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RECIRCULATED DRAFT
Initial Study/Mitigated Negative Declaration
Orange Avenue Luxury Apartments Project
City of Redlands, San Bernardino County, California

State Clearinghouse Number 2019069016

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Report Date: July 31, 2019

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ACRONYMS AND ABBREVIATIONS

AAM	American Association of Museums
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily traffic
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BMP	Best Management Practice
BSA	Biological Study Area
BUOW	burrowing owl
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
cfs	cubic feet per second
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
dB	decibel
dBA	A-weighted noise scale measurement
DIF	Development Impact Fee
DPR	Department of Parks and Recreation
du/a	dwelling units per acre
EDD	Employment Development Department
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
EMFAC2017	ARB 2017 Emissions Factors model
EPA	Environmental Protection Act

ESA	Environmental Site Assessment
EV	electric vehicle
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rates Map
FTA	Federal Transit Administration
GHG	greenhouse gas
gpd	gallons per cay
IS/MND	Initial Study/Mitigated Negative Declaration
kBTU	kilo-British Thermal Units
kWh	kilowatt hour
L_{eq}	equivalent noise/sound level
LID	Low Impact Development
LOS	Level of Service
MDR	Medium Density Residential
mgd	million gallons per day
MM	Mitigation Measure
mph	miles per hour
msl	mean sea level
MT	metric tons
NAAQS	National Ambient Air Quality Standards
NAHC	California Native American Heritage Commission
NBP	Nesting Bird Plan
NEPA	National Environmental Policy Act
NHM	Natural History Museum of Los Angeles
NPDES	National Pollution Discharge Elimination System
NWP	nation-wide permit
PCE	Passenger Car Equivalent
PPV	peak particle velocity
REC	Recognized Environmental Condition
rms	root mean square
RUSD	Redlands Unified School District
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Associated Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center

SoCAB	South Coast Air Basin
SP	service population
State Water Board	State Water Resources Control Board
STC	Sound Transmission Class
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
TIA	Traffic Impact Analysis
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration in decibels
VOC	volatile organic compounds
WQMP	Water Quality Management Plan

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SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the Orange Avenue Luxury Apartments Project (project) in the City of Redlands, California. Pursuant to California Environmental Quality Act (CEQA) Guidelines, Section 15367, the City of Redlands is the Lead Agency in the preparation of this IS/MND and any additional environmental documentation required for the project.

The purpose of an Initial Study is to: (1) identify environmental impacts; (2) provide the Lead Agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or Negative Declaration; (3) enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared; (4) facilitate environmental assessment early in the design of a project; (5) provide documentation of the factual basis for the finding in a Negative Declaration that a project would not have a significant environmental effect; (6) eliminate needless EIRs; (7) determine whether a previously prepared EIR could be used for a project; and (8) assist in the preparation of an EIR, if required, by focusing the EIR on the effects determined to be significant, identifying the effects determined not to be significant, and explaining the reasons for determining that potentially significant effects would not be significant.

Section 15063 of the CEQA Guidelines identifies specific disclosure requirements for inclusion in an Initial Study. Pursuant to those requirements, an Initial Study must include: (1) a description of the project, including the location of the project; (2) an identification of the environmental setting; (3) an identification of environmental effects by use of a checklist, matrix or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries; (4) a discussion of ways to mitigate significant effects identified, if any; (5) an examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls; and (6) the name of the person or persons who prepared or participated in the preparation of the Initial Study. Pursuant to Section 15063(f), the City has tailored the sample initial study form in Appendix G to the CEQA Guidelines to satisfy the City's needs and project circumstances.

1.2 - Project Location

The proposed project is located in the City of Redlands, San Bernardino County, California (Exhibit 1). The proposed project site encompasses 21.84 acres and is located on the west side of Alabama Street and is bisected by Orange Avenue (Exhibit 2). The project spans the north and south sides of Orange Avenue between Alabama Street and Iowa Street. The project site consists of 10 separate parcels identified as Assessor's Parcel Numbers (APNs) 0292-167-08, APN 0292-167-11, APN 0292-167-12, APN 0292-167-13, APN 0292-167-18, APN 0292-167-25, APN 0292-168-03, APN 0292-168-16, APN 0292-168-21, and APN 0292-168-22.

The project site is located on the Redlands, California, United States Geological Survey 7.5-minute topographic quadrangle map, in Township 1 South, Range 39 West, Section 21, within the San Bernardino Baseline and Meridian (34° 3'7.24"N, 117°12'35.84"W).

Regional access to the site is available via Interstate 10 (I-10) at the Alabama Street exit, which is approximately 1.06 miles from the site, and Interstate 210 (I-210) at the San Bernardino Avenue exit, which is approximately 1.49 miles from the site. Local access to the site is provided via Orange Avenue and Alabama Street. The east-west roadways expected to provide local access include Redlands Boulevard, Park Avenue, Citrus Avenue, Orange Avenue, and Barton Road. The north-south roadways expected to provide local access include Iowa Street and Alabama Street.

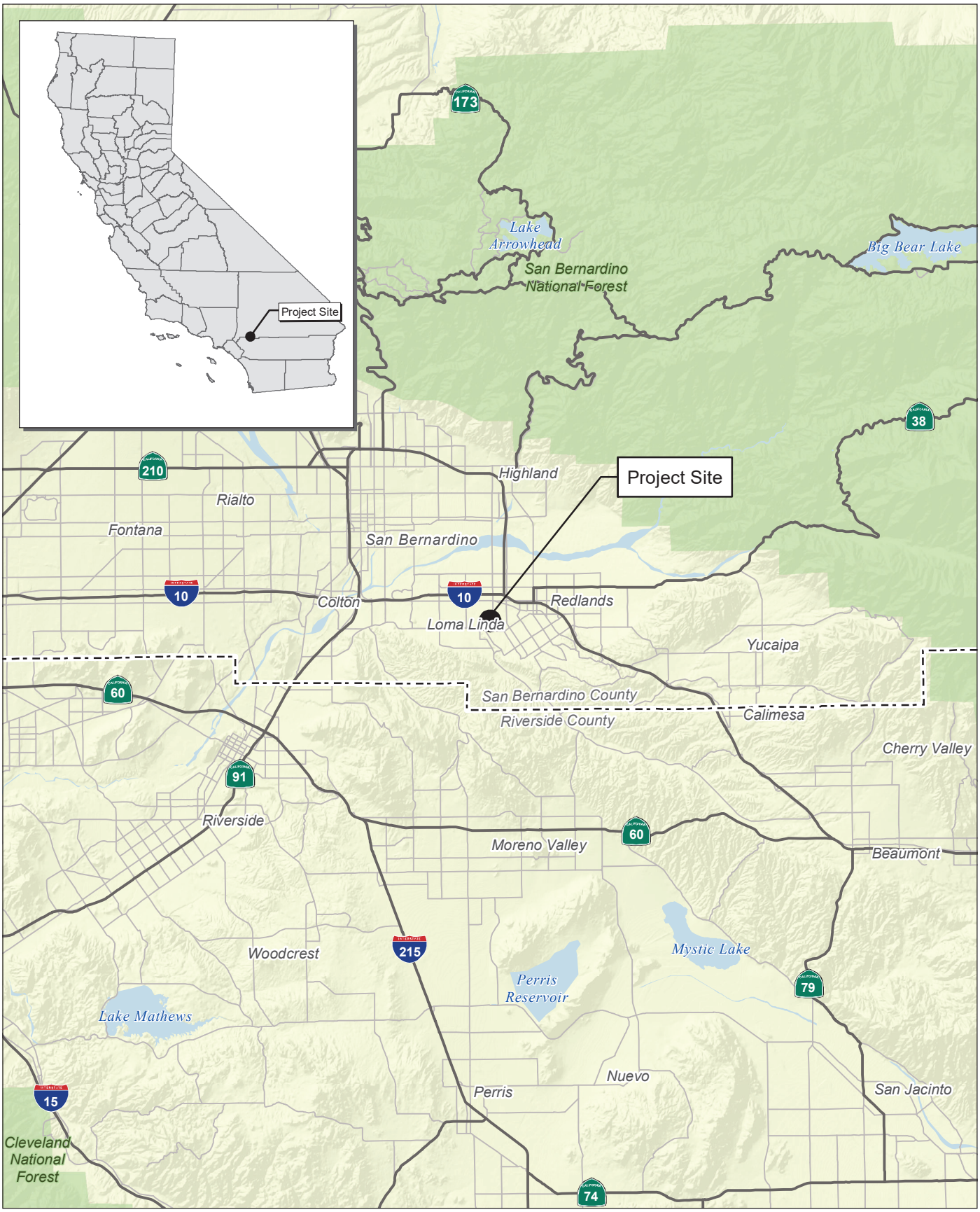
1.3 - Environmental Setting

The project site is designated as Medium Density Residential (MDR) by the City of Redlands General Plan 2035 (City of Redlands, 2017b) (Exhibit 3), which permits up to 15 dwelling units/acre (du/a). The project site is located within the East Valley Corridor Specific Plan and is zoned as Administrative-Professional, and Multi-Family Residential (EV/3000 RM and EV/2500 RM) (Exhibit 4).

The project site is bisected by Orange Avenue, which divides the northern portion of the project site from the southern portion of the site.

The northern portion of the project site is currently occupied by three single-family homes and structures associated with American Landscape and Maintenance, Inc., including its associated parking and nursery storage areas. This portion of the site has a density of two du/a. There is also a small grove of citrus trees adjacent to the homes and landscaping company to the north and within the project site. The existing structures and citrus grove would be removed from the property in order to construct the proposed project. The northern portion of the site is bound to the north by an existing citrus orchard, single-family detached residential dwelling units, and the Morey Arroyo Channel, a natural drainage that has been used as a stormwater turnoff ditch since the 1800s; to the east by The Grove at Villa Valencia apartment complex; and to the west by a vacant lot with an abandoned housing structure. To the south is Orange Avenue.

The southern portion of the project site currently consists of vacant land immediately south of Orange Avenue, as well as two single-family detached residential dwelling units located at 27217 Orange Avenue and 27201 Orange Avenue, which would be removed from the site prior to construction. The southern portion of the project site is immediately bound to the north by Orange Avenue; to the west by Cottage Lane, a residential community made up of single-family detached residential dwelling units; to the east by multi-family attached residential dwelling units along Alabama Street; and to the south by the Mission Road of Seventh Day Adventists Church and the Islamic Society of California Redlands Mosque. The Pearson Professional Center is located to the southwest on the same block. Past construction and agricultural activities on the southern portion of the project site have created a highly disturbed ground surface. Consequently, the terrain is relatively level but features some low mounds, particularly on the vacant land immediately south of Orange Avenue. The remains of the Zanja Wash bounds the southern end of the southern parcel.



Source: Census 2000 Data, The CaSIL

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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CITY OF REDLANDS
ORANGE AVENUE LUXURY APARTMENTS
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

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Source: ESRI Aerial Imagery.

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1,000 500 0 1,000
Feet

Exhibit 2
Local Vicinity Map
Aerial Base

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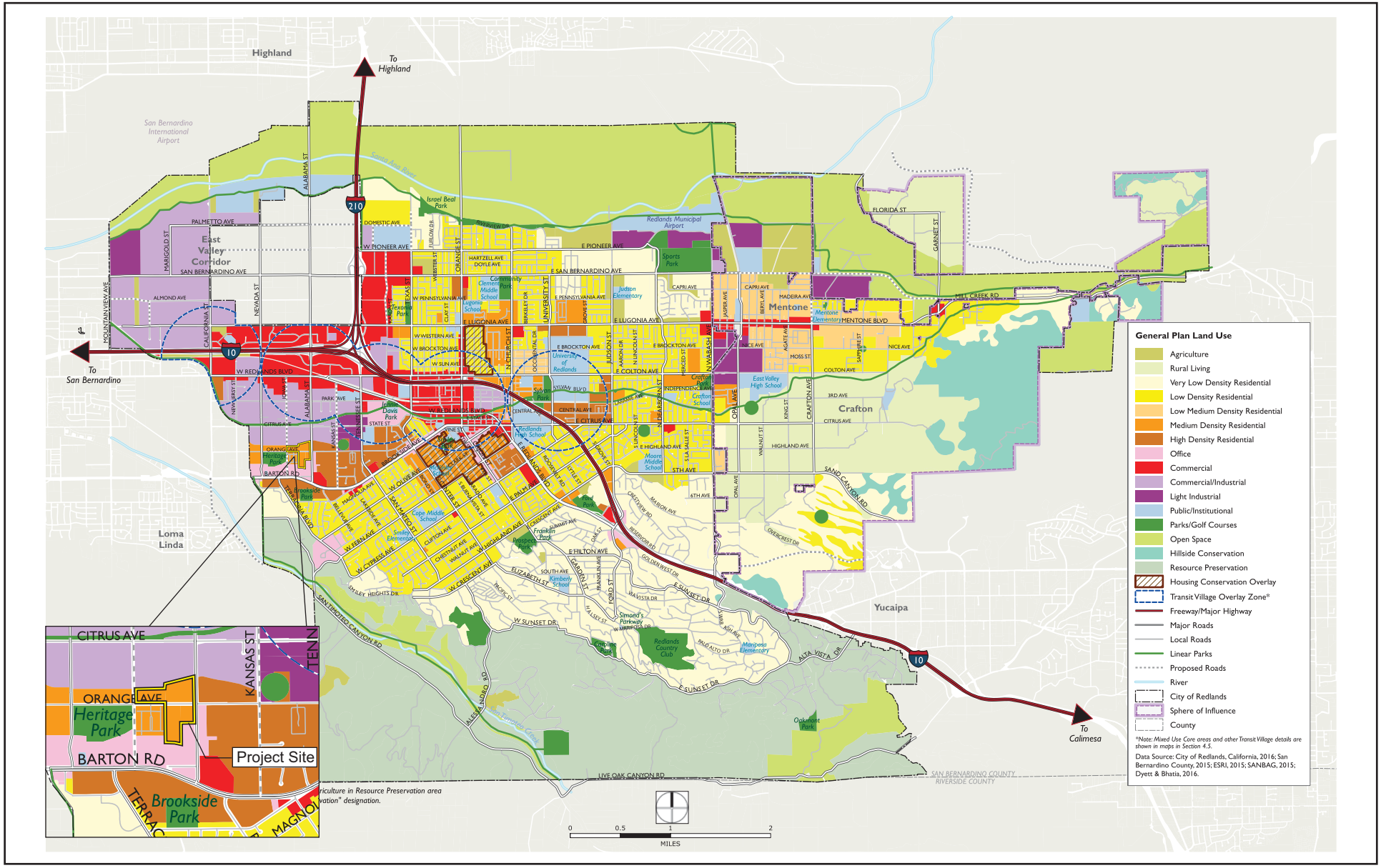

Source: City of Redlands.

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Exhibit 3
Current General Plan Land Use

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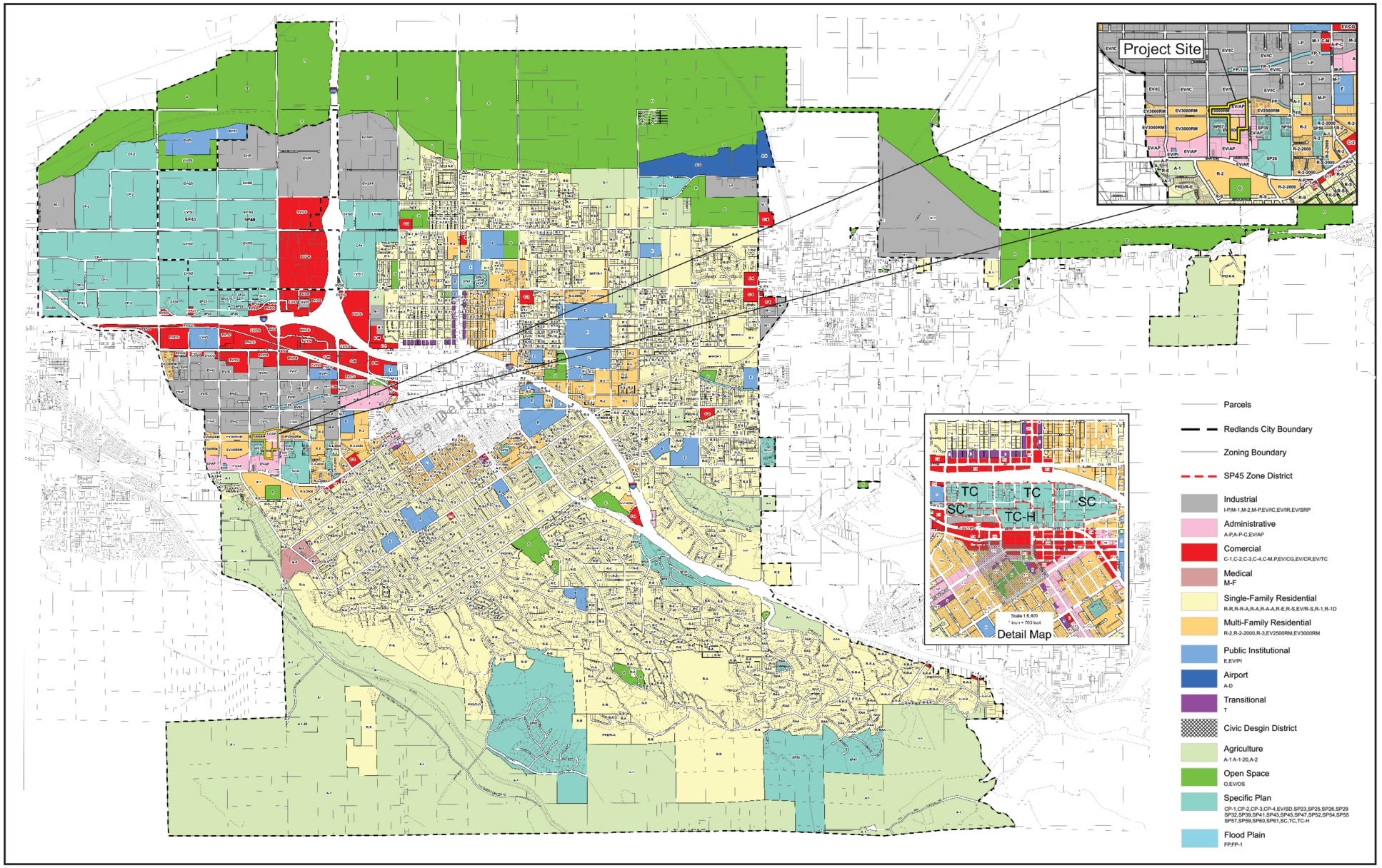

Source: City of Redlands.

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Exhibit 4
Zoning Map

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There are several schools located within 1500 feet of the project site, as shown below in Table 1. For the purposes of this environmental analysis and to present the most conservative analysis possible, the distances listed in Table 1 are measured from edge of property line to edge of property line.

Table 1: Schools in the Project Vicinity

School Name	Distance from Project (miles)	Distance from Project (feet)
The Grove School Farm Campus	0.02	106
Barton Road KinderCare	0.10	528
Montessori in Redlands	0.13	686
Grove High School	0.13	686
Barton House Playschool	0.24	1,267
Notes: Distances are measured from the edge of the nearest Property Line to the edge of the nearest Property Line. Source: Google Earth 2018/confirmed by: San Bernardino County GIS Data.		

The project site contains plant species representative of the ruderal/developed/disturbed land vegetation communities, which are classified as areas that have been physically disturbed (by previous human activity) and are no longer recognizable as a native or naturalized vegetation association, but that continue to retain a soil substrate. Typically, vegetation in the ruderal/developed/disturbed community, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance.

The project site is at an elevation range of 1,215 to 1,240 feet above mean sea level, and natural slopes across the site are approximately 2 percent. Water flow in the northern parcel of the site tends to be sheet flow in a southeasterly to northwesterly direction until reaching the nearby Morey Arroyo Channel. The majority of the northern parcel is within the Federal Emergency Management Agency (FEMA) Flood Zone AO. The southern parcel is located within the FEMA Flood Zone X. Zone X is determined to be outside of the 0.2 percent annual chance floodplain. The project design would include on-site infiltration to capture and dispose of stormwater.

1.4 - Project Description

The proposed project would develop a 328-unit low-rise luxury apartment complex spanning the northern and southern portions of the project site. The apartment complex would include six new, 3-story apartment buildings and a clubhouse (with a total building area of 169,835 square feet) (Exhibit 5). The apartment buildings would include a combination of one, two and three-bedroom units. Some of the apartment units would feature garages on the first floor and balconies on the second floor. A total of 653 parking spaces would be available within the complex, including both covered and uncovered spaces, as well as Americans with Disabilities Act (ADA) van accessible spaces, which exceeds the minimum parking requirements of both the East Valley Corridor Specific Plan and the

Redlands Municipal Code. The project would include 346,064 square feet of landscaping area, plus 19,156 square feet of landscaping area within parking areas.

Buildings N1, N2, N3, N4 and the central clubhouse would be constructed on the northern portion of the project site (Exhibit 6). Buildings N1, N3, and N4 would be "U-Court" or u-shaped buildings to allow for central courtyards in each, and Building N2 would be I-shaped and oriented to face Alabama Avenue. A total of 174 apartment units would be developed within the northern properties. The main entry drive to the northern project site will lead to the central clubhouse. The three-story clubhouse will feature a gym, yoga and Pilates studio, game room, copy and print center with conference room, lobby, demonstration kitchen with bar area, pool room, and office amenities on the first floor and apartments on the top two floors (Exhibit 7). Landscaping in the northern parcel will include a 620-square-foot splash pad fountain, a shade structure, a six-foot-high decorative metal fence with pedestrian gates, a 1,920-square-foot outdoor swimming pool, an 87-square-foot hot tub, and an outdoor fireplace.

