery of soil contamination. However, these potential impacts will be reduced to less than significant levels through implementation of the recommended mitigation measures, and similar mitigation would be implemented for the Reduced Density Alternative. Therefore, the Reduced Density Alternative would have impacts related to hazards and hazardous materials similar to the project.

5.5.8 - Hydrology and Water Quality

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as the proposed project. The Reduced Density Alternative is anticipated to have reduced hydrology and water quality impacts compared with the project, because this alternative would reduce the size of the impervious parking area on-site, due to the reduced number of dwelling units. As such, storm drainage runoff would be reduced compared with the proposed project, due to a greater percentage of landscaped area that would be provided under this alternative. The project was found to result in less than significant impacts to hydrology and water quality, with mitigation. These impacts would be further reduced under the Reduced Density Alternative, due to the reduced amount of impervious parking surfaces and greater amount of landscaped/open space areas.

5.5.9 - Land Use and Planning

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain the same as under the proposed project. A General Plan Amendment and change of zone would still be required to develop the Reduced Density Alternative, similar to the proposed project. The proposed project was found to have a less than significant impact to land use and planning, with no mitigation required. Therefore, impacts under this alternative would be roughly equal to the proposed project.

5.5.10 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as the proposed project. Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. The City of Wildomar General Plan shows the project site as being located within an area designated by the State as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data). The project site would not be a feasible candidate for mining operations because of the incompatible land uses in the vicinity. Therefore, although the project site is designated by the State as an area containing mineral deposits, the significance of these resources is unknown at this time and the site is considered unsuitable for mining. Thus, the Reduced Density Alternative would have roughly equal impacts to known mineral resources of value to the region or state compared with the proposed project, which would be less than significant.

5.5.11 - Noise

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. The Reduced Density Alternative would involve similar construction and earthwork requirements, and would result in the same levels of temporary construction noise as would occur under the project, which was determined to be less than significant with mitigation. This alternative would result in less operational and traffic noise, due to fewer daily vehicle trips associated with the reduced number of dwelling units. All noise impacts under the project were found to be less than

significant with mitigation, and the project was not found to contribute to long-term traffic noise increases. However, traffic noise and operational noise impacts under the Reduced Density Alternative would be slightly reduced compared with the proposed project.

5.5.12 - Population and Housing

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. The Reduced Density Alternative would result in a reduced population compared with the proposed project, due to the reduced number of dwelling units under this alternative. The Draft EIR concluded that the project would have a less than significant impact regarding population and housing. The Reduced Density Alternative would have a similar but slightly reduced impact to population and housing in the City of Wildomar than would occur under the proposed project.

5.5.13 - Public Services

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain the same as under the proposed project. This alternative would have reduced impacts regarding public services compared with the proposed project, because the reduced number of dwelling units and persons under this alternative would have a reduced demand on police, fire, schools, and public services. However, the Draft EIR determined that with the required payment of development impact fees for public services, the project would not result in significant impacts to public services. Therefore, the Reduced Density Alternative would have reduced impacts on public services compared with the project, although impacts under the project would also be less than significant.

5.5.14 - Recreation

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. The project was found to result in less than significant impacts to recreational facilities, without the need for mitigation. The Reduced Density Alternative would introduce fewer new residents to the project area than would occur under the proposed project, and may provide more open space than the proposed project, due to the reduced parking requirements. Therefore, this alternative would result in somewhat lesser impacts compared with the project, although impacts under the project would also be less than significant.

5.5.15 - Transportation and Traffic

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. The Reduced Density Alternative would result in fewer transportation and traffic impacts because it would result in 20% fewer dwelling units, and as such fewer daily vehicle trips would be generated by this alternative, compared with the proposed project. Therefore, the Reduced Density Alternative would have reduced impacts to transportation and traffic compared with the project. However, the Alternatives impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for cumulative 2015 conditions, similar to the proposed project.

5.5.16 - Utilities and Service Systems

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations and lot coverage would remain roughly the same as under the proposed project. Because fewer dwelling units are proposed, it is anticipated that this alternative would have incrementally reduced impacts to existing or planned utility systems (i.e., a lesser increase in the consumption of water or energy resources, or the additional production of wastewater or solid waste, compared with the proposed project). With construction of planned improvements and payment of established development impact fees, the project is also not expected to produce any significant impacts on these systems. Therefore, the Reduced Density Alternative would have reduced impacts on utilities and service systems compared with the project, although impacts under the project would also be less than significant.

5.5.17 - Greenhouse Gases

Under the Reduced Density Alternative, fewer but larger dwelling units are proposed, and the building configurations, lot coverage, and construction emissions would remain roughly the same as the proposed project. The Reduced Density Alternative is anticipated to have reduced operational greenhouse gas emissions compared with the proposed project, due to fewer daily vehicle trips associated with the reduced number of dwelling units. The project would result in a less than significant greenhouse gas impact, as discussed in Section 3.17, Greenhouse Gases. The Reduced Density Alternative would have a slightly lesser impact on greenhouse gases compared with the project, due to the anticipated reduced operational emissions.