Buildings S1 and S2 will be constructed in the southern portion of the project site (Exhibit 8). Building S1 will be a U-court shaped building, and Building S2 will be an L-shaped building. A total of 154 apartment units will be developed within the southern parcel. Landscaping in the southern parcel will include a pergola, a walking trail, an outdoor lounge and BBQ area, a retention basin, and perimeter fencing with a pedestrian gate.

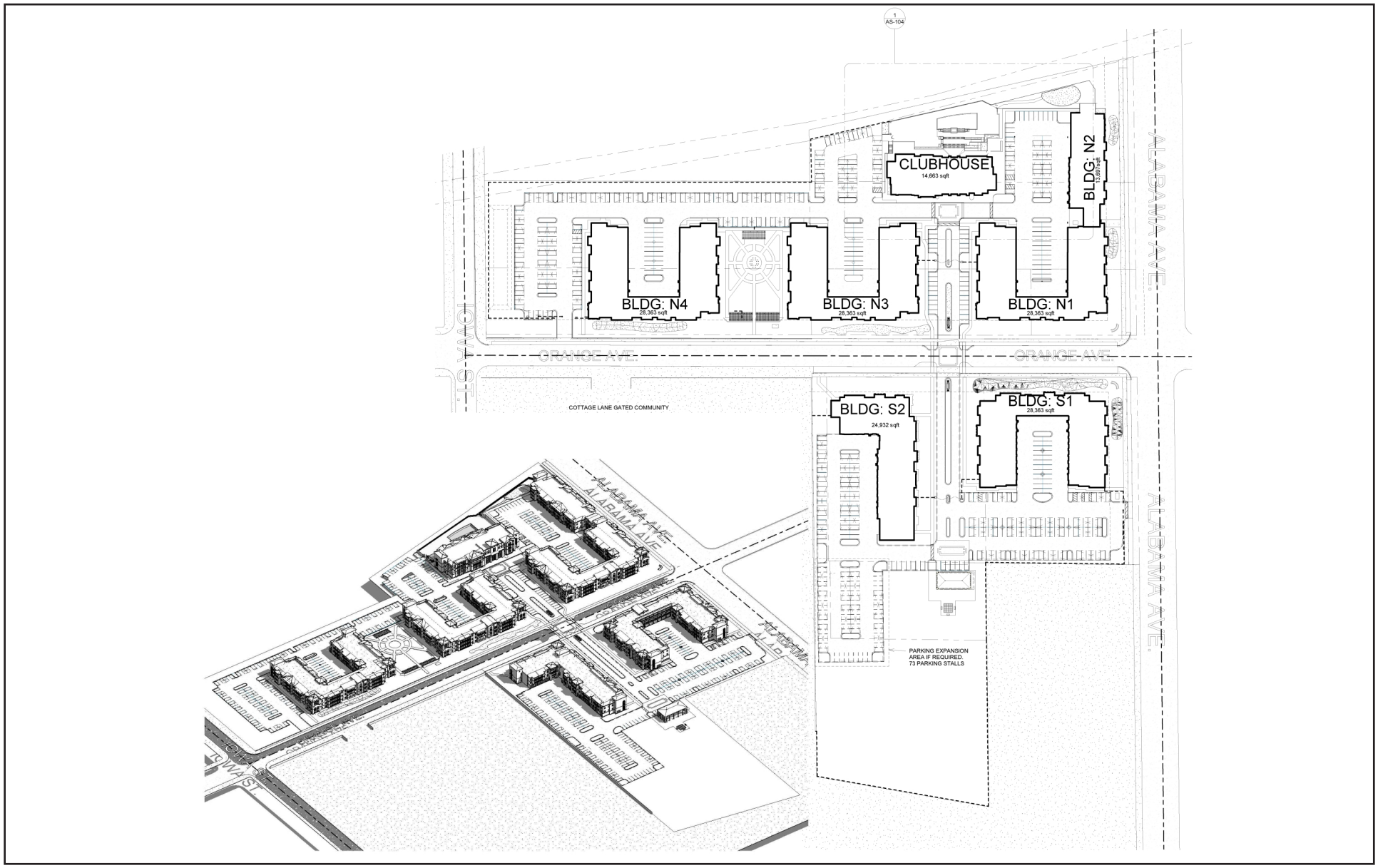
Three driveways will allow access to the northern and southern portions of the apartment complex along Orange Avenue. The access driveway near Orange Avenue and Iowa Street will be gated and will provide a secondary access point for emergency vehicles. The two primary access points along Orange Avenue will be gated and will provide full access to the complex.

Construction would be completed in one phase over the course of a year. The project is expected to be operational in 2020. The project would import 53,285 cubic yards of fill to the site during the construction process.

1.4.1 - Required Discretionary Approvals

The following entitlement applications and plans will be required by the City of Redlands prior to project development:

- East Valley Corridor Specific Plan Land Use Amendment to change the project site zoning designation from EV/AP (Administrative) and EV3000/RM (Multi-Family Residential) to EV2500/RM (Multi-Family Residential)(Exhibit 9)
- Tentative Tract Map No. 20244 merging existing lots into two (2) lots
- Conditional Use Permit No. 1108 for the development of a 328-unit luxury apartment project with related parking, clubhouse and recreational amenities
- Street Vacation for the vacation of approximately sixteen (16) feet along the Orange Avenue project frontages
- Socio-Economic Cost Benefit Study
- Preliminary Water Quality Management Plan
- Demolition Permit for a structure over 50 years of age located at 27201 Orange Avenue



Source: Miller Architecture Interiors Planning, July 18, 2019.

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Exhibit 5
Overall Site Plan

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Source: Miller Architecture Interiors Planning, February 2019.

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Exhibit 6
Building N1, N2, N3 & S1 Elevations

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Source: Miller Architecture Interiors Planning, February 2019.

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Exhibit 7
Clubhouse Elevations

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Source: Miller Architecture Interiors Planning, February 2019.

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Exhibit 8
Building S2 Elevations

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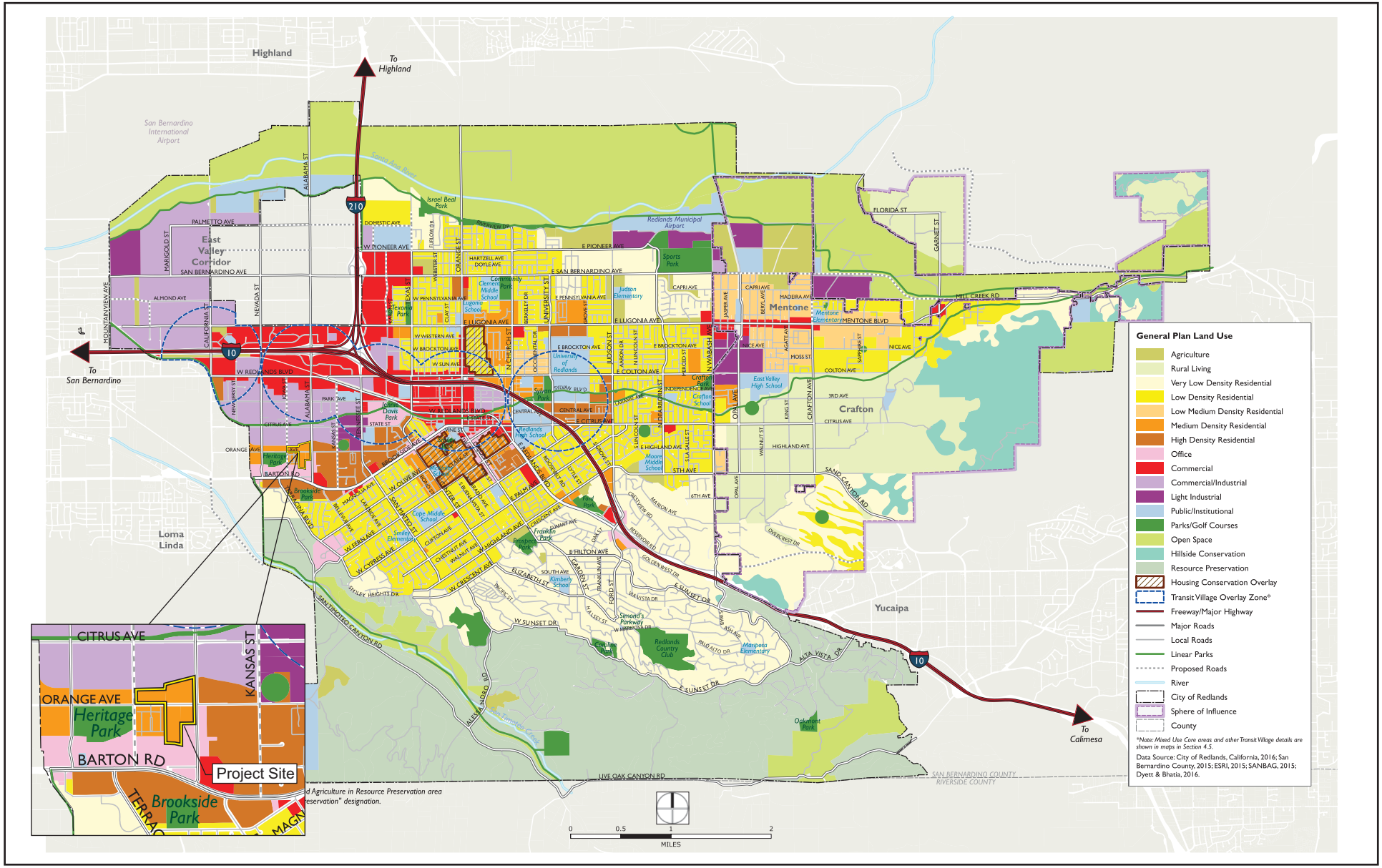

Source: City of Redlands.

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Exhibit 9
Proposed Land Use

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Several plans will be submitted for review and approval by the Redlands Planning Commission and City Council, including the following:

- Architectural plans, including site plan, floor plans, and elevations
- Grading plans
- Landscape plans

Following approval of the project, an application for a Residential Development Allocation will be submitted. In addition, construction drawings, including civil engineering, architecture, and landscape architecture will be submitted to the City for plan check review and permitting.

1.4.2 - Access, Circulation, and Parking

Regional access to the site is available via I-10 at the Alabama Street exit, which is approximately 1.06 miles from the site, and I-210 at the San Bernardino Avenue exit, which is approximately 1.49 miles from the site. Local access to the site is provided via Orange Avenue and Alabama Street. The east-west roadways expected to provide local access include Redlands Boulevard, Park Avenue, Citrus Avenue, Orange Avenue, and Barton Road. Vehicular access to the project site will be available from three points on Orange Avenue.

Because the project site is located within the East Valley Corridor Specific Plan area, the provisions of the East Valley Corridor Specific Plan would apply to the project. The East Valley Corridor Specific Plan requires the provision of 1 parking space per unit for studio apartments, and 1.5 parking spaces per unit for one-bedroom apartments. Each additional bedroom requires 0.5 parking spaces per unit and 0.25 guest parking spaces per bedroom or sleeping quarters is also required. A minimum of 1 parking space per unit is required to be covered for multi-family residential units.

The East Valley Corridor Specific Plan also allows a 10 percent parking reduction if landscaping is provided (see the East Valley Corridor Specific Plan Section EV4.0260, Other Site Landscaping Provisions). The landscaping must be arranged in such a manner that parking may be installed at a later date, if the demand arises (City of Redlands 2002). Table 2 shows the parking calculations pursuant to the requirements of the East Valley Corridor Specific Plan Section EV4.0201.

Table 2: Project Parking Stall Requirements

Unit Type	Number of Units	Stalls Per Unit[1]	Totals
1 Bedroom	158	1.75	276.5
2 Bedroom	143	2.5	357.5
3 Bedroom	27	3.25	87.75
Parking Stalls Required (Rounded)			722
EV4.0260.1b Parking Reduction		10%	72
Net Total Parking Stalls Required			**650**

Notes:
[1] An additional 0.25 spaces per bedroom has been included to account for guest parking.

The project proposes to utilize the 10 percent reduction provided for in the Specific Plan and will therefore provide a total of 653 parking stalls, which exceeds the minimum parking stall requirements. This number includes fifteen accessible parking stalls, including 10 van accessible parking stalls. In addition, a fire lane and bicycle racks will provided within 200 feet of the buildings.

1.4.3 - Public Services and Utilities

The following public services are available to the project site:

- Fire Protection Services (Redlands Fire Department)
- Police Protection services (Redlands Police Department)
- School Services (Redlands Unified School District)
- Library Services (A.K. Smiley Public Library)
- City Administrative Services (City of Redlands)

The following utilities/infrastructure systems and services are available to the project:

- Water/Sewer/Solid Waste (City of Redlands, Municipal Utilities and Engineering Department. Quality of Life for solid waste);
- Streets/Infrastructure (City of Redlands, Municipal Utilities and Engineering Department)
- Electricity (Southern California Edison Company);
- Natural Gas (The Gas Company); and
- Telephone/Communications (Verizon Communications).

1.4.4 - Project Energy Features

The proposed project would construct infrastructure for electric vehicle (EV) charging stations to comply with State energy requirements, which state that a minimum of 8 percent of stalls must have an ability to connect. The project would also construct infrastructure for solar collectors to be installed over shade canopies and/or building roofs (Exhibit 10). This includes providing adequate space in the electric room for required inverters and the installation of conduit from the proposed parking canopies to the main service panel. The proposed shade structure parking canopies would have sufficient capacity to support solar panels.

The project would also offer the following energy features:

- High efficiency water heaters
- High efficiency heating, ventilation, air conditioning (HVAC) equipment and appliances
- LED lighting throughout
- Low water usage plumbing fixtures
- Super-insulated roofing
- Cool/reflective roofing
- Heat-absorbing glazing
- Energy efficient window frames

SPECIFICATIONS:
Approximately 550 KW net metered Carport or roof system
Panels serve as roofing as well as collectors

Source: MILLER architectural corporation, July 17, 2019.

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Exhibit 10
Solar Carport Photographs

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SECTION 2: ENVIRONMENTAL CHECKLIST AND ENVIRONMENTAL EVALUATION

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

Environmental Determination

On the basis of this initial evaluation:

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

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

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

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

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

Date: July 30, 2019 Signed: 

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

Environmental Evaluation

Would the project:

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

Less than significant impact. Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks the view of a vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). The project site is located in an area with mixed administrative/professional, residential, and active agricultural uses and consists of vacant land, existing single-family residences, and a landscaping business. The proposed three-story residential buildings would be consistent with these uses. The General Plan Draft Environmental Impact Report (DEIR) defines scenic vistas in the City of Redlands as scenic corridors and views to and from open spaces, hillsides, groves, Canyonlands, and the San Bernardino Mountains. [1]Views of the San Bernardino Mountains to the north are available from the project site and surrounding area. The San Bernardino Mountains and foothills are visually prominent topographic features that provide a scenic vista from mobile and stationary viewing locations throughout the City. The San Bernardino Mountains and foothills are approximately 30 miles to the northeast of the project site.

[1] City of Redlands. 2017. Revised Draft Environmental Impact Report for the Redlands General Plan Update and Climate Action Plan. Aesthetics. Revised Draft. Website: https://www.cityofredlands.org/UserFiles/Servers/Server_6255662/File/City%20Hall/Departments/Development%20Services/Planning%20Division/General%20Plan/GeneralPlan2035/Redlands%20DEIR%20Compiled%20lo_071917.pdf. Accessed May 6, 2019.

Based on these distances, as well as the presence of existing intervening natural features and manmade structures, the project site is not located within the general viewshed of this scenic vista, nor is the project likely to block views of or from these scenic resources. Thus, the inclusion of the project within the existing viewshed would be consistent with views presently found in the project area. In addition, the proposed project would be subject to City Design Guidelines and Zoning Code, which regulate the height and bulk of the buildings. Therefore, impacts associated with scenic vistas would be less than significant.

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

No impact. There are no officially designated scenic highways in the project vicinity. According to the California Department of Transportation (Caltrans), the closest Eligible State Scenic Highway to the project site is State Route 38 (SR-38), which is approximately 2.5 miles from the project site. However, this highway is not officially designated according to the California Scenic Highway Mapping System. Based on this distance and intervening natural topography and manmade structures, the project site is not located within the viewshed of this State Scenic Highway.

The project site is located in an administrative/professional/residential area according to Redlands General Plan 2035. The General Plan 2035 Cultural Resources Element states that here are streets within the City that have been designated as scenic highways, drives, and historic streets (City of Redlands, 2017h). The nearest designated scenic or historic drive designated by the City of Redlands is Brookside Avenue, between Lakeside Avenue and Eureka Street, which is located a little less than 1 mile southwest of the project site. Due to the existing development between Brookside Avenue and the project site, the proposed development would not be visible from the designated scenic corridor along Brookside Avenue. Consequently, most scenic corridors are located in or near already developed areas or are located in areas designated for development. The project site is not considered to be within a portion of a scenic vista and contains no scenic resources such as rock outcroppings, significant trees, or historical buildings. Although some of the existing structures on-site were old enough to require evaluation to ascertain eligibility for listing, the Historical/Archaeological Resources Survey Report (CRM TECH 2018; Appendix C) concluded that the existing on-site structures are not considered historic resources because they do not exhibit any distinctively historic characteristics. Therefore, no impact would occur.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than significant impact. Development of the proposed project could result in a significant impact if it resulted in substantial degradation of the existing visual character or quality of the site and its surroundings. Degradation of visual character or quality means making substantial changes to the existing appearance of a site by constructing elements that are poorly designed or that conflict with the existing surroundings.

Short-term Construction Impacts

During project construction, equipment, vehicles, and materials would be stored within a designated staging area or areas on the project site. Although storage of these items could potentially be viewed from adjacent properties, storage would be temporary and would cease upon completion of construction. The project, once constructed, would be consistent with the site's existing surroundings. Therefore, short-term construction impacts associated with the existing visual character and quality of the project site and the surrounding area would be less than significant.

Long-term Operational Impacts

The project site is currently occupied by single-family homes and structures associated with American Landscape and Maintenance, Inc., including its associated parking and nursery storage areas, and small groves of citrus trees and ruderal vegetation. As such, the project site does not presently contain any significant scenic resources. The project site is located in an urbanizing area of the City that supports a variety of different land uses. The project area contains office, industrial, commercial, and high density residential uses. The proposed project would incorporate architectural elements—including a neutral, complementary color palette and a variety of building materials—that are similar to other land uses in the project area, thereby mirroring existing development in the area. Additionally, the project has been designed to include vertical and horizontal elements and features, which would break up the massing of the building and provide visual interest (Exhibits 6–8). Further, substantial landscaping along the project site boundary and around the building would help visually soften views into the site and enhance the visual character of the project site. Overall, the project would improve the visual quality and character of the project site, compared with the residential and commercial structures, vacant parcels, and a closed commercial nursery that currently exist on-site. According to the Redlands General Plan 2035, the project site is designated as MDR (City of Redlands 2017). The project site is also in the East Valley Corridor Specific Plan area, which has the goal of promoting high-quality commercial, industrial, and residential development (City of Redlands 2017). The proposed project would develop a luxury apartment complex consistent with the site's surroundings. Additionally, the project would be constructed to conform to the City's Zoning Code and the City's adopted architectural guidelines, which include design standards related to building size, height, setback, and materials, as well as landscaping, signage, and other visual considerations. These provisions help ensure adjacent land uses are visually consistent with one another and their surroundings, while reducing the potential for aesthetic conflict. The design specifications of all development proposals submitted to the City are reviewed to ensure compliance with the Zoning Code. As part of the City's design review process, the project plans are reviewed by City staff, the Development Review Committee, and the Planning Commission to ensure that the project conforms to the Zoning Code and enhances the visual character of the project area. Therefore, long-term impacts associated with the existing visual character and quality of the project site and the surrounding area would be less than significant.

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

Less than significant impact with mitigation incorporated. Excessive or inappropriately directed lighting can adversely affect nighttime views by reducing the ability to see the night sky and stars. Glare can be derived from unshielded or misdirected lighting sources. Reflective surfaces (i.e., polished metal) can also cause glare. Impacts associated with glare range from simple nuisance to potentially dangerous situations (i.e., if glare is directed into the eyes of motorists).

Sources of light and glare in Redlands include building lights (interior and exterior), security lights, sign illumination, and parking-area lighting. Other sources of nighttime light and glare include streetlights and vehicular traffic along roadways. Redlands' night skies benefit from the City being surrounded by uses that emit little or no light: open space lands, vacant land, farmland, and rural residential development. In addition, land uses that generate significant amounts of light pollution, such as shopping centers, are limited and concentrated in specific areas in the City.

The project would develop an apartment complex with seven new buildings in an area surrounded by office, commercial, industrial, and residential land uses. Proposed lighting for the project would be in character and work in conjunction with existing uses surrounding the project.

Short-term Construction Impacts

The project will be required to comply with the City's Noise Ordinance, which prohibits construction during the evening and nighttime hours. Thus, project construction would be limited to the daytime hours and nighttime lighting would not be required until the project is operational. Therefore, short-term impacts associated with light and glare would not occur. There would be no impact.

Long-term Operational Impacts

The project would require nighttime lighting for safety, security, and operational purposes. The project would introduce new sources of daytime glare and nighttime lighting onto the project site because the site would be converted from vacant/residential/commercial to a residential use. As such, there is potential for light originating on the project site to spill over onto adjacent properties or roadways. However, the proposed project will comply with the City of Redlands Municipal Code and standard conditions of approval. Additionally, the City will review project plans prior to permitting to ensure compliance with the Zoning Code. Therefore, long-term operational impacts associated with light and glare would be less than significant.