5.5.18 - Conclusion for the Reduced Density Alternative

The Reduced Density Alternative would result in equal or slightly reduced impacts compared with the project in all areas. However, the Alternatives impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for cumulative 2015 conditions, similar to the proposed project. The Reduced Density Alternative would meet the project objectives, but to a lesser degree than the project. Specifically, the Reduced Density Alternative would not fully meet Objective 4, which is to develop a very high-density residential development. In addition, Objectives 1, 3, and 5 would not be as fully met, thereby providing fewer housing opportunities to Wildomar residents, and a corresponding reduction in economic return on the investment in the project, due to the removal of 34 dwelling units.

5.6 - Alternative 3: Reduced Size Alternative

Impacts from the project are compared with the Reduced Size Alternative for each of the 17 topical issue areas discussed in the EIR in the sections that follow.

5.6.1 - Aesthetics, Light, and Glare

The EIR concluded that aesthetics and light and glare impacts would be less than significant under the proposed project. Under the Reduced Size Alternative, the same number of dwelling units would be contained in fewer buildings, resulting in less lot coverage compared with the proposed project. The Reduced Size Alternative would allow development on the project site, but in a design that

would result in taller, buildings being developed than would occur under the proposed project. Greater aesthetic and view impacts would be anticipated under this scenario because of the increased building heights of 4 to 5 stories. Therefore, the Reduced Size Alternative would have greater aesthetic impacts compared with the project.

5.6.2 - Agricultural Resources and Forestry Resources

Under the Reduced Size Alternative, the same number of dwelling units would be contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. The Draft EIR determined that the project would have no impacts on agricultural resources, and no impacts to forestry resources. Therefore, impacts in these areas under the Reduced Size Alternative would be the same as what would occur under the proposed project.

5.6.3 - Air Quality

Under the Reduced Size Alternative, the same number of dwelling units would be constructed in fewer buildings, resulting in less lot coverage but taller buildings compared with the proposed project. The project would result in a less than significant air quality impact, as discussed in Section 3.3, Air Quality. The Reduced Size Alternative is anticipated to have similar construction and operational air quality emissions compared with the proposed project, because the same number of dwelling units would be developed.

5.6.4 - Biological Resources

Under the Reduced Size Alternative, the same number of dwelling units would be constructed in fewer, taller buildings, resulting in less lot coverage than would occur under the proposed project. Some of this lot area would instead be dedicated to additional landscaped/open space area. However, no sensitive habitat was found to exist on the project site. Impacts from the project to biological resources were found to be less than significant with mitigation, and the Draft EIR concluded that the project would not have significant impacts on biological resources. Therefore, the Reduced Size Alternative would have roughly equal impacts on biological resources compared with the project, which are less than significant with mitigation.

5.6.5 - Cultural Resources

Under the Reduced Size Alternative, the same number of dwelling units would be constructed in fewer, taller buildings, resulting in less lot coverage than would occur under the proposed project. Some of this lot area would instead be dedicated to additional landscaped/open space area. However, the Reduced Density Alternative would still result in a similar amount of grading and ground disturbance as would occur under the project. The Draft EIR concluded that the project would not have significant impacts to cultural resources, with mitigation. Similar mitigation measures would likely be incorporated under the Reduced Size Alternative; therefore, this alternative would result in roughly equal impacts to cultural resources as would occur under the proposed project.

5.6.6 - Geology, Soils, and Seismicity

Under the Reduced Size Alternative, the same number of dwelling units would be constructed in fewer, taller buildings, resulting in less lot coverage than would occur under the proposed project. Some of this lot area would instead be dedicated to additional landscaped/open space area. Similar grading, earthwork, and construction activities would occur under the Reduced Size Alternative. While the Draft EIR determined that implementation of the project would have various geotechnical impacts, they would be reduced to less than significant levels through compliance with the California Building Code and the implementation of recommended mitigation measures. Therefore, impacts related to geology and soils under both the Reduced Size Alternative and the project would be roughly equal and less than significant.

5.6.7 - Hazards and Hazardous Materials

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. Implementation of the project would have potential impacts related to lead/asbestos remediation and potential discovery of soil contamination. However, these potential impacts will be reduced to less than significant levels through implementation of the recommended mitigation measures, and similar mitigation would be implemented for the Reduced Size Alternative. Therefore, the Reduced Size Alternative would have similar impacts related to hazards and hazardous materials compared with the project.

5.6.8 - Hydrology and Water Quality

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. The Reduced Size Alternative is anticipated to have reduced hydrology and water quality impacts compared with the project, because this alternative would reduce the amount of impervious surfaces on the project site, due to the reduced lot coverage. As such, storm drainage runoff would be reduced compared with the proposed project, due to a greater percentage of landscaped area and open space areas that would be provided under this alternative. The project was found to result in less than significant impacts to hydrology and water quality, with mitigation. These impacts would be further reduced under the Reduced Size Alternative, due to the reduced amount of impervious parking surfaces and greater amount of landscaped/open space areas.

5.6.9 - Land Use and Planning

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. A General Plan Amendment and change of zone would still be required to develop the Reduced Size Alternative, similar to the proposed project. The proposed project was found to have a less than significant impact to land use and planning, with no mitigation required. Therefore, impacts under this alternative would be roughly equal to the proposed project.

5.6.10 - Mineral Resources

Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. Under the Reduced Size Alternative, the same number of dwelling units would be contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. Mineral resources impacts relate to loss of mineral resources, incompatible land uses and hazards related to quarries/mines. The City of Wildomar General Plan shows the project site as being located within an area designated by the State as MRZ-3 (areas containing mineral deposits, the significance of which cannot be evaluated from available data). The project site would not be a feasible candidate for mining operations because of the incompatible land uses in the vicinity. Therefore, although the project site is designated by the State as an area containing mineral deposits, the significance of these resources are unknown at this time and the site is considered unsuitable for mining. Thus, impacts from the proposed project to known mineral resources of value to the region or state would be less than significant. The Reduced Size Alternative would have less than significant impacts on mineral resources similar to those of the project.

5.6.11 - Noise

The Reduced Size Alternative would involve similar construction and earthwork requirements, and would result in the same levels of temporary construction noise as would occur under the project, which was determined to be less than significant with mitigation. This alternative would also result in similar operational and traffic noise, because the number of dwelling units and corresponding vehicle trips would be the same as would occur under the project. All noise impacts under the project were found to be less than significant with mitigation, and the project was not found to contribute to long-term traffic noise increases. The Reduced Size Alternative would result in roughly equal noise impacts compared with the proposed project.

5.6.12 - Population and Housing

Under the Reduced Size Alternative, the same number of dwelling units would be contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. The Reduced Size Alternative would result in the same anticipated number of new residents as the proposed project. The Draft EIR concluded that the project would have a less than significant impact regarding population and housing. As such, the Reduced Size Alternative would have a similar less than significant impact than the proposed project regarding impacts to population and housing in the City of Wildomar.

5.6.13 - Public Services

Under the Reduced Size Alternative, the same number of dwelling units would be contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. This alternative is anticipated to have the same impacts regarding public services because the number of dwelling units and persons under this alternative would be the same. As such, this alternative will have a similar demand on police, fire, schools, and public services as the proposed project, which were all found to be less than significant.

5.6.14 - Recreation

Under the Reduced Size Alternative the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. The project was found to result in less than significant impacts to recreational facilities, without the need for mitigation. The Reduced Size Alternative would introduce the same number of new residents to the project area as would occur under the proposed project, but may provide more open space than the proposed project, due to the reduced lot coverage. Therefore, this alternative may result in somewhat lesser impacts compared with the project, although impacts under the project would also be less than significant.

5.6.15 - Transportation and Traffic

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. Therefore, the Reduced Size Alternative would have similar impacts to transportation and traffic compared with the project, which would also be significant and unavoidable.

5.6.16 - Utilities and Service Systems

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. Thus, it is anticipated than this alternative would have the same potential impacts to existing or planned utility systems (i.e., increase in the consumption of water or energy resources or the additional production of wastewater or solid waste). With construction of planned improvements and payment of established development impact fees, the project is not expected to produce any significant impacts on these systems. Therefore, the Reduced Size Alternative would have similar impacts on utilities and service systems compared with the project, which would also be less than significant.

5.6.17 - Greenhouse Gases

Under the Reduced Size Alternative, the same number of dwelling units are contained in fewer, taller buildings, resulting in less lot coverage compared with the proposed project. The project would result in a less than significant greenhouse gas impact, as discussed in Section 3.17, Greenhouse Gases. The Reduced Size Alternative is anticipated to have greenhouse gas emissions roughly equal to the proposed project, because the same number of dwelling units would be developed under this alternative.

5.6.18 - Conclusion for Reduced Size Alternative

The Reduced Size Alternative would result in equal or slightly reduced impacts compared with the project in all areas. However, the Alternatives impacts to the intersection of Elizabeth Lane/Clinton Keith Road would remain significant and unavoidable for cumulative 2015 conditions, similar to the proposed project. This alternative would meet the project objectives, but to a lesser degree than the proposed project. Specifically, because the same number of dwelling units would be contained in fewer, taller buildings, building heights of 4 to 5 stories under this Alternative would not meet

Objective 4, which is to provide a residential development that is in keeping with the character of adjacent residences the south and east of the project site.

5.7 - Environmentally Superior Alternative

As required by CEQA Guidelines Section 15126.6, one of the alternatives must be identified as an Environmentally Superior Alternative. The Environmentally Superior Alternative is the one that would result in the fewest or least significant impacts. If the Environmentally Superior Alternative is the No Project Alternative, as in this case, then an Environmentally Superior Alternative must be selected from the remaining alternatives.

The No Project Alternative would avoid all environmental impacts without the need for mitigation measures that would be required under the project. The No Project Alternative would also avoid impacts to the intersection of Elizabeth Lane/Clinton Keith Road, which is determined to be significant and unavoidable for Cumulative 2015 with Project. Of the remaining alternatives, Alternative 2, the Reduced Density Alternative, would be the Environmentally Superior Alternative. A comparison of the alternatives is shown in Table 5-1 for informational purposes only.

Table 5-1 provides a summary of each alternative related to the environmental issues evaluated in Section 3, Environmental Impact Analysis, of this Draft EIR, and includes the level of significance associated with the project in order to facilitate a thorough comparison of the alternatives. Refer to Section 3 of this document for a detailed discussion of each environmental issue.

SECTION 6: OTHER CEQA CONSIDERATIONS

6.1 - Introduction

This section addresses other considerations of the California Environmental Quality Act (CEQA). More specifically, this section includes a description of growth-inducing impacts of the project, which pertains to ways in which the project could promote either direct or indirect growth. Additionally, this addresses significant irreversible changes to the environment, which would result from implementation of the project. This section includes a discussion of any significant and unavoidable impacts of the project, which are significant impacts that result from the project and that can be mitigated, but not to a less than significant level. Finally, in accordance with Appendix F of CEQA, this section includes a discussion of energy conservation.