Sources of daytime glare are typically concentrated in commercial areas and are often associated with retail uses. Glare results from development and associated parking areas that contain reflective materials such as glass, highly polished surfaces, and expanses of pavement. Exterior paint colors and materials used to construct the proposed project would be non-reflective. There are no exposed metal or other materials proposed that could result in a substantial amount of glare. The project lighting design shall limit glare and up-light and comply with all local codes and CALGreen standards, as stated in Mitigation Measure (MM) AES-1. Consequently, given the minimal use of glare-inducing

materials in the design of the proposed buildings for the project, reflective glare impacts would be less than significant.

Mitigation Measures

MM AES-1 The project lighting design shall limit glare and up-light and comply with all local codes and CALGreen standards.

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

Environmental Evaluation

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

Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (ARB).

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?

No impact. According to the California Farmland Mapping and Monitoring Program, the project site is considered "Other Land" (California Department of Conservation 2019), which is defined as 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 that is greater than 40 acres is mapped as "Other Land." However, the soils on the project site consist of Hanford Coarse Sandy Loam, which is considered to be Prime Farmland, if irrigated. Historic data for the project site reveals that the site was used for row crops and orchards as early as 1930, a use that persisted on the site until as late as 2014. The project site is not currently being irrigated, and therefore the soils on site are not considered to be Prime Farmland. Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use because the site is not officially categorized as such land. No impact would occur.

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

No impact. According to the City of Redlands General Plan 2035, the site is designated as MDR. The site is within the East Valley Corridor Specific Plan, which is intended for high-quality commercial, industrial, and residential development in the City of Redlands (City of Redlands 2019). The project site is not within a Williamson Act contract. The project would not conflict with existing zoning for agricultural use or a Williamson Act contract. Therefore, no impact would occur.

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

No impact. Forest land does not exist on the project site, and the site is not zoned for forest or timberland use. The project would not conflict with existing zoning or cause rezoning of forest land, timberland, or timberland zone Timberland Production. The project site is considered MDR and surrounded by similar land uses. Therefore, no impact would occur.

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

No impact. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. The project is located within the East Valley Corridor Specific Plan, which is

intended for high-quality commercial, industrial, and residential development. The project site and surrounding area is not used for forest land. The project site is disturbed and does not contain any trees. No impact would occur.

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

Less than significant impact. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. The project site and surrounding area is not used for forest land. The land use designation for the site based on the City of Redlands General Plan 2035 is MDR. The proposed project would remove the small portion of planted area on site containing citrus and avocado trees. However, while the project site has been used for agricultural purposes in the past, the site is zoned for professional office and residential uses. Impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

Analysis in this section is based on the SD Homes Redlands Apartments Air Quality and Global Climate Change Impact Analysis provided by Ganddini Group, Inc., prepared on September 25, 2018, and revised on March 8, 2019 (Air Quality Study). The Air Quality Study is included as Appendix A.

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

Would the project:

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

Less than significant impact with mitigation. A significant impact could occur if the proposed project conflicts with or obstructs implementation of the South Coast Air Basin 2016 Air Quality Management Plan (AQMP) (Appendix A). Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintain existing compliance with applicable air quality standards.

The project is within the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Air Quality and Global Climate Change Impact Analysis (Appendix A) determined that the project would not conflict with the SoCAB AQMP with the implementation of MM AQ-1 and MM AQ-2. Consequently, the project will comply with all

applicable SCAQMD construction-source emission reduction rules and guidelines. Impacts would be less than significant with mitigation incorporated.

b) 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?

Less than significant impact. Cumulative short-term, construction-related emissions and long-term, operational emissions from the project would not contribute considerably to any potential cumulative air quality impact because short-term project and operational emissions would not exceed any SCAQMD daily threshold.

Methodology

The operations-related air quality impacts created by the proposed project have been analyzed using the California Emissions Estimator Model (CalEEMod). The operating emissions were based on the year 2020, which is the anticipated opening year for the proposed project. Eight single-family detached residential dwelling units, a 4,000-square-foot specialty trade contractor, and a 1.2-acre nursery wholesale facility would be removed from the project site and the reductions in operational emissions from the elimination of these uses are included in Tables 10 and 11 of the Air Quality and Global Climate Change Impact Analysis (Appendix A). The operational daily emissions printouts from the CalEEMod model are provided in Appendix B of the Analysis. CalEEMod analyzes operational emissions from area sources, energy usage, and mobile sources.

SCAQMD's Rule 403

The project is required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through applying standard best management practices (BMPs) in construction and operation activities, such as the application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent and stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. The total project area is approximately 21.84 acres; therefore, a Fugitive Dust Control Plan or Large Operation Notification would not be required.

At a minimum, SCAQMD's Rule 403 requires the application of the best available dust control measures for all grading operations. This includes the application of water or other soil stabilizers in sufficient quantity to prevent the generation of visible dust plumes. Compliance with Rule 403 would require the use of water trucks during all phases where earth-moving operations would occur.

The local air quality emissions from construction were analyzed using the SCAQMD's Mass Rate Localized Significant Threshold Look-up Tables and the methodology described in Localized Significance Threshold Methodology prepared by SCAQMD (revised July 2008). The Look-up Tables were developed by the SCAQMD in order to readily determine if the daily emissions of CO, NO_X,

PM_{10}, and $PM_{2.5}$ from the proposed project could result in a significant impact to the local air quality. The emission thresholds were calculated based on the East San Bernardino Valley source receptor area (SRA 35) and, a disturbance area of five acres per day.

The nearest sensitive receptors to the project site are the existing residential uses located immediately adjacent and to the north, south, east, and west of the proposed project site. Additionally, there are single-family detached residential dwelling units located approximately 65 feet east (across Alabama Street) and 50 feet west (across Iowa Street) of the project site, while multi-family attached residential dwelling units are located approximately 100 feet east (across Alabama Street). All of these residential sensitive receptors are located closer to the project site than the existing schools, the nearest of which is The Grove Farm School Campus, at 106 feet from the project site (measured from the nearest edge of the property line of the project site to the nearest edge of property line of the subject school property). Other nearby schools, including Barton Road Kindercare, Montessori in Redlands, Grove High School, and the Barton House Playschool are located 528 to 1,267 feet from the project site, respectively (see Table 1). Because all of the nearby schools are located further away than the nearest sensitive receptors (the existing residential uses located immediately adjacent to the project boundary), and because air emissions decrease with distance, any and all of the existing school uses in the project vicinity would be less impacted by emissions sourced from the project site. Therefore, the SCAQMD Look-up Tables for 25 meters were used. Table 3 shows the on-site emissions from the CalEEMod model for the different construction phases and the emissions thresholds.

The phases of the construction activities that have been analyzed below for each phase are: (1) grading, (2) building construction, (3) paving, and (4) application of architectural coatings.

Table 3: Local Construction Emissions at the Nearest Receptor

Activity	On-Site Pollutant Emissions (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition	35.78	22.06	2.73	1.81
Grading	54.52	33.38	11.24	5.82
Building Construction	24.55	20.37	1.54	1.44
Paving	14.07	14.65	0.75	0.69
Architectural Coating	1.68	1.83	0.11	0.11
SCAQMD Thresholds for 25 meters (82 feet)[1]	237	1,775	12	8
Exceeds Threshold?	no	no	no	no

Note:
[1] The nearest sensitive receptors are the single-family detached residential dwelling units located immediately adjacent and to the north, south, east, and west of the project site; therefore, the 25-meter threshold was used.

Project Impacts

The construction-related criteria pollutant emissions for each phase are shown in Table 3. Table 3 shows that none of the project's emissions will exceed regional thresholds. Therefore, a less than significant regional air quality impact would occur from construction of the proposed project.

The data provided in Table 3 shows that none of the analyzed criteria pollutants would exceed the local emissions thresholds at the nearest sensitive receptors. Therefore, a less than significant local air quality impact would occur from construction of the proposed project.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than significant impact. 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 defines a sensitive receptor as a land use such as residences, schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes (SCAQMD 2008). Commercial and industrial facilities are not included in the definition of sensitive receptor because employees do not typically remain on-site for a full 24 hours, but are present for shorter periods of time, such as 8 hours.

The nearest sensitive receptors to the project site are the single-family detached residential dwelling units located immediately adjacent and to the north, south, east, and west of the project site. In addition, single-family detached residential dwelling units are located approximately 65 feet east (across Alabama Street) and 50 feet west (across Iowa Street), while multi-family attached residential dwelling units are located approximately 100 feet east (across Alabama Street). As shown previously in Table 1, the nearest schools to the project site include the Grove School Farm Campus (approximately 106 feet southwest), Barton Road KinderCare (approximately 528 feet south), the Montessori in Redlands school (approximately 686 feet west), Grove High School (located approximately 686 feet west-northwest), and the Barton House Playschool (approximately 1,267 feet southwest). In addition, the Blossom Grove Alzheimer's Special Care Center is located approximately 0.60 mile from the project site. Additional sensitive receptors such as Empire Gymnastics (approximately 1,000 feet east), Redlands Jiu Jitsu, Fox Dance Studio, and Block CrossFit (approximately 1,300 feet north-northeast) are located in the project vicinity.

Because all of the nearby schools and other sensitive receptors are located further away than the nearest residential sensitive receptors (the single-family detached residential dwelling units that are immediately adjacent and to the north, south, east, and west of the project site), and because air emissions decrease with distance, any and all of the existing school uses in the project vicinity would be less impacted by emissions sourced from the project site than the immediately adjacent residential dwelling units.

As indicated in Table 3 above, none of the SCAQMD thresholds of significance would be exceeded at a distance of 25 meters from the project site. The impact analysis appropriately analyzes the localized impacts to the closest sensitive receptors directly adjacent to the project boundary and the most-stringent 25-meter localized significance thresholds were used. As the analysis shows that

there are no impacts at receptor locations directly adjacent to the project site, there will also not be any impacts at receptors (such as the schools listed) located further away from the site. Impacts are considered be less than significant.

Construction-Source Emissions

Project construction-source emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. For localized emissions, the project will not exceed applicable Localized Significance Thresholds established by the SCAQMD.

Project construction-source emissions would not conflict with the SCAQMD. As discussed herein, the project will comply with all applicable SCAQMD construction-source emission reduction rules and guidelines.

Operational-Source Emissions

The project operational-sourced emissions would not exceed applicable regional thresholds of significance established by the SCAQMD. Project operational-source emissions would not result in or cause a significant localized air quality impact as discussed in the Air Quality and Global Climate Change Impact Analysis (Appendix A). The proposed project is a residential project that does not include stationary sources and would not attract mobile sources (such as heavy-duty trucks) that would spend long periods queuing and idling at the site. Therefore, due the lack of stationary source emissions, no long-term localized significance threshold analysis is warranted. Project operational source emissions would therefore not adversely affect any of the sensitive receptors within the vicinity of the project and impacts would be less than significant. No operational mitigation is required.

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

Less than significant impact. The SCAQMD CEQA Handbook states that an odor impact would occur if the proposed project creates an odor nuisance pursuant to SCAQMD Rule 402, which 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 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.

If the proposed project results in a violation of Rule 402 with regard to odor impacts, then the proposed project would create a significant odor impact. Project operational-source emissions would not conflict with the SoCAB AQMP. The project's emissions meet SCAQMD regional thresholds and with the implementation of mitigation, will not result in a significant cumulative impact. The project does not propose any uses or activities that would result in potentially significant operational-source

odor impacts. Nor are any other emissions that would adversely affect a substantial number of people proposed. Potential operational-source odor impacts are therefore considered less than significant.

Mitigation Measures

MM AQ-1 Architectural coatings applied to project buildings are to be limited to 30 grams per liter volatile organic compounds (VOC) content.

MM AQ-2 The project applicant shall ensure that the construction contractor use construction equipment that have Tier 3 engines or better for any on-site construction activities.

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

Environmental Evaluation

Analysis in this section is based on the Biological Resources Assessment for the Proposed SD Homes Complex—Alabama and Orange Avenue provided by Jericho Systems, Inc. on March 23, 2018 (Biological Resources Assessment). The Biological Resources Assessment is included as Appendix B of this IS/MND.

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 Game or U.S. Fish and Wildlife Service?

Less than significant impact with mitigation incorporated. The proposed project site contains residential and commercial structures, vacant land, and a closed commercial nursery. The dominant plant species on site include tumbleweed (*Salsola tragus*), slender oat (*Avena barbata*), tree of heaven (*Ailanthus altissima*), and tree tobacco (*Nicotiana glauca*). The vegetation within the nursery site is a mix of non-native vegetation including multiple trees and shrubs. The northern boundary of the site abuts Morey Arroyo Channel, which contains Arundo (*Arundo donax*), tree tobacco, castor bean (*Ricinus communis*), mule fat (*Baccharis salicifolia*) and willow (*Salix*) species.

Wildlife observed included coyote (*Canis latrans*), side-blotched lizard (*Uta stansburiana*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), California towhee (*Melozone crissalis*), and turkey vulture (*Cathartes aura*), as well as a large flock of rock pigeon (*Columba livia*), which stayed close to the adjacent residential area, indicating that these may be a domestic flock associated with one of the residents. No special-status species were observed on site during the field survey.

The Biological Resources Assessment for the project site, dated March 23, 2018, and provided as Appendix B of this IS/MND determined that the site in its current condition is not expected to support any sensitive wildlife species given the existing level of disturbance on-site. On-site and surrounding land uses have nearly eliminated the naturally-occurring native habitats. The northern boundary of the project site abuts the Morey Arroyo Channel. This area of the project site near the channel is dominated by non-native weedy species, although some native riparian species are present, as described above. The project will not interfere with the Morey Arroyo Channel. While all vegetation on-site will likely be removed for construction of the project, vegetation off-site and near the Morey Arroyo Channel will not be disturbed or removed. A landscaped, vegetated buffer will separate the project features from the Morey Arroyo Channel.

Land uses surrounding the project site consist of residential, institutional, and commercial land uses. The ground cover within and adjacent to the project area consists mostly of weedy vegetation, tilled dirt, pavement, concrete, ornamental trees, and existing buildings. The site does not provide suitable habitat for any of the identified sensitive plant and wildlife species known to occur in the project vicinity. The vegetation on-site (native or not) does, however, provide potential nesting habitat for birds. Implementation of MM BIO-1 would help to avoid and minimize potential impacts to nesting birds and raptors. Impacts would be less than significant with the incorporation of mitigation.

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 Game or U.S. Fish and Wildlife Service?

Less than significant impact. The majority of the project site is dominated by ruderal/disturbed and cultivated vegetation that is not riparian habitat or a sensitive natural community. One land cover type, ruderal/disturbed habitat, dominates the project site. Ruderal/disturbed habitats contain areas that that are heavily to sparsely vegetated by non-native ruderal weedy species or lack vegetation completely. They provide little to no habitat value for wildlife. The ruderal/disturbed habitats observed within the project site do not fit any classification described in Preliminary Descriptions of the Terrestrial Communities of California (Holland 1986) or (Sawyer et al. 2009). Ruderal/disturbed habitat is not considered a sensitive plant community; however, it could potentially provide foraging and nesting habitat for some wildlife species. The dominant plant species on site include tumbleweed (*Salsola tragus*), slender oat (*Avena barbata*), tree of heaven (*Ailanthus altissima*), and tree tobacco (*Nicotiana glauca*). The vegetation within the nursery site is a mix of non-native vegetation including multiple trees and shrubs. The northern boundary of the site abuts Morey Arroyo Channel, which contains Arundo (*Arundo donax*), tree tobacco, castor bean (*Ricinus communis*), mule fat (*Baccharis salicifolia*) and willow (*Salix*) species.

Some of these species associated with the Morey Arroyo Channel at the project site's northern boundary are considered to by hydric vegetation, a wetland/riparian indicator. The project will not interfere with the Morey Arroyo Channel. While all vegetation on-site will likely be removed for construction of the project, vegetation off-site and near the Morey Arroyo Channel will not be disturbed or removed. The proposed project has been designed as to avoid potential Waters of the United States at the northern project boundary and therefore Federal permitting would not be required. However, riparian vegetation that is subject to jurisdiction under the Fish and Game code 1602 Streambed Alteration process extends beyond the Waters of the United States boundary and toward the project site. The project boundary encroaches into 0.37 acre of this riparian zone, and the project may be required to obtain a 1602 Streambed Alteration Agreement if construction activity alters the channel or its associated riparian habitat. The project has been designed to completely avoid this area and all construction and staging areas will be located away from the northern boundary of the project site where the Morey Arroyo Channel is located. However, in the event that the project would include the encroachment into the riparian area and/or removal of riparian vegetation, the formal application materials, fee, and a copy of the appropriate CEQA documentation must be included with a 1602 Streambed Alteration Agreement application. In its operation phase, the project's features will be separated from the adjacent riparian area with landscaping. With the implementation of total avoidance of the riparian area at the project site's northern boundary, and a permanent landscaped buffer between project features and this area, impacts to potentially jurisdictional riparian habitat would be less than significant.

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

Less than significant impact with mitigation incorporated. According to Section 404 of the Federal Clean Water Act (CWA), wetlands are defined as, "Those areas that are inundated or saturated by surface or groundwater (hydrology) at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation (hydrophytes) typically adapted for life in saturated soil conditions (hydric soils). Wetlands generally include swamps, marshes, bogs, and similar areas." The northern boundary of the site abuts Morey Arroyo Channel. The jurisdictional delineation conducted as part of the Biological Resources Assessment for the project found that the northern portion of the project site contains no Waters of the United States, and 0.37 acre of waters with California Department of Fish and Game (CDFG) jurisdiction due to its proximity to the Morey Arroyo Channel, as shown in Exhibits 11a and 11b. The southern portion of the site does not contain any water features or wetlands, nor wetland hydrology. Although hydric vegetation is present in the northern portion of the site, the two other required parameters that are indicative of wetlands are absent from the northern portion of the site: hydric soils and wetland hydrology. The soils on site consist of gravelly, loamy sands including Hanford Coarse Sandy Loam, which is not identified as a hydric soil type according to the National List of Hydric Soils (USDA 2019).

The Morey Arroyo Channel is an ephemeral stream that likely flows for less than 3 months per year, and would, therefore, be classified as non relatively-permanent water by the United States Army Corps of Engineers (USACE). The proposed project has been designed as to avoid potential Waters of the United States at the northern project boundary and therefore Federal permitting would not be required. However, riparian vegetation that is subject to jurisdiction under the Fish and Game code 1602 Streambed Alteration process extends beyond the Waters of the United States boundary and toward the project site. The project boundary encroaches into 0.37 acre of this riparian zone, and the project may be required to obtain a 1602 Streambed Alteration Agreement if construction activity alters the channel or its associated riparian habitat. The project has been designed to completely avoid this area and all construction and staging areas will be located away from the northern boundary of the project site where the Morey Arroyo Channel is located. However, in the event that the project would include the encroachment into the riparian area and/or removal of riparian vegetation, the formal application materials, fee, and a copy of the appropriate CEQA documentation must be included with a 1602 Streambed Alteration Agreement application. In its operation phase, the project's features will be separated from the adjacent riparian area with landscaping. With the implementation of total avoidance of the riparian area at the project site's northern boundary, and a permanent landscaped buffer between project features and this area, impacts to potentially jurisdictional wetland areas would be less than significant.

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?

No impact. The literature review determined that the project site is not located within a CDFW designated Essential Habitat Connectivity Area or a Natural Landscape Block. In addition, the project

site does not function as a wildlife movement corridor. The project site does not contain wildlife travel routes, such as a riparian strip, ridgeline, or drainage; or wildlife crossings, such as a tunnel, culvert, or underpass. The project site does not represent a wildlife movement corridor because it is completely disturbed; covered in nonnative grasses and other non-native vegetation; and entirely surrounded by development, walls, fencing, and roadways. These permanent structures serve as significant barriers to wildlife movement through the project site and region. The project site contains residential and commercial structures, vacant parcels and a closed commercial nursery in the East Valley Corridor Specific Plan area of Redlands, which is intended for high-quality commercial, industrial, and residential development. There are roadways surrounding the site on three sites, which serve as barriers to wildlife movement. Therefore, the project is not likely to serve as a migratory corridor and would not interfere with the movement of any native resident or species. These conditions preclude the possibility of related impacts. No impact would occur.