6.2 - Growth-Inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the project's characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines Section 15126.2(d)).

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing population growth, or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth may provide a catalyst for future unrelated development in an area such as a new residential community that requires additional commercial uses to support residents.

At buildout, the project will develop 170 apartment units. The new residential units envisioned would result in direct population growth; however, the project's growth projections are accounted for the Wildomar General Plan growth projections, which in turn are reflected in the regional growth projections set forth in the City of Wildomar (see Section 3.12, Population and Housing). Development and land use activities that are consistent with the General Plan are inherently "planned growth," and would not be considered growth-inducing.

The project area is currently served by urban infrastructure and utilities, including roads, potable water, wastewater, storm drainage facilities, electricity, and natural gas. As such, the project would not result in a removal of a physical barrier to growth (i.e., indirect growth inducement).

In summary, development of land use and infrastructure that are contemplated by the project have been planned for by the General Plan and therefore would not be considered as resulting in significant direct or indirect growth-inducing impacts.

6.3 - Significant Irreversible Changes

The environmental effects of the proposed project are summarized in the Executive Summary, and are analyzed in detail in Section 3, Environmental Impact Analysis, of this Draft EIR.

As mandated by the CEQA Guidelines, the Draft EIR must address any significant irreversible environmental change that would result from implementation of the proposed project. Specifically, pursuant to the CEQA Guidelines (Section 15126.2(c)), such an impact would occur if:

- The project would involve a large commitment of nonrenewable resources;
- Irreversible damage can result from environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy).

Development of the project would result in an irretrievable commitment of non-renewable resources such as energy supplies for future residents and construction-related materials. Day-to-day activities would involve the use of non-renewable resources such as petroleum and natural gas during operations. New development projects would be required to adhere to the latest adopted edition of the California Building Standards Code, which includes a number of standards that would reduce energy demand, water consumption, wastewater generation, and solid waste generation that would collectively reduce the demand for resources. This would result in the emission and generation of less pollution and effluent and lessen the severity of corresponding environmental effects. Although development activities that occur pursuant to the project would result in an irretrievable commitment of non-renewable resources, the commitment of these resources would not be significantly inefficient, unnecessary, or wasteful.

The project would develop as many as 170 apartment units on the project site. The proposed residential uses would not handle large quantities of hazardous materials or engage in activities that have the potential to result in serious environmental accidents (from chemical manufacturing, mineral extraction, refining, etc.). As such, the project would not have the potential to cause serious environmental accidents.

The project would result in greater demand for resources such as energy and water; however, such consumption would not be unusually high or disproportionate relative to similar land uses. The project would implement a number of design features and mitigation measures to reduce energy and water consumption. These design features and mitigation measures exceed state and local requirements for energy and water conservation, demonstrating the proposed project's justifiable consumption.

Therefore, the project's end uses have limited potential to cause significant environmental accidents through releases into the environment. Those facilities that handle large quantities of hazardous

materials are required to comply with federal and state statutes and regulations concerning transport, use, handling, storage, and disposal of these materials. Thus, compliance with applicable requirements would make the likelihood of hazardous materials release very low.

6.4 - Significant and Unavoidable Impacts

The environmental effects of the proposed project are summarized in the Executive Summary, and are analyzed in detail in Section 3, Environmental Impact Analysis, of this Draft EIR. The project was found not to result in any significant and unavoidable impacts.

6.5 - Energy Conservation

Public Resources Code Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. 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 State responses to energy emergencies, and—perhaps most importantly—promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created Appendix F of the CEQA Guidelines.

CEQA Guidelines Appendix F is an advisory document that assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. For the reasons set forth below, this EIR concludes that the project would not result in the wasteful, inefficient, and unnecessary consumption of energy, would not cause the need for additional natural gas or electrical energy-producing facilities, and, therefore, would not create a significant impact on energy resources.

6.5.1 - Regulatory Setting

Federal and state agencies regulate energy use and consumption through various means and programs. At 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. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. At the state level, the California Public Utilities Commission (CPUC) and the CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned utilities in the energy, rail, telecommunications, and water fields. The CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new

on-road motor vehicles. Some of the more relevant federal and State energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act

The Federal Energy Policy and Conservation Act of 1975 sought to ensure 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. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. The Corporate Average Fuel Economy (CAFE) program, which is administered by United States Environmental Protection Agency, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The United States Environmental Protection Agency calculates a CAFE value for each manufacturer, based on city and highway fuel economy test results and vehicle sales. On the basis of the information generated under the CAFE program, the United States Department of Transportation is authorized to assess penalties for noncompliance. In the course of its over 30-year history, this regulatory program has resulted in vastly improved fuel economy throughout the nation's vehicle fleet.

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) such as the Southern California Association of Governments were required 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 that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution.

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.

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 providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicle miles traveled, and accommodating pedestrian and bicycle access.

Title 24, Energy Efficiency Standards

Title 24, which was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, provides energy efficiency standards for residential and nonresidential buildings. According to the CEC, since the energy efficiency standards went into effect in 1978, it is estimated that California residential and nonresidential consumers have reduced their utility bills by at least $15.8 billion.

California's Building Energy Efficiency Standards are updated approximately every three-years. The 2013 Standards improve upon the 2008 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2013 Standards went into effect July 1, 2014, and may be reviewed online at http://www.energy.ca.gov/2012publications/CEC-400-2012-004/CEC-400-2012-004-CMF-REV2.pdf.

Because the adoption of Title 24 post-dates the adoption of AB 1575, it has generally been the presumption throughout the State that compliance with Title 24 (as well as compliance with the federal and State regulations discussed above) ensures that projects will not result in the inefficient, wasteful, and unnecessary consumption of energy. As is the case with other uniform building codes, Title 24 is designed to provide certainty and uniformity throughout the State while ensuring that the efficient and non-wasteful consumption of energy is carried out through design features. Large infrastructure transportation projects that cannot adhere to Title 24 design-build performance standards may, depending on the circumstances, undertake a more involved assessment of energy conservation measures in accordance with some of the factors set forth in Appendix F of the CEQA Guidelines. As an example, pursuant to the California Department of Transportation CEQA implementation procedures and Federal Highway Administration (FHWA) Technical Advisory 6640.8A, a detailed energy study is generally only required for large-scale infrastructure projects. However, for the vast majority of residential and nonresidential projects, adherence to Title 24 is deemed necessary to ensure that no significant impacts occur from the inefficient, wasteful, and unnecessary consumption of energy. As a further example, the adoption of federal vehicle fuel standards, which have been continually improved since their original adoption in 1975, have also protected against the inefficient, wasteful, and unnecessary use of energy.

6.5.2 - Energy Requirements of the Project

Short-term construction and long-term operational energy consumption are discussed below.

Short-Term Construction

Development and land use activities contemplated by the project would include short-term construction activities that would consume energy, primarily in the form of diesel fuel (e.g., mobile construction equipment) and electricity (e.g., power tools).

Construction taking place within the project area would be required to monitor air quality emissions using applicable regulatory guidance such as the SCAQMD CEQA Guidelines. The policy indirectly relates to construction energy consumption because construction air pollutant emissions are reduced through functions of energy consumption. As such, evaluation of air quality emissions on a project-by-project basis would likely utilize energy-reducing activities such as anti-idling measures, limits on duration of activities, and the use of alternative fuels, thereby reducing energy consumption.

Finally, there are no aspects of the project that would foreseeably result in the inefficient, wasteful, or unnecessary consumption of energy during construction activities. For example, there are no policies that would directly or indirectly cause construction activities to be any less efficient than would otherwise occur elsewhere (restrictions on equipment, labor, types of activities, etc.).

In summary, the project would not result in the inefficient, wasteful, or unnecessary consumption of energy during construction activities.

Long-Term Operations

Transportation Energy Demand

Development and land use activities contemplated by the project would include long-term operational activities that would consume energy, both in the form of transportation fuel and building/equipment energy (e.g., electricity and natural gas). It is not possible to reasonably estimate the amount of energy consumed by operational activities, as a number of hard-to-predict variables influence energy consumption.

A key aspect of the project is to reduce vehicle miles traveled (which reduce transportation fuel consumption) through the development of a pedestrian-oriented residential and recreation uses within the project site and area. The Riverside Transit Authority (RTA) Routes 23, 217, and 79 currently service the project area. As this project and the surrounding area develop, the RTA may reassess the potential demand for these facilities in the area, and may establish new routes near the project area. Development coordination with RTA will determine the need for future bus turnouts. The design of the project includes curbs and sidewalks where required, thereby encouraging alternate methods of transportation for future development. Development of the project would comply with the development standards for the City. All access would be in compliance with Americans with Disabilities Act standards for accessibility. Therefore, potential impacts would be less than significant. Such uses would be well positioned to allow residents to use the RTA services, rather than travel by single-occupant vehicle.

In summary, the project would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy during operational activities.

Building Energy Demand

All new residential development within the project boundaries would be subject to the latest adopted edition of the Title 24 energy efficiency standards, which are among the most stringent in the United States. As such, implementation of the project would not result in the unnecessary, wasteful, or inefficient use of energy.

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 7: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

7.1 - Persons and Organizations Consulted

7.1.1 - Public Agencies

State Agencies

California Department of Transportation

Office Chief, Community and Regional Planning ..... Daniel Kopulsky

South Coast Air Quality Management District

Program Supervisor, CEQA Inter-Governmental Review ..... Ian MacMillan

Native American Heritage Commission

Program Analyst ..... Dave Singleton

California Department of Fish and Wildlife

Senior Environmental Scientist ..... Jeff Brandt

Local Agencies

Temecula Band of Luiseño Mission Indians

Cultural Analyst ..... Anna Hoover

Southern California Edison

Project Manager ..... Laura Judy
Local Public Affairs Region Manager ..... Jeremy Goldman

Lake Elsinore Unified School District

Director, Facilities and Operations ..... Tina Sayers-Koonce
Administrative Secretary ..... Karen Kosi