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

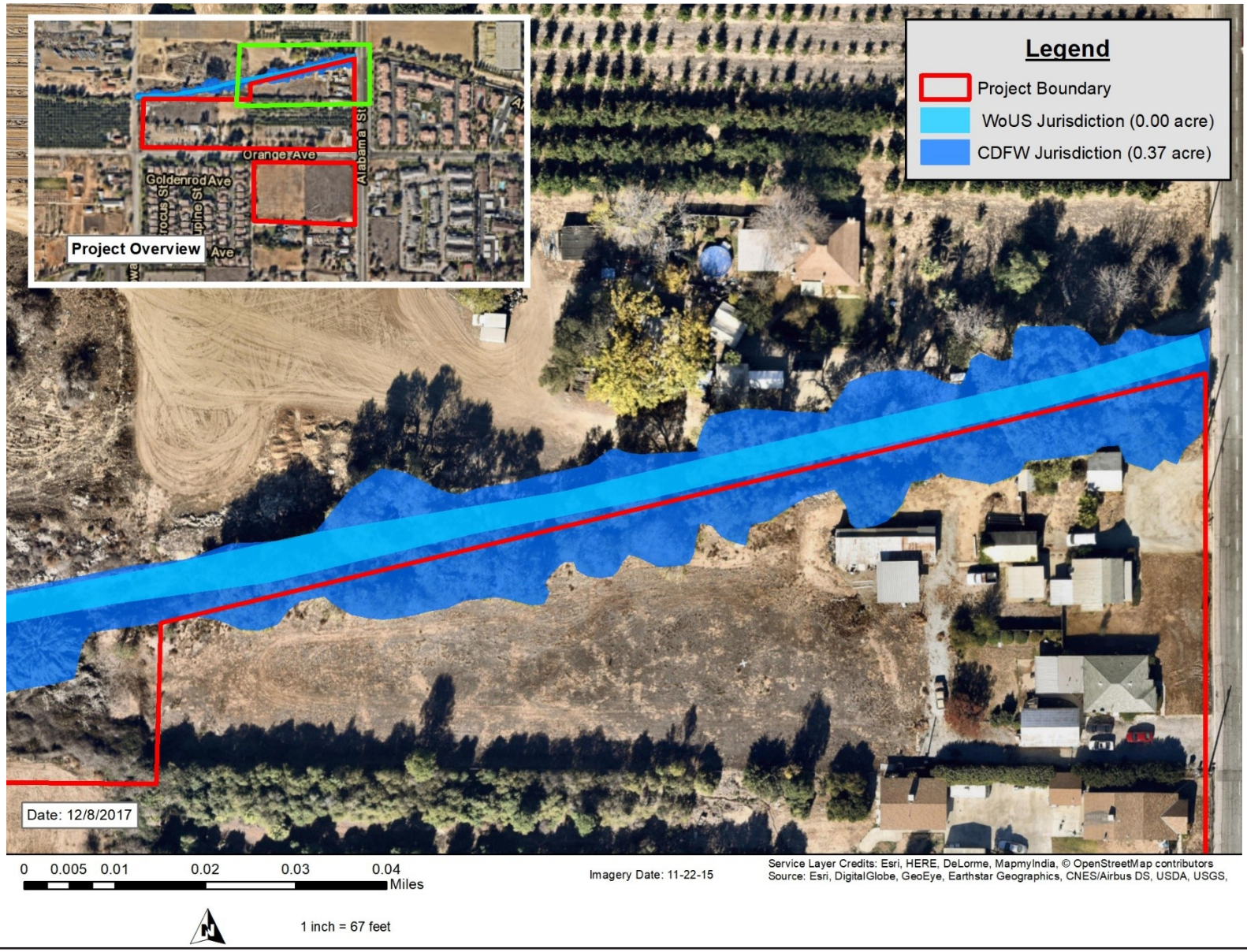
No impact. The City of Redlands has policies and guidelines related to street trees on public City property in Chapter 12.52 of the Redlands Municipal Code. There are no City policies or ordinances related to trees on private property. The project would not conflict with any policies or ordinances protecting biological resources. No impact would occur.

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

No impact. The site is not located within a habitat conservation plan. Therefore, it would not conflict with the provisions of a Habitat Conservation Plan, Natural Community Conservation plan, or other approved habitat conservation plan. No impact would occur.

Mitigation Measures

MM BIO-1 Any grubbing, brush clearing, or tree removal should be conducted outside of the State identified nesting season for migratory birds, which is typically March 15 through September 1. If work cannot be conducted outside of nesting season, a migratory nesting bird survey within and adjacent to the project site shall be conducted by a qualified biologist within 3 days prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, nesting sage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity.



Source: Jericho Systems, Inc., January 2018.

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Exhibit 11a
Jurisdictional Delineation

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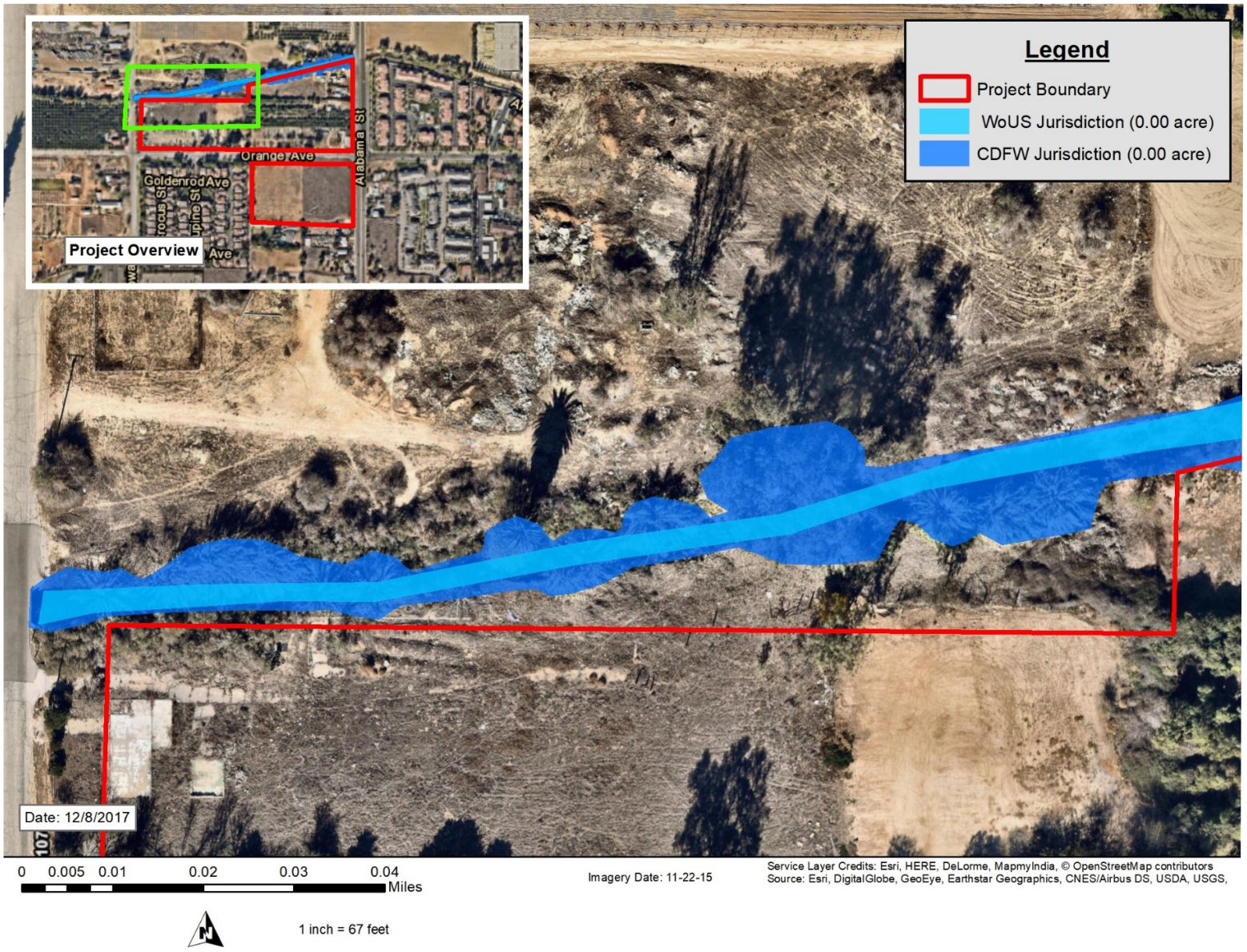

Source: Jericho Systems, Inc., January 2018.

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Exhibit 11b
Jurisdictional Delineation

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Cultural Resources *Would the project:*				
a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Evaluation

Analysis for this section is based on the Historical/Archaeological Resources Survey Report prepared for the Lilburn Corporation by CRM TECH on January 5, 2018 (revised July 18, 2018) in addition to the Phase I Cultural Resources Survey Addendum prepared on May 7, 2018 (revised on July 1, 2018). The Historical/Archaeological Resources Survey Report and its associated Addendum are included in this document as Appendix C.

Would the project:

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

Less than significant impact with mitigation incorporated. Historical resources are defined as buildings, structures, objects, sites, and districts of significance in history, archaeology, architecture, and culture. These resources include intact structures of any type that are 50 years or more of age. These resources are sometimes called the "built environment" and can include, in addition to houses, other structures such as irrigation works and engineering features. Historical resources are preserved because they provide a link to a region's past as well as a frame of reference for a community.

CEQA Guidelines Section 15064.5 defines "historic resources" as resources listed in the California Register of Historical Resources, or determined to be eligible by the California Historical Resources Commission for listing in the California Register of Historic Resources. The National Register recognizes properties that are significant at the national, State, and local levels. In accordance with CEQA Guidelines Section 15064.5, a site or structure may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of Public Resources Code (PRC) Section 5020.1(j), or if it meets the criteria for listing in either the National Register of Historic Places or the California Register of

Historical Resources (14 Code of Federal Regulations [CFR] § 4850). CEQA allows local historic resource guidelines to serve as the California Register of Historical Resources criteria if enacted by local legislation to act as the equivalent of the State criteria.

No cultural resources of historic origin were observed within the boundaries of the property during the field survey on December 12, 2017. According to the record search conducted by staff at South Central Coastal Information Center (SCCIC), the project area had not been surveyed for cultural resources prior to this study, and no cultural resources had been recorded on or immediately adjacent to the property. While 54 historical/archaeological sites were recorded in the project vicinity, one was determined to be an improved segment of the natural drainage known as Morey Arroyo (36-029388), which runs along the northern boundary of the site. However, it was determined that 36-029388 did not meet any of the federal, State, or local criteria to be historically significant. The ground surface in the project area has been disturbed extensively by past agricultural operations and construction activities, making it unlikely for any prehistoric or early historic cultural remains to survive intact.

The Phase I Cultural Resources Survey Addendum (Appendix C) identified two single-family residences accompanied by various ancillary buildings, landscaping, and open fields located on APNs 0292-168-21 and -22 within the southern project area. Record search results from the SCCIC determined that the additional project area had not been surveyed for cultural resources prior to the study, and no additional cultural resources had been recorded on the property.

One historic-period linear site, 36-008092 (CA-SBR-8092H) was identified extending along the southern boundary of the southern project area. The site represents the former course of the historic Mill Creek Zanja (also known as the Zanja or “Zankey”), a well-known local historic landmark.

Aerial photographs indicate that no notable man-made features were present within the southern project area prior to the 1960s. It is evident that in 1938 and 1959, the southern project area was used only for agricultural purposes. The Mill Creek Zanja was shown to be present in the late 1980s.

The building located on APN 0292-168-22 appeared by the mid-1960s, followed by the residence on APN 0292-168-21, which was constructed sometime between 1968 and 1980. Due to the lack of specific documentation in available City and County records, the exact dates of construction could not be ascertained for these buildings. The County of San Bernardino’s real property information database suggests that both of these residences, or at least some buildings on the two southern parcels, were constructed in 1951-1952. However, historical aerial photographs clearly demonstrate that no buildings were extant on the property in 1959.

The southern portion of the project area was surveyed on March 23, 2018. The residence located on APN 0292-168-21 (27217 Orange Avenue) is known to postdate 1968 and demonstrates no outstanding merits in design and construction. Although it may be more than 45 years old, this residence falls short of the generally recognized 50-year age threshold to be considered a potential “historical resource” without “exceptional importance,” and was therefore not recorded.

A field inspection of all existing buildings and other built-environment features on the property and field recordation of the residence on APN 0292-168-22 (27201 Orange Avenue) and a rock alignment along the southern project boundary, including detailed notations, coordinates for locations and dimensions, and preliminary photo-documentation was conducted.

Along the southern boundary of APN 0292-168-22, the former course of the Mill Creek Zanja is apparently marked by a shallow linear depression in the ground surface and a stone alignment. Portions of the Zanja were lined with stone after the 1880s and prior to the abandonment of its lower reach after 1926. The linear depression and the stone alignment at this location may very well represent the remnants of the historic Zanja after the post-1880s reconfiguration.

Construction and ownership history of the residence located at 27201 Orange Avenue could not be fully documented due to the limited availability of archival records. There is no evidence that it is closely associated with a person or an event of recognized historic significance, or that it represents the work of a prominent architect, designer, or builder. In addition, it does not stand out as an important example of any style, type, period, region, or method of construction, nor does it demonstrate any potential for important historical data. Based on these considerations, this residence does not appear eligible for listing in the California Register of Historical Resources, and does not qualify as a "historical resource," as defined by CEQA. Therefore, it requires no further treatment under the CEQA provisions for cultural resources.

A relatively intact segment of the Zanja to the east of the project site, extending from its intake to downtown Redlands, is currently listed in the National Register of Historic Places. At the project location, the original open ditch, lined with stone or paved after the 1880s, is no longer extant, but any archaeological remains confirmed to be from the Zanja would be considered historically significant, especially to the local community.

At this time, there is insufficient archaeological data to establish whether the stone alignment along the southern project boundary is indeed a part of the physical remains of the Zanja. In order to ascertain that possibility, further archaeological investigations, including controlled excavations, will be required. However, according to current project site plans, no construction is proposed at or near the southern project boundary, leaving it entirely possible for the stone alignment to be preserved in situ for future research. If all physical impacts can be avoided on the former location of the Zanja, the project will not cause a substantial adverse change in the significance of this "historical resource." Therefore, implementation of Mitigation Measures CUL-1 and CUL-2 is required.

As previously mentioned, the single family residence located at 27201 Orange Avenue does not appear to constitute a "historical resource". The City of Redlands Historic and Scenic Preservation Commission must approve the demolition permits for on-site structures after an official determination has been made confirming that they are not historical resources. Implementation of MM CUL-1, which requires a 50-foot buffer and avoidance of the proposed Zanja site, would reduce potential impacts to the Zanja to a less than significant level. In addition, implementation of MM CUL-2 would reduce potential impacts to buried cultural resources to a less than significant level.

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

Less than significant impact with mitigation incorporated. Archaeological resources are the physical remains of past human activities and can be either prehistoric or historic in origin. Archaeological sites are locations that contain significant evidence of human activity, including food remains, waste from the manufacturing of tools, tools, concentrations or alignments of stones, modification of rock surfaces, unusual discoloration or accumulation of soil, or human skeletal remains. Archaeological sites are often located along creek areas and ridgelines. Given that the site is highly disturbed due to past agricultural uses, the potential for development of the proposed project to affect an unidentified archaeological or paleontological resources is considered low. Furthermore, an archaeological records search was conducted by CRM TECH on November 14, 2017, and showed that no previously identified cultural resources have been recorded within the current project boundaries. However, there were a total of 54 historical/archaeological sites and one isolate previously recorded within a 1-mile radius of the project site. A pedestrian survey was also conducted on December 12, 2017, by Archaeologist Daniel Ballester, with negative results.

However, while unlikely, the presence of subsurface archaeological resources on the project site remains possible, these could be presence of subsurface archaeological resources on the project site remains possible, and these could be affected by ground-disturbing activities associated with grading and construction at the site. It is possible that subsurface disturbance might occur at levels not previously disturbed (e.g., deeper excavation than previously performed) or may uncover undiscovered archeological resources at the site.

Therefore, potential impacts to archeological resources could occur because of project-related construction activities. Implementation of standard cultural resource construction mitigation (MM CUL-3) as well as MM CUL-4, which requires the preparation of a Monitoring and Treatment Plan for the inadvertent find of significant cultural resources, would reduce impacts to a level of less than significant.

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

Less than significant impact with mitigation incorporated. Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the history of the earth and its past ecological settings. The potential for fossil occurrence depends on the rock type exposed at the surface in a given area. It is possible that potentially significant prehistoric remains could be found, since buried fossils often go undetected during a walkover survey. In the unlikely event that human remains are uncovered during ground-disturbing activities, implementation of MM CUL-5, in compliance with existing law regarding the discovery of human remains would reduce potential impacts to human remains to less than significant levels.

Mitigation Measures

MM CUL-1 A 50-foot buffer shall be established along the southern boundary of the additional project areas, to be landscaped in the future but strictly avoided during construction.

The linear depression and stone alignment shall be left undisturbed. If any disturbances to these features become necessary, a systematic archaeological testing program shall be required to ascertain the nature, extent, and condition of what remains of the Zanja at this location, both above and below the ground surface.

MM CUL-2 If buried cultural materials are discovered during any earth-moving operations associated with the project, all work in the immediate area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

MM CUL-3 **Archaeological Monitoring:** The Applicant shall retain a Secretary of Interior Standards qualified archaeological monitor. The monitor shall be present during all ground-disturbing activities to identify any known or suspected archaeological and/or cultural resource. The qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site. The plan shall be developed in coordination with the City of Redlands and shall include, but shall not be limited to:

a. Project grading and development scheduling.
b. A rotating or simultaneous monitoring schedule based on the scope of work during all ground related activities, including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery on the project site. The monitoring plan shall include scheduling, safety requirements, duties, scope of work, and a discussion of the monitor's authority to stop and redirect grading activities.
c. The protocols and stipulations that the Applicant, City of Redlands and Project Archaeologist shall follow in the event of previously unknown archaeological/cultural resources discoveries that could be subject to a archaeological/cultural resources evaluation.

MM CUL-4 If significant cultural resources are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to Interested Tribe(s) for review and comment, as detailed within Tribal Cultural Resources (TCR)-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

MM CUL-5 In the event of an accidental discovery or recognition of any human remains or funerary objects, Public Resource Code Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area (within a 100-foot buffer of the find), as reasonably suspected to overlie adjacent human remains, until the City of Redlands Police Department and San Bernardino County Coroner are contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the County Coroner determines the remains to be Native American, the County Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resource Code Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;
   - The descendent identified fails to make a recommendation; or
   - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

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

Environmental Evaluation

Analysis in this section is based on the SD Homes Redlands Apartments Air Quality and Global Climate Change Impact Analysis provided by Ganddini Group, Inc. on September 25, 2018, revised March 8, 2019 (Air Quality Study). The Air Quality Study is included as Appendix A.

Would the project:

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

A significant impact would occur if the project would result in the wasteful, inefficient or unnecessary use of energy.

Construction

Less than significant impact. During construction, the project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, paving, and building construction. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations Title 13, Sections 2449(d) (3) and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. In addition, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. The City's permissible hours for construction is

7:00 a.m. to 6:00 p.m. on non-holiday weekdays, including Saturdays. As on-site construction activities would be restricted between these hours, it is anticipated that the use of construction lighting would be minimal. Single-wide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. A typical 720-square-foot office trailer would consume approximately 6,283 kilowatt hour (kWh) during the 12-month construction phase (Appendix A). Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy.

Operation

Less than significant impact. The operational phase of the project would consume energy as part of building operations and transportation activities. Building operations for the project would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, lighting, and electronics, as well as parking lot lighting. Based on CalEEMod estimations within the modeling output files used to estimate greenhouse gas (GHG) emissions associated with the proposed project, building operations would consume approximately 322,261 kilowatt hours of electricity per year, and an estimated 18,885 kilo-British Thermal Units (kBTU) per year of natural gas (Appendix B). In 2015, the industrial sector of the City of Redlands consumed 83.9 million kilowatt hours of electricity and 6.24 million kBTU of natural gas.[2] Energy consumption of the proposed project represents 0.5 percent of the City's 2015 industrial electricity consumption, and 5 percent of the City's 2015 industrial natural gas consumption.

Operational energy would also be consumed during vehicle trips associated with the project. Residents and visitors associated with the proposed residential development would primarily relate fuel consumption to vehicle use. The project is located near the I-10 Alabama Street interchange and I-210 San Bernardino Avenue interchange. As such, it would be in proximity to two regional routes of travel, thus further reducing fuel consumption demand. For these reasons, transportation fuel consumption would not be wasteful, inefficient, or unnecessary.

The proposed project's buildings would be designed and constructed in accordance with the State's Title 24 energy efficiency standards. These standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Policies 8-A.8 and 8-A.39 of the Redlands General Plan 2035 reinforce the implementation and enforcement of the California Building and Energy codes to promote energy efficient building design and construction. The proposed project would be required by State law to comply with these energy conservation standards. Therefore, the project would not result in an inefficient, wasteful, or unnecessary use of energy. Operational energy impacts would be less than significant.

[2] City of Redlands. 2017. Climate Action Plan (CAP). December 5. Website: http://www.cityofredlands.org/UserFiles/Servers/Server_6255662/File/City%20Hall/Departments/Development%20Services/Planning%20Division/General%20Plan/GeneralPlan2035/Final_Redlands%20CAP%20with%20Appendices_011718.pdf. Accessed March 1, 2019.

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

A significant impact would occur if the project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Construction

Less than significant impact. As described above, the project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings, lighting, and other sources. The types of equipment could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers, frontend loaders, forklifts, and cranes. Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools.

California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, limit idling from both on-road and off-road diesel-powered equipment. The project would be required to comply with these regulations, which are enforced by the ARB. Part 11, Chapter 5 of the State's Title 24 energy efficiency standards establish mandatory measures for non-residential buildings, including material conservation and efficiency. The project would also be required to comply with these mandatory measures. There are no policies at the local level applicable to energy conservation specific to the construction phase. Therefore, it is anticipated that the construction phase of the project would not conflict with State or local renewable or energy efficiency objectives. Construction-related energy impacts would be less than significant.

Operation

Less than significant impact. The operational phase of the project would consume energy as part of building operations and transportation activities. Building operations for the project would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, lighting, and electronics, as well as parking lot lighting. The State's Title 24 energy efficiency standards are widely regarded as the most advanced energy efficiency standards. These standards help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation. Policies 8-A.8 and 8-A.39 of the Redlands General Plan 2035 reinforce the implementation and enforcement of the California Building and Energy codes to promote energy efficient building design and construction. Additionally, General Plan Policy 8-A.9 encourages the use of construction, roofing materials, and paving surfaces with solar reflectance and thermal emittance values per the California Green Building Code (California Code of Regulations [CCR]) Title 24, Part 11) to minimize heat island effects. The proposed project would be required by State law to comply with the Title 24 energy efficiency standards.

The City of Redlands General Plan[3] contains multiple voluntary measures that support energy conservation, including measures that promote energy efficient technologies and practices. Specific

[3] City of Redlands. 2017. City of Redlands General Plan 2035. December 5. Website: https://www.cityofredlands.org/cms/one.aspx?pageId=7276316. Accessed March 7, 2019.

design features applied to this project include infrastructure for EV charging stations that comply with State energy requirements, infrastructure for solar collectors to be installed over shade canopies and/or roofs, and shade structure-parking canopies with sufficient capacity to support solar panels. Additional features include high efficiency water heaters, high efficiency HVAC equipment and appliances, energy efficient window frames, LED lighting, water conserving plumbing fixtures, super-insulated roofing made with cool/reflective materials, and heat absorbing glazing. Installing solar/alternative energy technology, implementing incentives for builders to exceed the standards included in Title 24, and integrating trees and shade into the built environment to mitigate issues such as stormwater runoff and the urban heat island effect are also incorporated into the project design.

The proposed project would include extensive landscaping throughout the site, including trees, which may provide shade that would reduce energy consumption for cooling of the buildings. Additionally, the Redlands Climate Action Plan (CAP)[4] offers further strategies to go beyond state emissions reduction standards, and the Redlands Community Sustainable Plan[5] presents a conceptual framework for the City to promote energy efficiency and conservation technologies and practices that reduce the use of nonrenewable resources. The proposed project would not conflict with or obstruct these voluntary energy conservation measures.

California's Renewables Portfolio Standard (RPS) requires that 33 percent of electricity retail sales be served by renewable energy sources by 2020. The proposed project would be served with gas provided by Southern California Gas (SoCalGas). SoCalGas offers renewable natural gas captured from sources like dairies, wastewater treatment plants, and landfills.[6] The proposed project would be served with electricity provided by Southern California Edison.[7] Southern California Edison's 2017 power mix[8] included 32 percent eligible renewable (biomass and biowaste, geothermal, eligible hydroelectric, solar, and wind), 34 percent unspecified sources of power, 20 percent natural gas, 8 percent large hydroelectric, and 6 percent nuclear. Southern California Edison also offers a Green Rate 50 percent option that sources 66 percent of its power mix from eligible renewable energy sources, and a Green Rate 100 percent option that sources 100 percent of its power mix from eligible renewable energy sources. Southern California Edison is on track to meet the RPS of 33 percent by 2020 mandate.

The proposed project would not conflict with any other State or local renewable or energy efficiency objectives, as listed in Table 4 below. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Operational energy impacts would be less than significant. Therefore, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

[4] City of Redlands. 2017. Climate Action Plan (CAP). December 5. Website: http://www.cityofredlands.org/UserFiles/Servers/Server_6255662/File/City%20Hall/Departments/Development%20Services/Planning%20Division/General%20Plan/GeneralPlan2035/Final_Redlands%20CAP%20with%20Appendices_011718.pdf. Accessed March 1, 2019.
[5] City of Redlands. 2011. Redlands Community Sustainable Plan. March. Website: ci.redlands.ca.us/clerk/2011staffreports/110215J1-att1.pdf. Accessed March 8, 2019.
[6] Southern California Gas (SoCalGas). 2019. Website: https://www.socalgas.com/. Accessed February 28, 2019.
[7] Southern California Edison (SCE). 2019. Website: https://www.sce.com/. Accessed March 1, 2019.
[8] Southern California Edison (SCE). 2018. 2017 Power Content Label. July.

Table 4: Project Consistency with State and Local Renewable or Energy Efficiency Objectives

Renewable or Energy Efficiency Objectives	Project Consistency?
State Level	
Title 24 California Building Energy Code. In 2010, Title 24 was updated to include the "California Green Building Standards Code," referred to as CALGreen. CALGreen requires that new buildings reduce water consumption, increase system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. CALGreen has mandatory measures that apply to nonresidential and residential construction. The most recent CALGreen code was adopted in 2016 and became effective in 2017. CALGreen contains voluntary Tier 1 and Tier 2 levels, which are designed to exceed energy efficiency and other standards by 15 percent or 30 percent.	**Consistent.** The proposed project would be required to comply with Title 24.
Renewable Portfolio Standards (RPS). Established in 2002 by the California State Senate in Senate Bill 1078 (SB 1078), and accelerated in 2006 and expanded in 2011, the RPS is one of the most ambitious renewable energy standards in the country. The RPS requires each energy provider to supply 33 percent of their electricity from eligible renewable energy resources by 2020. Signed in October 2015, SB 350 requires providers to supply 50 percent of their electricity from eligible renewable energy resources by 2030.	**Consistent.** The proposed project would be served with electricity provided by Southern California Edison, which is on track to meet the RPS of 33 percent by 2020.
California Code of Regulations Title 13, Sections 2449(d)(3) and 2485. These regulations limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB.	**Consistent.** The proposed project would be required by the ARB to comply with California Code of Regulations Title 13, Sections 2449(d)(3) and 2485.
Local Level	
Redlands Community Sustainable Plan (RCSP) key goal for energy efficiency: Promote energy efficiency and conservation technologies and practices that reduce the use of nonrenewable resources by both City government and the community.	**Not in conflict.** This Plan provides a conceptual framework for energy conservation to the City and does not represent formal ordinance. The proposed project would not conflict with this goal.
Redlands General Plan Policy 7-A.44: Support the use of clean fuel and "climate friendly" vehicles in order to reduce energy use, energy costs, and GHG emissions by residents, businesses, and City government activities.	**Not in conflict.** The proposed project would not obstruct or be in conflict with this voluntary policy.
Redlands General Plan Policy 8-P.1: Promote energy efficiency and conservation technologies and practices that reduce the use and dependency of nonrenewable resources of energy by both City government and the community.	**Not in conflict.** The proposed project would not obstruct or be in conflict with this voluntary policy.
Redlands General Plan Policy 8-A.2: Support San Bernardino County and San Bernardino Associated Governments (SANBAG) in implementation of their energy-related policies.	**Not in conflict.** The proposed project would not obstruct or be in conflict with this voluntary policy.

Table 4 (cont.): Project Consistency with State and Local Renewable or Energy Efficiency Objectives

Renewable or Energy Efficiency Objectives	Project Consistency?
Redlands General Plan Policy 8-A.5: Accelerate the adoption of solar power and/or other alternative energy usage in Redlands through actions such as installing solar/alternative energy technology on available City spaces.	**Not in conflict.** The proposed project would not obstruct or be in conflict with this voluntary policy.
Redlands General Plan Policy 8-A.8: Implement and enforce California Code of Regulations Title 24 building standards (Parts 6 and 11) to improve energy efficiency in new or substantially remodeled construction. Consider implementing incentives for builders that exceed the standards included in Title 24 and recognize their achievements over the minimum standards.	**Consistent.** The proposed project would be required to comply with Title 24 building standards. **Not in conflict.** The proposed project would not obstruct or be in conflict with the voluntary latter part of this policy.
Redlands General Plan Policy 8-A.9: Encourage the use of construction, roofing materials, and paving surfaces with solar reflectance and thermal emittance values per the California Green Building Code (CCR Title 24, Part 11) to minimize heat island effects.	**Consistent.** The proposed project would be required to comply with Title 24 building standards.
Redlands General Plan Policy 8-A.10: Integrate trees and shade into the built environment to mitigate issues such as stormwater runoff and the urban heat island effect.	**Consistent.** The proposed project includes landscaping throughout the site, including trees.
Redlands General Plan Policy 8-A.39: Continue implementation and enforcement of the California Building and Energy codes to promote energy efficient building design and construction.	**Consistent.** The proposed project would be required to comply with the California Building and Energy codes.
Redlands Climate Action Plan: This plan adopted federal and state emissions reductions strategies and standards, including Title 24 and California RPS. This plan also includes strategies that go beyond the required state emissions reduction standards.	**Consistent.** As noted above, the proposed project would be consistent with the required state standards included in this plan. Furthermore, the proposed project would not obstruct or be in conflict with the voluntary strategies included in this plan.
Source: FCS 2019	

Mitigation Measures

None required.

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

Environmental Evaluation

Analysis for this section is based on the Feasibility Study Report of Soils and Foundation Evaluations conducted by Soils Southwest, Inc. on November 28, 2018. The report has been included in this document as Appendix D.

Would the project:

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

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

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

Less than significant impact. Although the project site is located within seismically active Southern California, the site is not located within an Alquist-Priolo Earthquake Fault Zone for fault rupture hazard as defined by the Alquist-Priolo Earthquake Fault Zoning Act of 1972. However, the site is located in an area that is subject to strong ground motions due to earthquakes. According to the Southern California Earthquake Data Center, several fault systems are located within relatively close proximity to the subject site. The subject site lies north of the San Jacinto Fault Zone and the Crafton Hills Fault Zone. The San Jacinto Fault Zone is capable of producing a maximum credible earthquake magnitude (Mw) of 6.5-7.5. The most recent surface rupture was on April 9, 1968. The Crafton Hills Fault Zone is a wedge between the San Andreas Fault Zone and the San Jacinto Fault Zone.

The development of the proposed project would provide substantially more housing on the project site than is currently there, thereby increasing the numbers of people and structures that would be exposed to strong ground shaking. The proposed project would be required to comply with seismic safety provisions of the California Building Code (CBC) (Title 24, Part 2 of the CCR).

The Redlands area has a moderate susceptibility for liquefaction or liquefaction-related phenomena to occur because of its subsurface soil characteristics (e.g., alluvium deposits, depth to groundwater, etc.). Regardless, standard grading and soil engineering practices would serve to ensure that project structures are adequately supported, and render the likelihood of liquefaction or liquefaction-related phenomena to very low levels. Impacts would be less than significant.

The project site and immediately adjacent areas contain flat relief. Therefore, the proposed project would not be susceptible to landsliding during a seismic event. The possibility of significant fault rupture, strong seismic ground shaking, seismic-related ground failure, or landslides on-site is low. Impacts would be less than significant.

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

Less than significant impact. The project proposes to develop an apartment complex with associated parking and landscaping. Grading and construction of the project could expose large

amounts of soil and could result in soil erosion if effective erosion control measures are not used. The project proposes to cut 3,075 cubic yards of soil on site and fill 56,360 cubic yards of soil. BMPs for erosion control are required under National Pollution Discharge Elimination System (NPDES) regulations pursuant to the federal CWA. NPDES requirements for construction projects one acre or more in area are set forth in the General Construction Permit issued by the State Water Resources Control Board (State Water Board Order No. 2009-0009-DWQ). Furthermore, the project's land clearing, grading, and construction activities would be required to comply with SCAQMD Rules 403 and 403.2 regulating fugitive dust emissions, thus minimizing wind erosion from such ground-disturbing activities. The geotechnical investigation for the project site also recommends BMPs for the site (Appendix D). The proposed project would not generate substantial erosion. Soil erosion impacts would be less than significant.

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

Less than significant impact. According to Figure 7-6, Liquefaction, of the Redlands General Plan 2035 (City of Redlands 2017), the project site is not located in an area of liquefaction susceptibility and liquefaction is unlikely to occur due to the presence of cohesive silty sands and the historical groundwater table at a depth of more than 100 feet. Based on information in the soils report, lateral spreading is unlikely considering the near level of existing grades and the fact that the project site and vicinity is characterized by flat relief. Compliance with recommendations in the geotechnical investigations report would be required as a condition of issuance of building and grading permits. The silty sandy soils found onside may be subject to change and may be susceptible to shrinkage and subsidence. However, overall, the site is considered stable for the proposed development. Impacts are therefore considered less than significant.

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

Less than significant impact. Expansive soils shrink or swell as the moisture content decreases or increases, which can shift, crack, or break structures built on such soils. Expansive soils may be present within the City of Redlands, and future development may be proposed and/or located on expansive soils. The majority of the project site consists of Hanford coarse sandy loam (HaC), which is not considered expansive. The southerly portion of the south parcel is made up of Ramona sandy loam (RmC), which has moderate shrink-swell potential. The CBC requires special design considerations for foundations of structures built on soils with expansion indices greater than 20. With the project's adherence to CBC design considerations, impacts related to expansive soils are considered less than significant.

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

No impact. The proposed project would connect to the existing sewer system operated by the City of Redlands. Septic tanks or alternative wastewater disposal systems would not be used. No impact would occur.

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

Less than significant impact with mitigation incorporated. Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. These resources are valued for the information they yield about the history of the earth and its past ecological settings. The potential for fossil occurrence depends on the rock type exposed at the surface in a given area. It is possible that potentially significant prehistoric remains could be found on the project site since buried fossils often go undetected during a walkover survey. Because the potential for paleontological resources exists within the project site and has not yet been examined, Mitigation Measure GEO-1, which provides precautions for incidental findings of paleontological resources on site, is required. Impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM GEO-1 Prior to the issuance of a grading permit, a paleontological records search shall be requested through the Natural History Museum of Los Angeles to determine the relative potential for paleontological resources to exist within the project site. If it is determined that fossil-bearing sediments are present, a qualified monitor will be required to be present during any ground-disturbing activities during the project. In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The Applicant shall retain a qualified paleontologist to examine the discovery. The paleontologist shall document the discovery in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Redlands for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.

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

Environmental Evaluation

Analysis in this section is based on the SD Homes Redlands Apartments Air Quality and Global Climate Change Impact Analysis provided by Ganddini Group, Inc. on September 25, 2018, updated March 8, 2019 (Air Quality Study). The Air Quality Study is included as Appendix A.

Would the project:

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

Less than significant with mitigation incorporated. The proposed project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, wastewater, and construction equipment. The following provides the methodology used to calculate the project-related GHG emissions, analyze project impacts, and examine the consistency of the proposed project with applicable GHG reduction plans, policies or regulations.

Methodology

The CalEEMod Version 2016.3.2 was used to calculate the GHG emissions from all phases of the proposed project. The project's emissions were initially compared to the Tier 3 SCAQMD draft screening threshold of 3,000 metric tons (MT) carbon dioxide equivalent (CO_2e) per year for all land uses and then, if the Tier 3 screening threshold was exceeded, the emissions were then compared to the Tier 4 SCAQMD 2020 Target Service Population Threshold of 4.8 MT CO_2e/service population (SP)/year.

The service population was estimated to be 862 future residents (default population from CalEEMod).

The City of Redlands issued a Hearing Draft of the City of Redlands CAP in July 2017. The CAP states that the City of Redlands has GHG emissions targets of 6.1 MT CO_2e/capita/year for the year 2015, 6.0 MT CO_2e/capita/year for the year 2030, and 5.0 MT CO_2e/capita/year for the year 2035. As the CAP year 2035 GHG emissions target is the most stringent, and the closest in value to the SCAQMD

Target Service Population emissions of 4.8 MT CO_2e/year for the year 2020 (project buildout year), the emissions were also compared to the year 2035 CAP per capita emissions target.

The CalEEMod Annual Output for year 2020 is available in Appendix B of the Air Quality and Global Climate Change Analysis contained in Appendix A of this IS/MND. Each source of GHG emissions is described in detail within the report.

Area Sources

Area sources include emissions from consumer products, landscape equipment, and architectural coatings. In order to account for SCAQMD Rule 445, no wood burning stoves or fireplaces will be included. No other changes were made to the default area source parameters.

Energy Usage

Energy usage includes emissions from the generation of electricity and natural gas used on-site. No changes were made to the default energy usage parameters.

Mobile Sources

Mobile sources include emissions from the additional vehicle miles generated from the proposed project. The vehicle trips associated with the proposed project have been analyzed by inputting the project-generated vehicular trips from the Traffic Impact Analysis (TIA) into the CalEEMod Model. The program then applies the emission factors for each trip, which is provided by the ARB 2017 Emissions Factors model (EMFAC2014) model to determine the vehicular traffic pollutant emissions. The CalEEMod default trip lengths were used in this analysis. See Section VII of the Air Quality and Global Climate Change Impact Analysis for details (Appendix A).

Waste

Waste includes the GHG emissions generated from the processing of waste from the proposed project as well as the GHG emissions from the waste once it is interred into a landfill. The CalEEMod default values were used in the analysis.

Water

Water includes the water used for the interior of the building as well as for landscaping and is based on the GHG emissions associated with the energy used to transport and filter the water. The CalEEMod default values were used in the analysis.

Construction

The construction-related GHG emissions were also included in the analysis and were based on a 30-year amortization rate as recommended in the SCAQMD GHG Working Group meeting on November 19, 2009. The construction-related GHG emissions were calculated by CalEEMod and detailed in Section VI of the Air Quality and Global Climate Change Impact Analysis (Appendix A).

Sequestration

The analysis includes reduction of GHG emissions from the project design feature calling for the planting of 230 new trees. The California Air Pollution Control Officers Association (CAPCOA) states that trees sequester carbon dioxide over 20 years of their life, after that, sequestration is nominal and outweighed by tree maintenance-related emissions. The total sequestration value given in the Annual CalEEMod output (see Appendix C of the Air Quality and Global Climate Change Impact Analysis contained in Appendix A of this IS/MND) was divided by 20 years to yield an annual value, which was then subtracted from the project's emissions.

Project Related Greenhouse Gas Emissions

The GHG emissions have been calculated based on the parameters described above. A summary of the results are shown below in Table 5 and the CalEEMod model run for the proposed project is provided in Appendix A. As stated previously, eight single-family detached residential dwelling units, a 4,000-square-foot specialty trade contractor, and a 1.2-acre nursery wholesale facility would be removed from the project site and the reductions in operational emissions from the elimination of these uses are included in Table 5.

Table 5: Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO_2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e
Area Sources[1]	0.00	76.43	76.43	0.01	0.00	76.99
Energy Usage[2]	0.00	911.54	911.54	0.03	0.01	915.51
Mobile Sources[3]	0.00	3,910.02	3,910.02	0.21	0.00	3,913.20
Waste[4]	49.90	0.00	49.90	2.95	0.00	123.63
Water[5]	7.09	142.58	149.67	0.73	0.02	173.52
Construction[6]	0.00	61.94	61.94	0.01	0.00	62.10
Sequestration from trees[7]						5.73
Subtotal Total Emissions	57.00	5,102.51	5,159.51	3.94	0.03	5,270.69
-specialty trade contractor, nursery wholesale, and single-family dwelling units being removed	-123.12	-539.20	-662.31	-7.33	-0.01	-847.58
Total Emissions	-66.12	4,563.32	4,497.19	-3.39	0.02	4,423.12
SCAQMD Draft Screening Threshold						3,000
Exceeds Threshold?						Yes
2020 Target Service Population Threshold 4.8 MT CO_2e/SP/year for projects						**4.72**
City of Redlands Year 2035 GHG Emissions Target of 5.0 MT CO_2e/capita/year						
Exceeds **Any** Population Threshold?						No

Table 5 (cont.): Project-Related Greenhouse Gas Emissions

Category	Greenhouse Gas Emissions (Metric Tons/Year)					
	Bio-CO_2	NonBio-CO_2	CO_2	CH_4	N_2O	CO_2e

Notes:
[1] Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment.
[2] Energy usage consists of GHG emissions from electricity and natural gas usage.
[3] Mobile sources consist of GHG emissions from vehicles.
[4] Solid waste includes the CO_2 and CH_4 emissions created from the solid waste placed in landfills.
[5] Water includes GHG emissions from electricity used for transport of water and processing of wastewater.
[6] Construction GHG emissions based on a 30-year amortization rate.
[7] CO_2 sequestration from the planting of at least 230 trees on site minus loss of sequestration from the removal of existing orange orchard (-114.66 $MTCO_2e$ [for years of active growth, per SCAQMD methodology])
Source: CalEEMod Version 2016.3.2

Table 5 shows that the subtotal for the proposed project's emissions (prior to the elimination of the existing uses) would be 5,270.69 MT CO_2e per year. The project's total emissions, after the operational emissions associated with the existing uses are deducted, would be 4,423.12 MT CO_2e per year, resulting in GHG emission of 4.72 MT CO_2e/SP/year. According to the thresholds of significance established above in Section V of the Air Quality and Global Climate Change Impact Analysis (Appendix A), a cumulative global climate change impact could occur if the GHG emissions created from the ongoing operations would exceed the SCAQMD Tier 3 draft threshold of 3,000 MT CO_2e per year for all land uses and the SCAQMD Tier 4 2020 Target Service Population threshold of 4.8 MT CO_2e/SP/year for projects. The project's emissions would not exceed the City's CAP year 2035 emissions target of 5.0 MT CO_2e/capita/year, nor would it exceed the more conservative SCAQMD Target Service Population threshold of 4.8 $MTCO_2e$/SP/year..

Therefore, with incorporation of Mitigation Measures AQ-1 and AQ-2, the project's GHG emissions are considered to be less than significant.

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

Less than significant impact. The proposed project would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHG. The applicable plan for the proposed project is the City of Redlands CAP. The CAP's GHG emission targets and goals are based on meeting the goals in Executive Order B-30-15 and SB 32 and following the CAP guidelines established in the ARB 2017 Scoping Plan. The CAP includes emissions targets of 6.0 MT CO_2e per capita per year for 2030 and 5.0 MT CO_2e per capita per year for 2035.

The SCAQMD's thresholds used Executive Order S-3-05 goal as the basis for deriving the screening level. The California Governor issued Executive Order S-3- 05, GHG Emission, in June 2005, which established the following reduction targets:

- **2010:** Reduce greenhouse gas emissions to 2000 levels

- **2020:** Reduce greenhouse gas emissions to 1990 levels
- **2050:** Reduce greenhouse gas emissions to 80 percent below 1990 levels

In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires the ARB, to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020 through an enforceable Statewide emission cap, which was phased in starting in 2012.

Even without mitigation, the project's emissions meet the City's CAP emissions target 5.0 MT CO_2e per capita per year for 2035. Therefore, the project will not conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

At a level of 4.72 MT CO_2e/SP/year, the project's GHG emissions do not exceed the Tier 4 SCAQMD 2020 Target Service Population Threshold of 4.8 MT CO_2e/SP/year and complies with the reduction goals of the City of Redlands CAP, AB-32 and SB-32. Furthermore, the project will comply with applicable Green Building Standards and City of Redlands' policies regarding sustainability (as dictated by the City's General Plan and CAP). Impacts are considered to be less than significant.