Elsinore Valley Municipal Water District

Development and Records Coordinator ..... Cher Quinones

7.1.2 - Organizations

Waste Management

Inside Commercial Sales Representative ..... Lisa Ongeano

Southern California Gas Company

Assistant Planner ..... Steven Vargas

7.2 - List of Preparers

7.2.1 - Lead Agency

City of Wildomar

Planning Director, City of Wildomar ..... Matthew C. Bassi, Planning Director

7.2.2 - Lead Consultant

FirstCarbon Solutions

Project Director ..... Frank Coyle
Project Manager ..... Charles Holcombe
Assistant Project Manager ..... Arabesque Said
Environmental Analyst ..... Margaret F. Partridge, AICP, LEED Green Associate
Environmental Analyst ..... Liz Westmoreland
Quality Control ..... Christine Jacobs-Donoghue
Air Quality Specialist ..... Chryss Meier
Biologist ..... Scott Crawford
Archaeologist ..... Carrie Wills
Associate Council ..... Tracy Owens
Intern ..... Angela Pan
Word Processor ..... Ericka Rodriguez
Editor ..... Ed Livingston
GIS Personnel ..... Karlee McCracken
Reprographics ..... Octavio Perez
Kevin Salguero

7.2.3 - Technical Subconsultants

CRM TECH

Principal ..... Bai "Tom" Tang, M.A.

Earth-Strata, Inc.

Professional Geologist ..... William T. Doyle

Kunzman Associates, Inc.

Senior Associate ..... Katie Wilson, M.S.
Principal Associate ..... Carl Ballard, LEED GA
Principal ..... William Kunzman, P.E.
Senior Associate ..... Roma Stromberg, INCE
Transportation and Noise Control Engineer ..... Chris Pylant, INCE

Pacific Coast Land Consultants, Inc.

Staff.....Travis P. Vincent Jr.

PMC

Principal.....Mark Teague, AICP

RCA Associates, LLC

Principal and Senior Biologist..... Randall C. Arnold, Jr.
Botanist..... Patricia Moore

Trames Solutions, Inc.

Associate.....Scott Sato, P.E.

7.2.4 - Legal Counsel

Burke, Williams & Sorenson, LLP

City Attorney..... Thomas D. Jex

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 8: REFERENCES

About EVMWD. 2014. Website: http://www.evmwd.com/about/default.asp. Accessed April 29, 2014.

AirNav. 2014. Website: http://www.airnav.com/airports/. Accessed May 21, 2014.

California Air Resources Board (ARB). 2014. Area Designations 2013. Website: http://www.arb.ca.gov/regact/2013/area13/area13.htm. Accessed May 8, 2014.

California Air Resources Board (ARB). 2014. Historical Air Quality, Top 4 Summary. Website: http://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed May 9, 2014.

California Department of Conservation. 2014b. Alquist-Priolo Earthquake Fault Zone Maps. Website: http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm. Accessed May 2014.

California Department of Education, 2014. Website: http://dq.cde.ca.gov/dataquest/. Accessed May 6, 2014.

California Department of Education. 2014. Website: http://dq.cde.ca.gov/dataquest/. Accessed May 6, 2014 and June 2, 2014.

California Department of Finance. 2014. Table E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2014, with 2010 benchmark. Website: http://www.dof.ca.gov/research/demographic/reports /estimates/e-5/2011-20/view.php. Accessed May 13, 2014.

California Environmental Health Tracking Program. 2011. Traffic Linkage Service Demonstration. Website: http://www.ehib.org/traffic_tool.jsp. Accessed May 9, 2014.

California Environmental Health Tracking Program. 2011. Traffic Linkage Service Demonstration. Website: http://www.ehib.org/traffic_tool.jsp. Accessed May 9, 2014.

California Regional Water Quality Control Board San Diego Region. 1994. Water Quality Control Plan for the San Diego Basin (9) (with amendments effective on or before April 4, 2011). Accessed May 21, 2014.

California Regional Water Quality Control Board San Diego Region. 1994. Water Quality Control Plan for the San Diego Basin (9) (with amendments effective on or before April 4, 2011) September 8.

California, State of. California Register of Historical Resources. 2013. Website: http://ohp.parks.ca.gov/?page_id=21238. Accessed May 22, 2014.

California, State of. California Wetlands Information System. 2002. Website: http://ceres.ca.gov/wetlands/permitting/Porter_summary.html. Accessed May 21, 2014.

California, State of. Department of Education. 2014. Website: http://dq.cde.ca.gov/dataquest/. Accessed May 6, 2014 and June 2, 2014.

California, State of. Department of Transportation (Caltrans). 2013b. Website: http://www.dot.ca.gov/aboutcaltrans.htm. Accessed May 12, 2014.

California, State of. Department of Transportation (Caltrans). 2013b. Website: http://www.dot.ca.gov/hq/LandArch/scenic/faq.htm. Accessed May 12, 2014.

California, State of. Department of Transportation (Caltrans). 2014. Website: http://www.dot.ca.gov/aboutcaltrans.htm. Accessed September 5, 2013.

California, State of. Department of Water Resources (CDWR). 2013. Website: http://www.water.ca.gov/wateruseefficiency/landscapeordinance/. Accessed April 29, 2014.

California, State of. Department of Water Resources (CDWR). 2013. Website: http://www.water.ca.gov/wateruseefficiency/landscapeordinance/. Accessed April 29, 2014.

California, State of. Scenic Highway Program. 2013d. Website: http://www.dot.ca.gov/hq /LandArch/scenic_highways/index.htm. Accessed May 12, 2014.

California, State of. State Water Resources Control Board (SWRCB). 2013. Website: http://www.waterboards.ca.gov/publications_forms/publications/factsheets/docs/region_b rds.pdf. Accessed May 19, 2014.