Mitigation Measures

Incorporate MM AQ-1and MM AQ-2.

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

Environmental Evaluation

The analysis in this section is based on the Phase I Environmental Site Assessment and Pesticide and Herbicide Soil Investigation (Phase I ESA) prepared by Lilburn Corporation in December 2017. The Phase I ESA is provided in Appendix E.

Would the project:

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

Less than significant impact. The proposed project could result in a significant hazard to the public if the project includes the routine transport, use, or disposal of hazardous materials or places housing near a facility that routinely transports, uses, or disposes of hazardous materials. The project proposes to demolish the existing on-site structures and develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery.

With regard to the demolition of existing residential structures on-site, which due to their age may contain asbestos or lead paint, the project is required to comply with all applicable State and local regulations for the abatement, handling and disposal of asbestos and lead paint, including but not limited to, the SCAQMD's Rule 1403 for abatement and the implementation of OSHA regulations for the handling and disposal of asbestos, lead paint, and related materials.

SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including removal and disturbance. This rule is designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires a certified inspector to survey any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable asbestos containing materials. Rule 1403 also establishes notification procedures, removal procedures, handling and clean-up procedures, storage, disposal, landfilling requirements, warning label requirements, and some methods of dry removal that must be implemented when disturbing identified appreciable amounts of asbestos containing material under defined conditions.

The safety of construction workers involved in the demolition would be assured by complying with all California Asbestos Standards in Construction (8 CCR Section 1529). These standards regulate exposure to asbestos in all construction work including the demolition of structures. Compliance with these existing regulations establish entry and exit procedures after working in areas that are identified as containing asbestos and establish specific control measures designed to protect workers depending on the type of asbestos they may be handling.

Compared with the existing conditions, particularly during project construction, the proposed residential project would increase the transport, use, and disposal of small quantities of various hazardous and potentially hazardous materials such as gasoline, diesel fuel, petroleum-based products, degreasers, solvents, and fertilizers, herbicides, and pesticides; these substances may also be used for routine maintenance and landscaping during operation. The transport, use, and disposal of these and other similar hazardous and potentially hazardous materials is controlled and regulated by federal and State regulations.

Regardless, the project would not result in the transport, use, or disposal of these materials in volumes or quantities that could pose a hazard to the public or the environment. Therefore, impacts associated with the transport and use of potentially hazardous materials are considered less than significant.

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

Less than significant impact. Project construction could result in exposure of hazards or hazardous materials through the routine transportation, use, and disposal of construction-related hazardous materials. The project proposes to demolish the existing on-site structures and construct an apartment complex with associated parking and landscaping.

Lilburn Corporation conducted a Phase I ESA for the project in 2017 (Appendix E). Based on the review of historical information in the Phase I ESA, the property was at least partially used for various forms of agriculture, including groves and row crops, from at least 1930 until present. The site was evaluated to assess the possibility of residual pesticides present in the soil due to the former use as orchard and row crops. A portion of the project site is occupied by American Landscape and Maintenance, Inc. (APN 0292-167-08-12) and has been used as a construction/landscaping yard. The site had numerous 55-gallon drums, tires, and construction equipment on-site as well as an aboveground storage tank (AST). Stained pavement was evident and portions of the site was used as a parking lot. The property adjacent to the north (APN 0292-167-08-11) was vacant; however, evidence of past uses (foundations) was observed. This site had numerous 55-gallon drums and household trash on-site. The contents of the 55-gallon drums could not be verified. APN 0292-167-08 and APN 0292-167-18 were both developed with single-family residences and portions of the sites had mounds of household trash. APN 0292-167-25 was covered with potted shrubs, plants, and trees used by American Landscape and Maintenance, Inc. The properties south of Orange Avenue were vacant (APN 0292-168-03 and APN 0292-168-16). No evidence of underground storage tanks, electrical transformers, or seepage pits were present. A review of federal and State environmental databases revealed no environmental concerns or issues directly related to the site that would be considered “an impairment.”

The Phase I report designated the entire site as an impairment, as portions of the subject site’s current and historical uses included citrus groves and row crops on which pesticides and/or herbicides may have been used. A soil investigation was prepared in November 2017 by Geocon. The assessment included 32 surface soil samples. The samples were reviewed for pesticides and herbicides, and lab testing determined that they were not detected in any of the composite surface soil samples at concentrations equal to or greater than the EPA Region 9 Regional Screening Levels for residential land use. The recommendations of the Phase I ESA do not include further investigation of the site.

While the project would demolish the existing residential structures on-site, which due to their age may contain asbestos or lead paint, as described above, the project is required to comply with all applicable State and local regulations for the abatement, handling and disposal of asbestos and lead

paint, including but not limited to, the SCAQMD's Rule 1403 for abatement and the implementation of OSHA regulations related to the handling and disposal of asbestos, lead paint, and related materials.

Future residential development of the site would require compliance with all local, State, and federal regulations. With adherence to existing regulations, the proposed project would not 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. Impacts would therefore be less than significant.

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

Less than significant impact. As shown previously in Table 1, the nearest schools to the project site include the Grove School Farm Campus (approximately 106 feet southwest), Barton Road KinderCare (approximately 528 feet south), the Montessori School (approximately 686 feet west), Grove High School (located approximately 686 feet west-northwest), and the Barton House Playschool (approximately 1,267 feet southwest). As previously discussed, the project proposes to demolish the existing residential structures on site and develop an apartment complex with associated parking and landscaping. The demolition of the site would be conducted in strict compliance with all applicable state and local regulations for the abatement, handling and disposal of asbestos and lead paint, including but not limited to, the South Coast Air Quality Management District's Rule 1403 for abatement and implement OSHA regulations for the handling and disposal of asbestos, lead paint, and materials. The construction of the project would temporarily increase the transport, use, and disposal of small quantities of various hazardous and potentially hazardous materials such as gasoline, diesel fuel, petroleum-based products, degreasers, solvents, and fertilizers, herbicides, and pesticides. Operationally, the residential use proposed for the site would not involve the handling, transport, or emission of hazardous materials. However, gasoline, diesel fuel, petroleum-based products, degreasers, solvents, and fertilizers, herbicides, and pesticides may also be used for routine maintenance and landscaping during operation. The transport, use, and disposal of these and other similar hazardous and potentially hazardous materials is controlled by, and regulated by federal and state regulations, and would be handled and disposed of according to these regulations. Impacts would be less than significant.

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

Less than significant impact. According to the project's Phase I ESA, the project site was listed within the Hazardous Waste Information System database (Haznet), a Facility and Manifest Data generator. According to the Environmental Data Resources, Inc. (EDR) report, the waste generated was from an unspecified solvent mixture. The waste was disposed of via a treatment tank and sent to a transfer station. The site was also listed within the Illegal Drug Lab (Clandestine Drug Labs [CDL]) database, circa 1995. CDL's are the location where an illegal drug lab was operated or drug lab equipment and/or materials were stored. However, none were observed during the site visit.

Additionally, the review of the EDR records search revealed several sites of concern within the vicinity. These sites appear to be in compliance with applicable hazardous waste regulations as they are either a permitted operation, actively in remedial work, or remedial work has been completed. These sites are not anticipated to affect the subject property, as they are located either a greater distance than would warrant establishment of a Recognized Environmental Condition (REC) or are cross/down gradient of the subject site and applicable water flow.

Residential development of the project site, including the importation of fill dirt, will not present a significant hazard to the public or environment. Therefore, impacts are considered less than significant.

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

No impact. Airports closest to the project site include the Redlands Municipal Airport and San Bernardino International Airport. The site is located approximately 4.23 miles southwest of Redlands Municipal Airport and approximately 3.98 miles southeast of San Bernardino International Airport. The project is not within a sphere of influence for either airport. This condition precludes the possibility of creating an aviation safety hazard for people residing or working in the project area. No impact would occur.

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

Less than significant impact. The proposed project will be required to comply with the City of Redlands' Emergency Plan and Hazard Mitigation Plan and the emergency access requirements of the California Fire Code, which include but are not limited to, providing access with adjoining uses and providing suitable access for emergency vehicles. In addition, the project does not propose any changes to Alabama Street or Park Avenue that could potentially impair emergency response or evacuation (lane reductions, narrowing, permanent road closures, etc.). Impacts would therefore be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than significant impact. According to the Redlands General Plan 2035, high fire risk areas in Redlands include San Timoteo and Live Oak Canyons in addition to Crafton Hills (City of Redlands 2018). Additionally, according to the general plan, open spaces in the City are susceptible to destructive wildland fires, often exacerbated by dry weather and Santa Ana winds. The proposed project is not located in or near a State Responsibility Area nor on lands classified as very high fire hazard severity zones. The proposed project is located in the West End of Redlands, which contains warehouses, logistics, and distribution centers in addition to apartment complexes, where the risk for wildland fire is lower. Because the project is located in an industrial zone, and the project site and surrounding areas are developed and covered with pavement and concrete, the threat of wildland

fire is unlikely. The proposed project site would not be located in a critical fire danger zone or adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area. In addition, the project would adhere to building codes and any conditions included through review by the fire department. Therefore, impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

The analysis in this section is based on the Preliminary Drainage Study for SD Homes Redlands Apartments prepared by Transtech Engineers, Inc., on January 30, 2018, and the Water Quality Management Plan for Redlands Apartments prepared by Transtech Engineers, Inc. (date not specified). These reports are provided in Appendix F.

Would the project:

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

Less than significant impact. A project normally would have an impact on surface water quality if discharges associated with the project would create pollution, contamination, or nuisance as defined in Water Code Section 13050, or if the project were to cause regulatory standards to be violated as defined in the applicable NPDES stormwater permit or Water Quality Control Plan for a receiving water body. For the purpose of this specific issue, a significant impact could occur if the project would discharge water that does not meet the quality standards of the agencies regulating surface water quality and water discharge into stormwater drainage systems. Significant impacts could also occur if the project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Board. These regulations include preparation of a Water Quality Management Plan (WQMP) to reduce potential post-construction water quality impacts.

The proposed project has the potential to release water pollutants during both construction and operations that may violate water quality standards. Each is discussed separately.

Construction

Three general sources of potential short-term, construction-related stormwater pollution associated with the proposed project include: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earthmoving activities which, when not controlled, may generate soil erosion via storm runoff or mechanical equipment.

The proposed project would disturb approximately 21.84 acres of land and therefore would be subject to NPDES permit requirements during construction activities. Pursuant to Redlands Municipal Code Section 15.54.160, new development or development projects shall implement stormwater management practices to minimize runoff and increase infiltration. The Department of Municipal Utilities and Engineering would review and approve BMPs contained in the project Applicant's submitted Storm Water Pollution Prevention Plan (SWPPP) to be implemented to reduce the discharge of pollutants during construction. The project Applicant's SWPPP shall identify erosion control BMPs to minimize pollutant discharges during construction activities. These identified BMPs would include stabilized construction entrances, sand bagging, designated concrete washout, tire wash racks, silt fencing, and curb cut/inlet protection. Impacts with regard to construction would be less than significant with implementation of existing regulations.

Operation

Proposed construction of the project would increase impervious areas by replacing the vacant property with apartments and associated paving. Landscaping throughout the project site is proposed as part of the project design. With compliance with existing federal, State, and local regulations related to water quality, implementation of BMPs included in the project construction SWPPP, and implementation of design recommendations included in the project's Infiltration

Report, the project would result in less than significant impacts to water quality resulting from project operation.

The proposed project would not generate hazardous wastewater that would require any special waste discharge permits. All wastewater associated with the project's interior plumbing systems would be discharged into the local sewer system for treatment at the regional wastewater treatment plant. Impacts would be less than significant with implementation of required BMPs and design recommendations.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than significant impact. If the project removes an existing groundwater recharge area or substantially reduces runoff that results in groundwater recharge such that existing wells would no longer be able to operate, a potentially significant impact could occur. The City of Redlands provides water services in the project area. On-site infiltration systems, such as bioswales, are included in the project's design to address permeable areas on-site. These infiltration systems have been included in design plans and are described in the project's infiltration report (see Appendix F of this IS/MND). These infiltration systems are designed to capture on-site runoff and prevent any potential depletion of groundwater supplies. Impacts would be less than significant.

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

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

Less than significant impact. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. Construction and operation of the proposed project would increase the net area of impermeable surfaces on the site. The project would include on-site infiltration to capture and dispose of stormwater. Improvement of the site with on-site infiltration will reduce and/or eliminate erosion and siltation on and off site by eliminating the current system of water sheet flow across the site. As concluded in the Preliminary Drainage Study provided by Transtech Engineers, Inc. (Appendix F), the infiltration system design will be constructed by the project civil engineer, in compliance with City of Redlands guidelines.

Once construction of the project is completed, the project would consist of impervious surfaces, landscaping, and bioswales, and therefore the development would not be subjected to substantial erosion. Impacts would be less than significant.

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

Less than significant impact. The proposed project would increase impervious surfaces on-site; however, the project would include on-site infiltration to capture and dispose of stormwater and to prevent overland flow that may otherwise cause flooding.

The project site is at an elevation range of 1,215 to 1,240 feet above mean sea level, and natural slopes across the site are approximately 2 percent. Water flow in the northern parcel of the site tends to be sheet flow in a southeasterly to northwesterly direction until reaching the nearby Morey Arroyo Channel. The majority of the northern parcel is within the FEMA Flood Zone AO. Zone AO is considered a Special Flood Hazard Area and is defined as areas with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain) with average depths determined and indicated on the FEMA Flood Insurance Rates Zone Map (FIRM) panel. The existing natural drainage on the southern parcel of the site is primarily sheet flow southeast to northwest. Stormwater flows from the southeast to northwest. The stormwater flows from the southern parcel are intercepted by Orange Avenue and conveyed westerly to a storm drain inlet located at the southeast corner of Iowa Street and Orange Avenue. The southern parcel is located within the FEMA Flood Zone X. Zone X are determined to be outside of the 0.2 percent annual chance floodplain.

The City of Redlands has adopted Ordinance No. 2837 for the purpose of providing for the sound use and development of areas of special hazards including properties located in special flood hazard areas. Chapter 15.32.110, Construction Standards, specifies the elevation and flood proofing requirements for residential construction in Zone AO as follows:

> Residential construction, new or substantial improvement, of any structure in zone AO shall have the lowest floor, including basement, elevated above the highest adjacent grade to a height exceeding the depth number specified in feet on the FIRM by at least two feet, or elevated at least four feet above the highest adjacent grade if no depth number is specified.

The FIRM panel for this property therefore specifies a depth of 1 foot. The proposed project grading design will establish the finished floor elevations for all structures to be elevated at least 3 feet above the highest adjacent grade elevation for each structure.

The proposed project's storm drain system will collect runoff from the site in an on-site storm drainage system on each of the northern and southern parcels. The detention basin on the northern parcel would be a minimum of 3,416 cubic feet, and on the southern portion, 6,776 cubic feet. Stormwater runoff will be conveyed and directed to the northwesterly portion of the north and south parcels. The low flow water quality flows will be diverted to the water quality infiltration basins with low flow diversion structures and drainage swales located in landscaped areas. Stormwater flows greater than the water quality flow rate of the on-site infiltration basin will be discharged to the existing 48-inch storm drainpipe located on Iowa Street or the proposed new storm drain in Orange Avenue. Detention basins will be provided to restrict the post-development

flow rates to less than 95 percent of the pre-developed project peak flow rates. The project will be required to capture and infiltrate the water quality design capture volume (North parcel: 22,486 cubic feet; South Parcel: 21,099 cubic feet.)

As such, the project would not substantially increase the rate or amount of surface runoff, which could result in on- or off-site flooding. Impacts would be less than significant.

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

Less than significant impact. During construction, the project Applicant would be required to comply with drainage and runoff guidelines pursuant to the City of Redlands. Compliance with these guidelines would reduce the potential for polluted runoff. The project is subject to the City's water quality and NPDES requirements. A separate WQMP will be prepared for the project.

Operation of the proposed project would increase the net area of impermeable surfaces on the site. Project implementation would not result in alteration of any existing drainage course. Permits to connect to the existing storm drainage system would be obtained prior to construction. Therefore, the increase in discharges would not affect local storm drain capacity. The project would not result in substantial pollutant loading such that treatment control BMPs would be required to protect downstream water quality. The proposed project would include detention basins on both the north and south parcels of the project site to address water quality. With implementation of the BMPs and adherence to existing water quality and NPDES requirements, impacts from polluted runoff, such as from oil and other pollutants from parking areas would be reduced to acceptable levels. Impacts would be less than significant.

(iv) impede or redirect flood flows?

Less than significant impact. Water flow in the northern parcel of the site tends to be sheet flow in a southeasterly to northwesterly direction until reaching the nearby Morey Arroyo Channel. The majority of the northern parcel is within the FEMA Flood Zone AO. Zone AO is considered a Special Flood Hazard Area and is defined as areas with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain) with average depths determined and indicated on the FEMA FIRM panel. The existing natural drainage on the southern parcel of the site is primarily sheet flow southeast to northwest. Stormwater flows from the southeast to northwest. The stormwater flows from the southern parcel are intercepted by Orange Avenue and conveyed westerly to a storm drain inlet located at the southeast corner of Iowa Street and Orange Avenue. The southern parcel is located within the FEMA Flood Zone X. Zone X are determined to be outside of the 0.2 percent annual chance floodplain.

The City of Redlands has adopted Ordinance No. 2837 for the purpose of providing for the sound use and development of areas of special hazards including properties located in special flood hazard areas. The project would comply with Chapter 15.32.110 Construction Standards specifies the elevation and flood proofing requirements for residential construction in Zone AO. The FIRM panel for this property therefore specifies a depth of 1 foot. The proposed project grading design will

establish the finished floor elevations for all structures to be elevated at least 3 feet above the highest adjacent grade elevation for each structure. The implementation of project design features, as well as adherence to water quality requirements would reduce this impact to less than significant.

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

No impact. The project site is not located near any large inland bodies of water and is more than 20 miles from the Pacific Ocean, a condition that precludes inundation by tsunami. According to the City of Redlands General Plan 2035 Flood Hazards Map, the project site is not located within a dam inundation area (City of Redlands, 2017d).

The nearest body of water is the Morey Arroyo Channel, which abuts the northern parcel boundary of the project site. However, according to the Morey Arroyo Regional Drainage Study, the 100-year storm event flow for the arroyo is approximately 3,000 cubic feet per second (cfs). The likelihood of the Morey Arroyo Channel inundating the project site via tsunami or seiche is very low. This precludes inundation by tsunami, seiche, or mudflow. There is no possibility of a seiche from this reservoir affecting the project site given the project's location being, at minimum, more than 1 mile away from a reservoir. The closest reservoir to the project site is the Crafton Reservoir, located more than 6 miles from the site. Furthermore, inundation of the project site would not create overland flow on- or off-site as on-site infiltration to capture and dispose of stormwater is part of the project's design. On-site infiltration would prevent the movement or release of any potential pollutants off-site. There would be no impact.

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

No impact. The City of Redlands, along with 16 other cities, the County of San Bernardino, and the County of San Bernardino Flood Control District developed a template for WQMPs to meet the requirements of the current General Stormwater Permit. This template has been reviewed and approved for use by the State Water Quality Control Board. The City of Redlands requires a project proponent to submit a "preliminary project specific" WQMP in the appropriate template as early in the entitlement process as possible. The "preliminary project specific" WQMP shall address the project's quality and quantity of stormwater runoff. It gives the Applicant a chance to illustrate that Low Impact Development (LID) concepts have been utilized, the basic design is sound and any assumptions made for the project are valid. The proposed project will develop a WQMP to address the project's quality and quantity of stormwater runoff and provide BMPs for the construction and operation of the project to ensure compliance with the General Stormwater Permit.

The City of Redlands is an implementing agency of the 2015 San Bernardino Valley Regional Urban Water Management Plan (UWMP), amended in June 2017. The UWMP provides a summary of water supply sources for the area, as well as management strategies to meet targets for future water use, including groundwater supply. The proposed project would be consistent with the management strategy outlined by the UWMP for local surface water and groundwater in the San Bernardino Valley. The proposed project would not obstruction of the General Stormwater Permit or the San Bernardino Valley Regional UWMP. There would be no impact.

Mitigation Measures

None required.

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

Environmental Evaluation

Analysis in this section is based, in part, on the Noise Impact Analysis prepared by Ganddini Group, Inc. originally dated September 24, 2018, and revised most recently on July 24, 2019. The Noise Impact Analysis is included in this report as Appendix D. For a discussion of the characteristics of noise and further information regarding the applicable noise regulatory framework, refer to the Noise impact discussion in Section 13, Noise, of this document.

Would the project:

a) Physically divide an established community?

No impact. The physical division of an already established community typically refers to the construction of a linear feature, such as an interstate highway, railroad tracks, or removal of a means of access, such as a bridge, which would impact mobility within an existing community and an outlying area. The proposed project does not propose construction of any roadway, flood control channel, or other structure that would physically divide any portion of the community. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant parcels and a closed commercial nursery. The proposed project is consistent with the surrounding land uses and would not divide an established community. Therefore, no impact would occur.

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

Less than significant impact. The project site is designated MDR by the City of Redlands General Plan 2035. In addition, the site is within the East Valley Corridor Specific Plan area, which is intended for high-quality commercial, industrial, and residential development (City of Redlands, 2017a). The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. The project is consistent with the City's CAP and with the goals of the East Valley Corridor Specific Plan. The project will amend the specific plan, and will change the current zoning

designations of EV/AP and EV3000/RM to a single designation of EV2500/RM. These amendments will bring the project into conformity with the General Plan, as EV2500/RM allows for Multi-Family Residential development.

The City of Redlands General Plan 2035, Section 2.4 Citrus Groves/Farms contains policies and actions to encourage the conservation and preservation of citrus groves and farms, especially those that have cultural or scenic significance, as well as the establishment of new groves. Within this section of the General Plan, the City identifies existing citrus groves within the City with cultural and/or scenic significance in Figure 2-3: Citrus Groves and Entryways. According to Figure 2-3: Citrus Groves and Entryways, the project site is not located in an area of the City that is designated as a "Citrus Entryway." While the project proposes the removal of the citrus groves on a portion of the site, these groves are not identified by the City as having cultural or scenic significance. Therefore, the proposed development of the site, including the removal of existing citrus trees, would not cause a significant environmental impact due to a conflict with the policies and actions of the General Plan related to citrus groves.

Because the project would remain consistent with the current General Plan land use designation of MDR and would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect, impacts would be less than significant.

Noise Land Use Compatibility

Less than significant impact with mitigation incorporated.

The City of Redlands has identified noise levels of up to 60 dBA CNEL as "clearly compatible" for multi-family attached residential uses. However, if exterior noise levels range between 60 dBA and 75 dBA CNEL, the City's guidelines recommend discouraging new residential development in that area; and if new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise reduction features included in the design. The interior noise level standard for multi-family residential development is 45 dBA CNEL.

The project site is bordered by Orange Avenue, Alabama Street, and Iowa Street. The City of Redlands General Plan 2035 identifies Alabama Street as a Major Arterial roadway and Iowa Street and Orange Avenue as Collector roadways. Future noise levels associated with vehicular traffic traveling on these roadways were modeled using the SoundPLAN model. The TIA prepared for the proposed project projects approximately 19,900 average daily traffic volumes to the roadway segment of Alabama Street north of Orange Avenue; 16,400 average daily traffic volumes to the roadway segment of Alabama Street south of Orange Avenue; 3,500 average daily traffic volumes to the roadway segment of Iowa Street along the project site frontage; and 8,000 average daily traffic volumes to the roadway segment of Orange Avenue along the project site frontage. A speed of 30 mph was utilized for modeling input for Orange Avenue and Iowa Street. The posted speed limit for Alabama Street near the project site is 45 mph.

SoundPLAN modeling data is included in Appendix G of the Noise Impact Analysis. Future exterior noise levels at the proposed multi-family (low-rise) attached residential facades along Alabama Street, north of Orange Avenue, are expected to reach up to 68 CNEL at the first floor, 71 CNEL at the second floor, and 71 CNEL at the third floor. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need a Sound Transmission Class (STC) rating of at least 29 to meet the interior noise standard of 45 CNEL. Impacts related to future exterior noise levels would be less than significant with the incorporation of Mitigation Measure LUP-1, which requires the addition of windows with STC ratings in order to meet interior noise thresholds.

Future exterior noise levels at the proposed multi-family (low-rise) attached residential facades along Alabama Street, south of Orange Avenue, are expected to reach up to 67 CNEL at the first floor, 69 CNEL at the second floor, and 70 CNEL at the third floor. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL. Impacts related to future exterior noise levels would be less than significant with the incorporation of Mitigation Measure LUP-1, which requires the addition of windows with STC ratings as described above.

Future exterior noise levels at building facades along Orange Avenue are expected to reach up to 60 CNEL at the first floor, 62 CNEL at the second floor, and 63 CNEL at the third floor. For the proposed multi-family (low rise) attached residential dwelling units located adjacent to Orange Avenue, windows facing or with a line of sight of Orange Street should have an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL. Impacts related to future exterior noise levels would be less than significant with the incorporation of Mitigation Measure LUP-1, which requires the addition of windows with STC ratings as described above.

Future exterior noise levels at the proposed multi-family (low rise) attached residential facades along Iowa Street are expected to reach up to 56 CNEL at the first floor, 55 CNEL at the second floor, and 56 CNEL at the third floor. Considering that typical construction provides approximately 20 dB of exterior to interior noise reduction, additional mitigation measures for the proposed multi-family (low-rise) attached residential facades facing Iowa Street are not necessary.

Exterior noise levels must also comply with the City's exterior noise level standard. However, the City's exterior noise standard for multi-family residential development only applies to balconies and patios that are served as "a means of exit from inside" of the residence. This guidance is contained in footnote 2 of Table 7-11 in the City of Redlands General Plan 2035. The proposed balconies or patios would not be served as exits from the dwelling units, rather all patios and balconies would be enclosed with a low wall or railing. Therefore, the exterior noise standard is not applicable to these outdoor uses, and only the interior noise standard must be met, as described in the paragraphs above. No additional mitigation would be required for balconies or patios. However, the City's exterior noise level standards would apply to the outdoor active use areas of the proposed recreation center and pool area. Future noise levels at the proposed recreation center and pool are expected to reach up to 55 dBA CNEL and would be consistent with the City's Land Use Compatibility criteria. No other mitigation is necessary.

Mitigation Measures

MM LUP-1 Prior to the issuance of building permits, the applicant shall submit to the City design specifications that demonstrate to the City's satisfaction that the following design measures are included in the project:

1. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need a Sound Transmission Class (STC) rating of at least 29 to meet the interior noise standard of 45 CNEL.
2. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL.
3. For the proposed multi-family (low rise) attached residential dwelling units located adjacent to Orange Avenue, windows facing or with a line of sight of Orange Street should have an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL.

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

Environmental Evaluation

Would the project:

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

No impact. According to the City of Redlands General Plan 2035, the project site is located in a MDR area. The project site does not support mineral extraction and does not contained any state designated mineral resource zones or other areas designated as containing known mineral resources of statewide importance (City of Redlands, 2017c). This precludes the potential for impacts associated with mineral resource. No impact would occur.

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No impact. According to the City of Redlands General Plan 2035, the project site is located in a MDR area. The project site does not support mineral extraction and does not contain any state designated mineral resource zones or other areas designated as containing known mineral resources of statewide importance. This precludes the potential for impacts associated with mineral resource. No impact would occur.

Mitigation Measures

None required.

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

Environmental Evaluation

Analysis in this section is based on the Noise Impact Analysis prepared by Ganddini Group, Inc., prepared on September 24, 2018 and most recently revised on July 24, 2019. The Noise Impact Analysis is included in this report as Appendix D. As outlined in Appendix D, the existing noise environment was established by using an American National Standards Institute (ANSI Section SI4 1979, Type 1) Larson Davis model LxT sound level meter to document existing ambient noise levels in the project area. In order to document existing ambient noise levels in the project area, four (4) 10-minute daytime noise measurements were taken between 2:06 PM and 3:25 PM on March 23, 2018. Noise measurements were taken along the single-family detached residential dwelling units located immediately adjacent and to the south and west of the project site, and the multi-family attached residential dwelling units located to the east of the project site, in order to document existing ambient noise levels at the sensitive receptors nearest to the project site. Appendix D, Table 3 provides a summary of the short-term ambient noise data. Ambient noise levels measured between 56.6 and 66.3 dBA L_{eq} during the daytime (7:00 AM to 10:00 PM). Estimated ambient nighttime noise levels are anticipated to decrease by five dBA to between 51.6 and 61.3 dBA L_{eq} during nighttime hours. The dominant noise sources were from vehicles traveling along Alabama Street, Orange Avenue, and Iowa Street.

Based on the 2019 updated CEQA Appendix G checklist questions, the noise land use compatibility discussion is now contained within the Land Use and Planning discussion (Section 11) of this document.

Would the project result in:

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

Less than significant impact with mitigation incorporated. For the purposes of this analysis, a significant impact would occur if construction activities would result in a substantial temporary increase in ambient noise levels outside of the City's permissible hours for construction, as described by the City's Municipal Code in Section 8.06.120 (G), that would result in annoyance or sleep disturbance of nearby sensitive receptors (within 500 feet of the project site). Existing single-family detached residential dwelling units located immediately adjacent and to the east, south, and west of the project site may be affected by short-term noise impacts associated with the transport of workers, the movement of construction materials to and from the project site, ground clearing, excavation, grading, and building activities. The single-family detached residential dwelling units located approximately 65 feet east (across Alabama Street) and 50 feet west (across Iowa Street) of the project site, as well as the multi-family attached residential dwelling units located approximately 100 feet east (across Alabama Street) may also be affected by short-term noise impacts. Each of these sensitive receptors are located closer to the project site than the existing schools (as shown in Table 1), the nearest of which is The Grove Farm School Campus, at 106 feet from the project site (measured from the nearest edge of the property line of the project site to the nearest edge of property line of the subject school property). Other nearby schools, including Barton Road Kindercare, Montessori in Redlands, Grove High School, and the Barton House Playschool are located 528 to 1,267 feet from the project site, respectively (see Table 1).

Short Term Construction Impacts

Project generated 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. The Federal Highway Administration (FHWA)s Roadway Construction Noise Model was utilized to model worst-case construction and demolition noise levels in the project vicinity (see Appendix D of the Noise Impact Analysis).

Demolition activities are expected to produce the highest sustained construction noise levels. Demolition is expected to include the use of a concrete saw, three excavators, and two dozers. Noise levels associated with equipment used during the demolition are shown in Appendix D, Table 4. A worst-case construction noise scenario assuming the above listed equipment was operating between 25 and 200 feet from the property line, assuming a use factor of 40 percent for each piece of equipment, unmitigated noise levels could reach 86.4 dBA L_{eq} and 89.6 dBA L_{max} at the property line and the nearest sensitive receptors during demolition. These noise levels will vary throughout each workday as equipment is moved around the site. Grading activities will produce slightly lower noise levels but will last for a longer period of time.

Construction noise levels were also evaluated at receptors not immediately adjacent to the property line in the immediate vicinity, including single and multiple-family residential land uses east of Alabama Street, a church south of the project site, medical offices southwest of the project site, and schools located within 0.5 mile of the project site (see Appendix D, Table 5). The sound level data in Appendix D, Table 5, shows that construction noise levels at properties not immediately adjacent to the project site can be expected to reach up to 60.4 dBA L_{eq}, and that construction noise at other nearby land uses, including schools, will not exceed 50.6 dBA L_{eq}. It is important to note that the listed noise levels do not take into account any attenuation provided by ground absorption, or by any existing buildings and/or walls. As listed in Appendix D, Table 3, existing measured ambient noise levels range between 56.6 dBA L_{eq} and 66.3 dBA L_{eq}. Noise levels associated with demolition, the loudest phase of construction, would not result in substantial increases in noise levels at the nearest sensitive receptors and therefore would not result in substantial increases in noise levels at any of the nearby schools (which are located slightly further away than the nearest sensitive receptors that are located immediately adjacent to the project site).

Any construction activities that occur outside the allowable time as identified in Section 8.06.090 and 8.06.120 of the City's Municipal Code would be considered significant. Further, as required in the City's Municipal Code, all motorized equipment used must be equipped with functioning mufflers. Noise reduction measures are also provided below to minimize construction noise impacts on nearby sensitive receptors. Implementation of the multi-part Mitigation Measures NOI-1 listed below would ensure that construction activities would not result in a substantial increase in ambient noise levels outside of the City's permissible hours for construction and the project-related impacts related to construction noise would be less than significant.

Project Generated Off-Site Operation Noise

Less than significant impact. A significant impact would occur if operational noise levels generated by mobile noise sources in the project vicinity would result in a substantial permanent increase in ambient noise levels. The City of Redlands General Plan 2035 defines a potentially substantial increase as either (a) an increase of 4 dB or more if the resulting noise level would exceed the clearly compatible standard for multi-family residential uses of 60 CNEL, or (b) any increase of 6 dB or more.

A worst-case project generated traffic noise level was modeled utilizing the FHWA Traffic Noise Prediction Model—FHWA-RD-77-108. Traffic noise levels were calculated from the centerline of the roadway to the roadway right-of-way (ROW). The modeling is theoretical and does not take into account any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to demonstrate the difference in with and without project conditions. Roadway input parameters including average daily traffic volumes (ADTs), speeds, and vehicle distribution data are shown in Appendix S, Table 7. Existing and Existing Plus Project FHWA worksheets are appended to Appendix D. The potential off-site noise impacts caused by an increase of traffic from operation of the proposed project on the nearby roadways were calculated for the following scenarios:

- **Existing Year (without Project):** This scenario refers to existing year traffic noise conditions and is demonstrated in Appendix D, Table 7.

- **Existing Year (Plus Project):** This scenario refers to existing year plus project traffic noise conditions and is also demonstrated in Appendix D, Table 7.

As shown in Appendix D, Table 8, modeled Existing traffic noise levels range between 62.98-75.63 dBA CNEL and the modeled Existing Plus Project traffic noise levels range between 63.35-75.66 dBA CNEL at the right-of-way of each modeled roadway segment. As discussed above, the City of Redlands General Plan 2035 identifies a potentially substantial increase as (a) either an increase of 4 dB or more if the resulting noise level would exceed the City's clearly compatible standards (b) or any increase of 6 dB.

Appendix D, Table 8 shows that under Existing Plus Project conditions, all modeled roadway segments are anticipated to change the noise a nominal amount (approximately 0.01 to 1.5 dBA CNEL). Audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, a change in noise level would not be audible at any of the identified sensitive receptors, including the nearby schools, and impacts related to project generated off-site operational noise would be considered less than significant. No mitigation is required.

Project Generated On-Site Operation Noise

Less than significant impact. A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels. As discussed above, audible increases in noise levels generally refer to a change of 3 dBA or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Therefore, for purposes of this analysis, an increase of greater than 5 dBA above existing ambient noise levels would be considered a substantial permanent increase in ambient noise levels.

On-site noise sources associated with development of the proposed project will include typical noises associated with residential land uses, including vehicles starting and stopping, passenger loading and unloading, refuse trucks, occasional car alarm activation, landscape maintenance, children playing, and mechanical ventilation equipment operation. Noise associated with proposed park uses will include people talking and socializing along the proposed trails and at the shaded rest areas. These instantaneous or short-term noise events would range between 55 dBA and 70 dBA L_{max} at 50 feet from the noise source. Normal conversation is typically 65 dBA as measured at 3 feet from the source.

As documented by the ambient noise measurements conducted for the project, ambient noise levels measured between 56.6 dBA and 66.3 dBA L_{eq} during the daytime (7:00 AM to 10:00 PM). Ambient nighttime noise levels are typically 5 dBA lower, on average, and are expected to be between 51 dBA and 61 dBA L_{eq} during nighttime hours in the project vicinity. Documented maximum noise levels ranged from 73.9 dBA to 80.4 dBA L_{max}.

On-site stationary operational noise sources, events, and conversation would not occur frequently enough or close enough to the adjacent sensitive receptors to exceed City of Redlands stationary noise standards/thresholds or result in a substantial increase in the ambient average (L_{eq}) noise levels in the project vicinity. Thus, the project would not result in a substantial increase above existing ambient noise levels and impacts related to project generated on-site operational noise are considered less than significant.

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

Less than significant impact with mitigation incorporated. Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage, such as the cracking of floor slabs, foundations, columns, beams, or wells, or cosmetic architectural damage, such as cracked plaster, stucco, or tile. For purposes of CEQA, a significant impact would occur if the proposed project would generate groundborne vibration or groundborne noise levels in excess of established standards. A vibration impact would generally be considered significant if it involves any construction-related or operations-related impacts in excess of 0.2 inches per second (in/sec) peak particle velocity (PPV). Section 8.06.090(g) of the City of Redlands Municipal Code prohibits vibration which is above the vibration perception threshold of an individual (a) at or beyond the property boundary of the source if on private property or (b) at 150 feet from the source if on a public space or public right-of-way.

Vibratory rollers and/or large bulldozers are the most vibratory pieces of equipment that may be utilized on the project site during construction. As shown in Appendix D, Table 5, a vibratory roller could generate up to 0.21 PPV at a distance of 25 feet; and operation of a large bulldozer could generate up to 0.089 PPV at a distance of 25 feet. The nearest sensitive receptors in the project vicinity (single-family detached residential dwelling units) are located immediately adjacent and to the south, east, west, and north of the project site. Additional single-family detached residential dwelling units are located approximately 65 feet east (across Alabama Street) and 50 feet west (across Iowa Street) of the project site, and multi-family attached residential dwelling units are located approximately 100 feet east (across Alabama Street). Each of these residential sensitive receptors are located closer to the project site than the existing schools (as shown in Table 1), the nearest of which is The Grove Farm School Campus, at 106 feet from the project site (measured from the nearest edge of the property line of the project site to the nearest edge of property line of the subject school property). Other nearby schools, including Barton Road Kindercare, Montessori in Redlands, Grove High School, and the Barton House Playschool are located from 528 to 1,267 feet from the project site, respectively (see Table 1).

Based on the stated distances to nearby sensitive receptors, the only receptors that could possibly be affected by groundborne vibration are the homes located immediately adjacent to the project site if a vibratory roller is utilized within 25 feet of a structure or if a large bulldozer is utilized within 15 feet of a structure. Incorporation of Mitigation Measure NOI-2 is required to ensure that construction related groundborne vibration impacts would be less than significant. Because the nearest school to the project site (the Grove School Farm Campus) is approximately 106 feet

southwest of the subject property line, the project would have no construction-related groundborne vibration impact on nearby schools.

As shown in Appendix D, Table 2, groundborne vibration becomes readily perceptible at 0.8 PPV. A vibratory roller generates vibration levels of 0.8 PPV at a distance of 10 feet and a large bulldozer generates vibration levels of 0.8 PPV at a distance of 6 feet (see Appendix D). Based on the measured distances to nearby sensitive receptors, vibratory equipment would not be utilized within 10 feet of an existing structure. Therefore, impacts related to annoyance associated with groundborne vibration are considered less than significant.

The proposed project would not include any permanent sources of vibration that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments by a reasonable person at the property lines of the project site. Therefore, project operational groundborne vibration impacts are considered less than significant

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

No impact. The project site is not located within an airport land use plan. The site is 3.59 miles from the Redlands Municipal airport and 4.16 miles from San Bernardino International Airport. The site is not located within an influence area for these airports. As a result, implementation of the project would not expose people residing or working in the project area to excessive noise levels from public airport activity. Therefore, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and no impact would occur.

Mitigation Measures

MM NOI-1 In addition to adhering to the required City of Redlands's policies found in the City of Redlands General Plan Noise Element and City of Redlands Municipal Code limiting the construction hours of operation, the following measures shall be implemented to reduce construction noise and vibration emanating from the proposed project:

1. 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.
2. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
3. Equipment shall be shut off and not left to idle when not in use.
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.
5. Jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded and noise shall be directed away from sensitive receptors.

MM NOI-2 The use of vibratory rollers is to be restricted within 25 feet of existing structures and the use of large bulldozers is to be restricted within 15 feet of existing structures.

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

Environmental Evaluation

Would the project:

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

No impact. The project would require a temporary construction workforce and a permanent operational workforce and residential uses on site, all of which could induce population growth in the project area. The temporary workforce would be needed to construct the residential buildings and associated improvements to allow for water, sewer, and stormwater as well as public sidewalks, curb and gutter, and landscaping. The number of construction workers needed during any given time period would largely depend on the specific stage of construction, but will likely range between a few dozen workers to nearly one hundred. Once operational, the project would require a minimal amount of employees to manage and operate the apartment complex. Current data (January 2018) provided by the California Employment Development Department (EDD) found that the unemployment rate for the City of Redlands is at 3.0 percent, or 1,100 people. As such, the project's temporary and permanent employment requirements could be met by the City of Redlands' existing labor force without people needing to relocate into the project region. Because of the nature of the project, workers who are already present in the local labor force typically fill the kinds of labor skills required for the project. The project would also create housing for 862 residents. The recently-approved City of Redlands General Plan 2035, this area of the city is anticipated to be Medium Density Residential (MDR). Additionally, the 2017 Annual Element Progress Report of the Housing Element of the 2035 General Plan identifies a need for an additional 2,065 housing units in the City (City of Redlands, 2017). This project proposes to construct 328 housing units on the site, which is zoned as MDR by the General Plan. Therefore, the project as proposed is consistent with the anticipated population growth of the General Plan, and is consistent with the Housing Element of the General Plan. Therefore, impacts associated with growth inducement would not occur.

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

No impact. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. The project site is designated as Medium Density Residential (MDR) by the City of Redlands General Plan 2035 (City of Redlands, 2017b) (please see Exhibit 3), which permits up to 15 dwelling units/acre (du/a). The project site is located within the East Valley Corridor Specific Plan and is zoned as Administrative-Professional, and Multi-Family Residential (EV/3000 RM and EV/2500 RM) (please see Exhibit 4). While the residential housing currently on site will be removed for construction of the proposed project (five single-family detached residential dwelling units), the project will add 328 housing units to the site. The project will not displace a substantial number of people, nor will it necessitate the construction of housing elsewhere. No impact would occur as a result of the project.

Mitigation Measures

None required.

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

Environmental Evaluation

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

a) Fire protection?

Less than significant impact. The project would result in a significant environmental impact if new or physically altered fire protection facilities would need to be built to maintain acceptable service ratios, response times, or other performance objectives for fire protection. According to the General Plan 2015 Public Safety Element, fire services are provided to the City of Redlands by the Redlands Fire Department. The majority of Redlands is served by four fire stations within the City, and can be reached within a four minute response time. The fire station nearest to the project site is Fire Station No. 264 located at 1270 West Park Avenue, approximately 0.72 mile northeast of the site. The project will pay all associated development impact fees in relation to fire protection. Therefore, the project would not have a significant impact on facilities or response times for the Redlands Fire Department because it is located in the existing service area of the Redlands Fire Department, near an existing station. While the General Plan EIR identifies a general need for more stations and staff to meet minimum response times, the payment of development fees will help to alleviate this burden. No new expanded fire protection facilities would be required as a result of the project. Impacts to fire services would be less than significant.

b) Police protection?