Calrecycle. 2014. Website: http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0006/Detail/. Accessed June 3, 2014.

Calrecycle. 2014. Website: http://www.calrecycle.ca.gov/WASTECHAR/WasteGenRates /default.htm. Accessed April 29, 2014.

CGS Seismic Hazard Zonation Program (SHZP). 2014. Data Access Page. Seismic Hazards Zonation Program. Website: http://gmw.consrv.ca.gov/shmp/html/pdf_maps_so.html. Accessed May 2014.

City of Wildomar Community Services Department. 2014. Website: http://www.cityofwildomar.org /parks-recreation.asp. Accessed May 6, 2014.

City of Wildomar Fire Department. 2014. Website: http://www.cityofwildomar.org/fire.asp. Accessed May 6, 2014.

City of Wildomar Housing Element Final Draft November/December 2013. Website: http://www.cityofwildomar.org/uploads/files/planning/2013-2021%20Final-Draft%20Housing%20Element%20Nov-Dec%202013.pdf. Accessed May 13, 2014.

City of Wildomar Housing Element Update 2013-2021. 2013. Draft Environmental Impact Report August.

City of Wildomar Municipal Code. 2013. Website: http://qcode.us/codes/wildomar/. Accessed May 12, 2014.

City of Wildomar Ordinance No. 44. Website: http://www.cityofwildomar.org/uploads/files/city-clerk/ordinances/44.pdf. Accessed June 2, 2014.

City of Wildomar Parks. 2014. Website: http://www.cityofwildomarparks.org/#!parks/cjg9. Accessed May 6, 2014.

City of Wildomar, New to Town. 2014. Website: http://www.cityofwildomar.org/new-to-wildomar.asp. Accessed April 28, 2014.

City of Wildomar. 2013. Housing Element Update 2013-2021 Draft Environmental Impact Report. August.

City of Wildomar. 2013. Housing Element Update 2013-2021 Draft Environmental Impact Report. August.

City of Wildomar. 2014. Emergency Preparedness. Website: http://www.cityofwildomar.org /emergency-preparedness.asp. Accessed May 21, 2014.

City of Wildomar. 2014. Website: http://www.cityofwildomar.org/new-to-wildomar.asp. Accessed April 28, 2014.

CRM Tech. 2013. Update to Historical/Archaeological Resources Survey Assessor's Parcel No. 380-290-029 (Siena Apartments Project), City of Wildomar, Riverside County, California. July

Earth-Strata, Inc. 2013. Phase I Environmental Site Assessment Proposed Residential Property Located at 36485 Jana Lane, City of Wildomar, Riverside County California. June 30.

EVMWD WW Operations. 2014. Website: http://www.evmwd.com/depts/operations/wastewater /default.asp. Accessed April 29, 2014.

Federal Emergency Management Agency (FEMA). 2014. FEMA Flood Zones. Website: http://www.fema.gov/national-flood-insurance-program-2/flood-zones. Accessed May 21, 2014.

Federal Emergency Management Agency (FEMA). 2014. Website: https://msc.fema.gov/webapp /wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1&userType=G. Accessed May 19, 2014.

First Carbon Solutions (FCS). 2013. Phase I Cultural Resources Assessment of Hidden Springs Ranch APN 380-290-029, ± 9.5 Acres of Land Near Wildomar, Riverside County, California.

Google Earth. 2014. Website: http://www.google.com/earth/.

Google Maps. 2011. Website: https://www.google.com/maps/preview. Accessed May 12, 2014.

Judy, Laura. Project Manager, Southern California Edison. Personal communication, email and telephone. May 13, 2014.

Koski, Karen. Administrative Secretary, Lake Elsinore Unified School District. Personal communication: telephone. May 7, 2014.

Kunzman Associates, Inc. 2014. Air Quality and Global Climate Change Impact Analysis, Villa Siena Apartment Homes, Riverside County, California.

Kunzman Associates, Inc. 2014. Noise Impact Analysis Villa Siena Apartment Homes, Riverside County, California.

MWH. 2011. (Final) Elsinore Valley Municipal Water District Urban Water Management Plan. July.

National Toxicology Program. 2011. Website: http://ntp.niehs.nih.gov/. Accessed May 9, 2014.

Ongeano, Lisa. Inside Commercial Sales Representative, Waste Management. Personal communication: telephone. April 29, 2014.

Pacific Coast Land Consultants, Inc., 2014a. Preliminary Water Quality Management Plan for Villa Sienna, Wildomar, California. August 2.

Pacific Coast Land Consultants, Inc., 2014b. Preliminary Hydrology Study for Villa Sienna, Wildomar, California. August 2.

Pacific Coast Land Consultants, Inc. 2013. Photometric Plan, Villa Siena Apartment Homes, Riverside County, California. July.

PMC. 2012. Draft Environmental Impact Report, Oak Creek Development. November.

PMC. 2013. City of Wildomar Housing Element Update 2013-2021 Draft Environmental Impact Report. August.

Quinones, Cher. Development & Records Coordinator, Elsinore Valley Municipal Water District. Personal communalization: e-mail. May 9, 2014 and May 14, 2014.

RCA Associates, LLC. 2013. General Biological Resources Assessment Villa Sienna Project Wildomar, California. July 22.

RCTC. 2014. Website: http://www.rctc.org/planning/congestion-management. Accessed May 27, 2014.

RHNA. 2014. Website: http://rtpscs.scag.ca.gov/Pages/Regional-Housing-Needs-Assessment.aspx /index.htm. Accessed May 13, 2014.

Riverside County Congestion Management Program. 2011. Website: http://www.rctc.org /uploads/media_items/congestionmanagementprogram.original.pdf. Accessed May 27, 2014.

Riverside County Fire Department Strategic Plan. 2009. Website: http://www.rvcfire.org /stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf. Accessed June 2, 2014.

Riverside County Fire Department. 2014. RCFD. Website: http://www.rcip.org/Documents /general_plan/appendix_h/pdf/04_08_02.pdf. Accessed May 6, 2014.

Riverside County Fire. 2014. Website: http://www.rvcfire.org/stationsAndFunctions/FireStations /Pages/Fire-Stations-Map.aspx. Accessed May 6, 2014.

Riverside County Flood Control District. 2014. Website: http://www.floodcontrol.co.riverside.ca.us /DistrictOverview.aspx. Accessed April 28, 2014.

Riverside County Planning Department. 2003. Riverside County Integrated Project General Plan Final Program Environmental Impact Report Volume I. Website: http://rctlma.org /Portals/0/genplan/content/eir/volume1.html. Accessed May 6, 2014.

Riverside County Planning Department. 2011. County of Riverside General Plan Elsinore Area Plan. October.

Riverside County Transportation Commission (RCTC). 2011. Riverside County Congestion Management Program. Website: http://www.rctc.org/uploads/media_items /congestionmanagementprogram.original.pdf. Accessed May 27, 2014.

Riverside, County of. 2003. County of Riverside, Elsinore Area Plan. Adopted October 2011. Website: http://planning.rctlma.org/Portals/0/genplan/content/ap1/elsinore.html. Accessed May 12, 2014.

Riverside, County of. 2008. Riverside County General Plan. Website: http://planning.rctlma.org /ZoningInformation/GeneralPlan.aspx. Accessed: April 28, 2014.

Riverside, County of. 2011. Drainage Area Management Plan Santa Ana Region. Website: http://www.waterboards.ca.gov/santaana/water_issues/programs/stormwater/docs/rcpermit/damp/DAMP_07-29-11.pdf. Accessed May 20, 2014/

Riverside, County of. 2012. The Riverside County Land Information System. Website: http://www3.tlma.co.riverside.ca.us/pa/rclis/. Accessed May 22, 2014.

Riverside, County of. 2013. Ordinance No. 655. Website: http://www.clerkoftheboard.co.riverside.ca.us/ords/600/655.htm. Accessed May 12, 2014.

Riverside, County of. 2014. Riverside County Fire Department. Website: http://www.rcip.org /Documents/general_plan/appendix_h/pdf/04_08_02.pdf. Accessed May 6, 2014.

Riverside, County of. Ordinances. Website: http://www.rivcocob.org/ords/600/659.7.pdf. Accessed May 12, 2014.

San Diego RWQCB Basin Plan. 2014. Website: http://www.waterboards.ca.gov/sandiego /water_issues/programs/basin_plan/. Accessed May 20, 2014.

Sayers-Koonce, Tina. Director, Facilities and Operations, Lake Elsinore Unified School District. Personal communication: email. May 7, 2014.

Solid Waste Information System (SWIS). 2014. Website: http://www.calrecycle.ca.gov /SWFacilities/Directory/33-AA-0006/Detail/. Accessed April 29, 2014.

South Coast Air Quality Management District. 2008. Website: http://www.aqmd.gov/. Accessed May 9, 2014.

Southern California Association of Governments. 2008. Regional Housing Needs Allocation: The Southern California Approach. (Draft 8/21/2008).

Southern California Edison Service Area (SCE). 2014. Website: http://www.edison.com/files /SCETerritory.pdf. Accessed April 28, 2014.

Southern California Gas Company (SCGC). 2014. Website: http://www.socalgas.com/regulatory /tariffs/tm2/pdf/CITIES.pdf. Accessed April 28, 2014.

State Allocation Board Agenda. 2014. Website: http://www.documents.dgs.ca.gov/opsc /sab_agenda_items/2014-01/revision_01172014.pdf. Accessed May 6, 2014.

State Water Resources Control Board. 2014. Website: http://www.waterboards.ca.gov /waterboards_map.shtml. Accessed May 19, 2014.

Trames Solutions, Inc. 2013. Siena Apartments Traffic Impact Analysis City of Wildomar, California. October 30.

United States Census Bureau. 2014. Website: http://quickfacts.census.gov/qfd/states /06/0685446.html. Accessed May 28, 2014.

United States Environmental Protection Agency. 2014. Green Book: Currently Designated Nonattainment Areas for All Criteria Pollutants. Website: http://www.epa.gov /airquality/greenbook /ancl.html#CALIFORNIA. Accessed May 8, 2014.

Vargas, Steven. Assistant Planner, Southern California Gas Company. Personal communication: telephone. May 13, 2014.

Wildomar Water Ordinance. 2010. Website ftp://ftp.water.ca.gov/Model-Water-Efficient-Landscape-Ordinance/Local-Ordinances/Wildomar_Ordinance.pdf. Accessed April 29, 2014.

Wilson Associates. 2014. Landscape Plan, Villa Siena Apartment Homes, Riverside County, California. March.