Less than significant impact. The project would result in a significant environmental impact if new or physically altered police protection facilities would need to be built to maintain acceptable service ratios, response times, or other performance objectives for police protection. The proposed development would not result in any unique or more extensive crime problems that cannot be handled with the existing level of police resources. Police protection services are provided by the Redlands Police Department.

The nearest police station to the project site is approximately 0.67 mile southeast of the site at 1150 Brookside Avenue. In 2015, the police department had a ratio of 1.1 officers for every 1,000 residents and a response time of 6.5 minutes (City of Redlands, 2017g). The project will be gated, which will promote safety by mitigating an increase in demand for police services by reducing the potential for crimes related to individuals not residing within the community. Project features including the gate, in addition to implementation of general plan policies promoting safety, and the payment of development impact fees would reduce potential service calls to the police department in the future. Due to its proximity to this police station, the increase in 862 residents resulting from the project would not have a significant impact on police protection services or require construction of new facilities. Impacts to police services would be less than significant.

c) Schools?

Less than significant impact. As shown previously in Table 1, the nearest schools to the project site include the Grove School Farm Campus (approximately 106 feet southwest), Barton Road KinderCare (approximately 528 feet south), the Montessori School (approximately 686 feet west), Grove High School (located approximately 686 feet west-northwest), and the Barton House Playschool (approximately 1,267 feet southwest). The project would result in a significant environmental impact if new or physically altered public education facilities would need to be built to maintain acceptable performance objects for public education. The project site is located within the Redlands Unified School District (RUSD). The number of housing units proposed for the project is consistent with the projections included in the City of Redlands General Plan 2035. The project would be subject to the school fees in effect at the time of development, as required for all new residential development under Senate Bill 50. Because the project developer will pay all associated development impact fees to offset impacts on schools, impacts to school services are considered less than significant.

d) Parks?

Less than significant impact. The current standard for the City of Redlands parkland and open recreational space is 5.0 acres per every 1,000 residents. The project is expected to generate 862 new residents, which could cause an increase in the use of parkland in Redlands. The closest park to the project site is Heritage Park, located 0.30 mile from the site, followed by Jennie Davis Park, which is approximately 0.96 mile from the site. General Plan buildout would create a demand for 55 acres of new parkland at the standard ratio of 5 acres per 1,000 residents (City of Redlands, 2017e). The project will pay all associated development impact fees in relation to parks. Additionally, the project will develop recreational amenities for the residents on site, including a clubhouse with gym, yoga and

Pilates studio, and game room, as well as outdoor recreational amenities, including a 1,920-square-foot outdoor swimming pool, an 87-square-foot hot tub, an outdoor fireplace, a walking trail, and an outdoor lounge and BBQ area. These amenities, as well as the payment of development impact fees, could serve to reduce impacts on public recreational amenities. Because the project would be consistent with Redlands General Plan 2035 buildout, development of park facilities would accommodate the anticipated increase in population, and impacts to parks would be less than significant.

e) Other public facilities?

Less than significant impact. The proposed project would consist of the construction of a 328-unit luxury apartment complex. The project is expected to generate 862 new residents. The nearest library to the project site is A.K. Smiley Public Library, approximately 1.46 miles away from the site. The anticipated increase in library use is not expected to be significant, and the current library facility would be able to accommodate the increase in population. Impacts to other public facilities would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

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

Less than significant impact. Significant impacts would occur if existing facilities would suffer substantial physical deterioration due to increased use related to population increase.

The Quimby Act, California Government Code Section 66477, requires the dedication of land and/or fees for park and recreational purposes as a condition of approval of a tentative map or parcel map. The Quimby Act establishes procedures that can be used by local jurisdictions to provide neighborhood and community parks and recreational facilities and services for new residential subdivisions. New developments in Redlands involving a tentative map or parcel map would pay fees to the City of Redlands for park and recreation purposes in accord with the Quimby Act.

The City of Redlands General Plan 2035 outlines a standard of 5 acres of parkland per every 1,000 residents. Current parkland exceeds this standard with a ratio of 6 acres for every 1,000 residents. In addition to numerous parks, the City of Redlands offers recreational facilities including trails, community centers, senior centers, community gardens, and the Carriage House located at Prospect Park. General Plan buildout would create demand for 55 acres of new parkland at a ratio of 5 acres per 1,000 residents.

Furthermore, the project will develop recreational amenities for the residents on site, including a clubhouse with gym, yoga and Pilates studio, and game room, as well as outdoor recreational amenities, including a 1,920-square-foot outdoor swimming pool, an 87-square-foot hot tub, an outdoor fireplace, a walking trail, and an outdoor lounge and BBQ area. These on-site amenities could serve to reduce impacts on public recreational amenities.

Because the project would be consistent with City of Redlands General Plan 2035 buildout and result in a small increase of 862 residents, payment of fees would accommodate the anticipated increase in population, and impacts to parks would be less than significant.

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

No impact. Significant impacts would occur if new recreation facilities needed to be constructed because of an increase in population. The project consists of the construction of a 328-unit luxury apartment complex. Neighborhood parks, regional parks, and recreational facilities are not part of the proposed site plan. According to the City of Redlands General Plan 2035, Redlands has 68,049 residents with a total of 405 acres of parkland. The City of Redlands parkland and open recreational space standard is 5 acres per every 1,000 residents, and current parkland exceeds this standard with a ratio of 6 acres for every 1,000 residents. In addition to numerous parks, the City of Redlands offers recreational facilities including trails, community centers, senior centers, community gardens, and the Carriage House located at Prospect Park.

The project is expected to generate 862 new residents. The project will develop recreational amenities for the residents on site, including a clubhouse with gym, yoga and Pilates studio, and game room, as well as outdoor recreational amenities, including a 1,920-square-foot outdoor swimming pool, an 87-square-foot hot tub, an outdoor fireplace, a walking trail, and an outdoor lounge and BBQ area. These on-site amenities could serve to reduce impacts on public recreational amenities. This project would be in accordance with the Redlands General Plan 2035 buildout projections, and such would not result in a substantial population increase necessitating the construction of new or expanded facilities. Therefore, there would be no substantial impact such that new or expanded facilities would be required, and impacts would be less than significant.

Mitigation Measures

None required.

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

Environmental Evaluation

The analysis in this section is based on the SD Homes Redlands Apartments Traffic Impact Analysis prepared by Ganddini Group, Inc. on March 4, 2019, revised April 1, 2019. The TIA Report has been included in this document as Appendix G. Traffic counts were performed by Counts Unlimited on Wednesday, November 1, 2017, and are appended to the TIA Report (see Appendix G, Appendix C). November 1, 2017, was Parent Observation day at The Grove School.

Would the project:

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

Less than significant impact with mitigation incorporated. In the City of Redlands General Plan 2035, the definition of an intersection deficiency states that peak-hour intersection operations of Level of Service (LOS) C or better are generally acceptable. Therefore, any intersection operating at LOS D to LOS F will be considered deficient. Appendix G, Table 1 shows that the study intersections currently operate within acceptable LOS (C or better) during peak hours for Existing conditions.

In accordance with the City of Redlands Measure 'U' Section 1A.60, PRINCIPLE SIX (a) ". . . all new development projects shall assure by appropriate mitigation measures that, at a minimum, traffic levels of service are maintained at a minimum of LOS C throughout the City, except where the current LOS is lower than LOS C, or as provided in Section 5.20 of the Redlands General Plan where a more intense LOS is specifically permitted. In any location where the level of service is below LOS C at the time an application for a development project is submitted, mitigation measures shall be

imposed on that development project to assure, at a minimum, that the level of traffic service is maintained at levels of service that are no worse than those existing at the time an application for development is filed, except as provided in Section 5.20b."

Measure 'U' Section 5.0 Circulation Element, Sections 5.20a, 5.20b, and 5.20c are listed as "Guiding Policies: Standards for Traffic Service" as follows:

- **5.20a:** Maintain LOS C or better as the standard at all intersections presently at LOS C or better.
- **5.20b:** Within the area identified in GP Figure 5.3, including that unincorporated County area identified on GP Figure 5.3 as the "donut hole," maintain LOS C or better; however, accept a reduced LOS D on a case by case basis upon approval by a four-fifths (4/5ths) vote of the total authorized membership of the City Council.
- **5.20c:** Where the current level of service at a location within the City of Redlands is below the Level of Service (LOS) C standard, no development project shall be approved that cannot be mitigated so that it does not reduce the existing level of service at that location except as provided in Section 5.20b.

Per the SD Homes Redlands Apartments Traffic Impact Analysis prepared by Ganddini Group, Inc. (Appendix H) a "significant" direct traffic impact under CEQA occurs when the project reduces the LOS for Opening Year (2020) as follows:

- Pre-project Level of Service C or better: Project-related Level of Service D or worse for signalized intersections.
- Pre-project Level of Service C or better: Project-related Level of Service D or worse for unsignalized intersections which meet peak-hour traffic signal warrant.
- Pre-project Level of Service D or worse: If the project reduces the Level of Service to a facility, which previously operated at Level of Service D or worse, the project shall provide improvements at a minimum to the pre-project delay.

Existing Traffic Conditions (2018)

The proposed development is located adjacent to Orange Avenue between Iowa Avenue and Alabama Street in the City of Redlands. For the purposes of this analysis, the TIA assumes that the proposed project will be generating trips at its full potential in Opening Year (2020). Existing Plus Project conditions will exemplify the existing traffic conditions with the entire site built-out.

Existing Roadway System

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the project vicinity. The key east-west roadways expected to provide local access include Redlands Boulevard, Park Avenue, Citrus Avenue, Orange Avenue, and Barton Road. The key north-south roadways expected to provide local access include Iowa Street and Alabama Street.

- **Redlands Boulevard:** This east-west roadway currently is four lanes divided in the project area and is classified as a Major Arterial roadway (64 to 78 feet designated roadway width) in the City of Redlands General Plan Circulation Element. This is a designated truck route in the City that currently carries approximately 18,000 to 20,600 vehicles per day in the project study area. On-street parking is generally not permitted. On-street bicycle lanes are currently not provided, but Redlands Boulevard is a proposed bike route in the City of Redlands General Plan. Sidewalks are currently provided on both sides of the road.
- **Park Avenue:** This east-west roadway currently is two lanes undivided in the project area. Park Avenue is classified as a Collector Street (36 to 40 feet designated roadway width) in the City of Redlands General Plan Circulation Element. This is a designated truck route in the City that currently carries approximately 2,000 to 3,600 vehicles per day in the project study area. On-street bicycle lanes are currently not provided, but Park Avenue is a proposed bike route in the City of Redlands General Plan. Sidewalk is provided on the south side of the road east of Alabama Street.
- **Citrus Avenue:** This east-west roadway currently is two lanes undivided in the project vicinity and is classified as a Collector Street (36 to 40 feet designated roadway width) in the City of Redlands General Plan Circulation Element. This is a designated truck route in the City that currently carries approximately 2,500 to 4,100 vehicles per day in the project study area. Citrus Avenue is also a proposed bike route in the City of Redlands General Plan. On-street parking is generally not permitted and on-street bicycle lanes are currently not provided. Sidewalk is provided on both sides of the road east of Alabama Street.
- **Orange Avenue:** This east-west roadway currently is two lanes undivided in the project vicinity and is classified as a Collector Street (36 to 40 feet designated roadway width) in the City of Redlands General Plan Circulation Element. This is a designated truck route in the City that currently carries approximately 3,400 to 4,100 vehicles per day in the project study area. While on-street bicycle lanes are currently not provided, Orange Avenue is a proposed bike route in the City of Redlands General Plan. Sidewalk is provided on the south side of the road between Iowa Street and mid-block to Alabama Street. On-street parking is generally not permitted.
- **Iowa Street:** This north-south roadway currently is two lanes undivided in the project vicinity and is not classified in the City of Redlands General Plan Circulation Element. It currently carries approximately 2,300 to 2,600 vehicles per day in the project study area.
- **Alabama Street:** This north-south roadway currently is four lanes divided to five lanes divided in the project vicinity and is classified as a Major Arterial (64 to 78 feet designated roadway width) in the City of Redlands General Plan Circulation Element. This is a designated truck route in the City that currently carries approximately 14,900 to 22,300 vehicles per day in the project study area. On-street bicycle lanes are currently provided in both north and south directions in the project vicinity. On-street parking is generally prohibited. Sidewalk is provided north of Orange Avenue on the east side of the road, between Orange Avenue and mid-block to Citrus Avenue.
- **I-10 Freeway:** This east-west 10 lane divided freeway is classified as a State Highway on the County of San Bernardino General Plan Circulation Element. This State Highway is also a designated truck route. It currently carries approximately 176,000 to 189,000 vehicles per day in the project site. Freeway access is approximately 0.5 mile from the proposed project site.

Existing Traffic Volumes

The Existing average daily traffic volumes were factored from peak-hour intersection turning movement counts (see Appendix C of the TIA) by Ganddini Group, Inc. using the following formula for each intersection leg:

PM Peak-hour (Approach + Exit Volume) x 11.5 = Daily Leg Volume.

This is a conservative estimate and, as such, may overestimate the average daily traffic volumes.

There are 2 peak-hours in a weekday. The morning peak-hour is between 7:00 AM and 9:00 AM, and the evening peak-hour is between 4:00 PM and 6:00 PM. The actual peak-hour within the 2-hour interval is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the evening peak-hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume.

Existing intersection traffic conditions were established through morning and evening peak-hour intersection turning movement counts obtained by Ganddini Group, Inc. on November 1, 2017, when school was in session (see Appendix C of the TIA). Explicit peak-hour factors were calculated using the data collected for this effort as well.

In addition, truck classification counts were conducted at the study intersections. The existing percentage of trucks was used in the conversion of trucks to passenger car equivalent trips (see Appendix D of the TIA).

Existing Levels of Service

As shown in Table 6, the study intersections currently operate within acceptable LOS during the peak-hours for Existing traffic conditions.

Table 6: Existing Intersection Delay and Levels of Service

ID Study Intersection	Traffic Control[1]	AM Peak-hour		PM Peak-hour	
		Delay[2]	LOS[3]	Delay	LOS
1. Iowa Street at Orange Avenue	AWS	10.5	B	9.3	A
2. Alabama Street at Redlands Boulevard	TS	28.9	C	23.6	C
3. Alabama Street at Park Avenue	TS	19.7	B	18.6	B
4. Alabama Street at Citrus Avenue	TS	12.3	B	20.0	B
5. Alabama Street at Orange Avenue	TS	18.0	B	17.6	B

Notes:
[1] TS = Traffic Signal; AWS = All Way Stop
[2] Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).
[3] LOS = Level of Service

Project Trip Generation

The trips generated by the proposed project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily trips, morning peak-hour inbound and outbound trips, and evening peak-hour inbound and outbound trips for the proposed land use. By multiplying the trip generation rates by the land use quantity, the project trips are determined. Table 7 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers (ITE), Trip Generation Manual, 10th Edition, 2017.

As shown in Table 7, below, the proposed development is projected to generate a total of approximately 2,261 daily vehicle trips, of which 138 would occur during the morning peak-hour and 167 would occur during the evening peak-hour.

The project site is currently occupied with the following land uses`: single-family detached residential, plant nursery, and landscape contracting maintenance yard. At the time the traffic counts were obtained, those land uses which would contribute to the existing traffic counts were included in the existing site trip generation credit.

Table 7: Project Trip Generation

Land Use	Source[1]	Unit[2]	AM Peak-hour			PM Peak-hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Trip Generation Rates									
Single-Family Detached Housing	ITE 210	DU	25%	75%	0.74	63%	37%	0.99	9.44
Specialty Trade Contractor	ITE 180	TSF	73%	27%	1.66	32%	68%	1.97	10.22
Nursery Wholesale[a]	ITE 818	AC	43%	57%	0.26	50%	50%	0.45	19.5
Multi-Family Housing	ITE 220	DU	23%	77%	0.46	63%	37%	0.56	7.32
Land Use	**Quantity[3]**	**Unit[2]**	**AM Peak-hour**			**PM Peak-hour**			**Daily**
			In	**Out**	**Total**	**In**	**Out**	**Total**	
Trips Generated									
Existing Land Uses									
Single-Family Detached Housing	-8	DU	-1	-5	-6	-5	-3	-8	-76
Specialty Trade Contractor	-4	TSF	-5	-2	-7	-3	-5	-8	-41
Nursery Wholesale	-1.2	AC	0	0	0	0	-1	-1	-23
Subtotal - Existing	—	—	-6	-7	-13	-8	-9	-17	-140
Proposed Land Uses									
Multi-Family Housing	328	DU	35	116	151	116	68	184	2,401

Table 7 (cont.): Project Trip Generation

Land Use	Quantity[3]	Unit[2]	AM Peak-hour			PM Peak-hour			Daily
			In	Out	Total	In	Out	Total	
Total Net New Trips			**+29**	**+109**	**+138**	**+108**	**+59**	**+167**	**+2,261**

Notes:
[1] Source: ITE Trip Generation Manual, 10th Edition, 2017; ### = Land Use Code.
- PM inbound-outbound distribution for nursery are not available; assumed to be 50/50 percent.

[2] DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acres
[3] DU = Dwelling Units, TSF = Thousand Square Feet; AC = Acres.

Existing Plus Project

The intersection LOS for Existing Plus Project conditions are shown in Table 8, below. The study intersections are projected to operate within acceptable LOS (C or better) during the peak-hours for Existing Plus Project conditions (see Table 8); therefore, the proposed project is forecast to result in no significant traffic impacts for Existing Plus Project conditions.

Table 8: Existing Plus Project Intersection Levels of Service

ID Study Intersection	Traffic Control[1]	Existing				Existing Plus Project			
		AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
		Delay[2]	LOS[3]	Delay	LOS	Delay	LOS	Delay	LOS
1. Iowa Street at Orange Avenue	AWS	10.5	B	9.3	A	11.1	B	9.5	A
2. Alabama Street at Redlands Boulevard	TS	28.9	C	23.6	C	29.3	C	24.0	C
3. Alabama Street at Park Avenue	TS	19.7	B	18.6	B	19.9	B	18.8	B
4. Alabama Street at Citrus Avenue	TS	12.3	B	20.0	B	14.8	B	20.1	C
5. Alabama Street at Orange Avenue	TS	18.0	B	17.6	B	18.5	B	19.4	B
6. Project West Driveway at Orange Avenue	CSS	—	—	—	—	10.0	A	10.8	B
7. Project East Driveway at Orange Avenue	CSS	—	—	—	—	11.4	B	12.2	B

Notes:
[1] TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop
[2] Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).
[3] LOS = Level of Service

Future Conditions

To account for trips generated by future development, trips generated by pending or approved other development projects in the County of San Bernardino and the Cities of Redlands and Loma Linda were added to the study area. In addition to other development trips, the Opening Year (2020) and Year 2022 projections have been interpolated by utilizing a portion of the growth between existing and San Bernardino Transportation Analysis Model data to project future Horizon Year (2040) traffic volumes.

Opening Year (2020) Without Project

The delay and LOS for Opening Year (2020) Without Project conditions are shown in Table 9, below. The study intersections are forecast to operate within acceptable LOS (C or better) during the peak-hours for Opening Year (2020) Without Project conditions (see Table 9).

Opening Year (2020) With Project

The intersection LOS for Opening Year (2020) With Project conditions are shown in Table 9. The study intersections are forecast to operate within acceptable LOS (C or better) during the peak-hours for Opening Year (2020) With Project conditions (see Table 8); therefore, the proposed project is forecast to result in no significant traffic impacts for Opening Year (2020) With Project conditions.

Table 9: Opening Year (2020) Intersection Levels of Service

ID Study Intersection	Traffic Control[1]	Opening Year Without Project				Opening Year With Project			
		AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
		Delay[2]	LOS[3]	Delay	LOS	Delay	LOS	Delay	LOS
1. Iowa Street at Orange Avenue	AWS	11.4	B	9.9	A	12.1	B	10.2	B
2. Alabama Street at Redlands Boulevard	TS	29.3	C	28.3	C	29.4	C	28.7	C
3. Alabama Street at Park Avenue	TS	22.2	C	20.4	C	22.5	C	20.6	C
4. Alabama Street at Citrus Avenue	TS	15.1	B	20.9	C	15.8	B	21.0	C
5. Alabama Street at Orange Avenue	TS	19.0	B	18.7	B	19.7	B	21.2	C
6. Project West Driveway at Orange Avenue	CSS	—	—	—	—	11.0	B	11.3	B
7. Project East Driveway at Orange Avenue	CSS	—	—	—	—	11.7	B	12.9	B

Notes:
[1] TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop
[2] Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).
[3] LOS = Level of Service

General Plan Buildout (Year 2040) Without Project

The City provided Ganddini Group, Inc. with a list of future identified projects in the project vicinity to allow for the analysis of cumulative impacts on traffic under General Plan Buildout conditions (Year 2040). It should be noted that the analysis of existing conditions (above) already accounts for existing school operations. One of the future projects identified on page 30 of the TIA (project #27) is the future construction of a student services building totaling 1,952 square feet and generating up to 30 additional trips per day. Given that the student services building would serve students already on campus and would not, in and of itself, be a student capacity generating project, this is a conservative (i.e., worst case scenario) estimate of trip generation associated with this future improvement project. If the building did not yet existing on November 1, 2017, then including it as an anticipated future project is appropriate.

The intersection LOS for General Plan Buildout (Year 2040) Without Project conditions, without and with improvements are shown in Table 10. The study intersections are projected to operate within acceptable LOS (C or better) during the peak-hours for General Plan Buildout (Year 2040) Without Project conditions, except for the following study intersection that is projected to operate at unacceptable LOS D without improvements (see Table 10):

- Alabama Street at Orange Avenue—No. 5 (PM peak-hour)

Implementation of Mitigation Measure TRANS-1 is required to maintain acceptable LOS at the study intersections for General Plan Buildout (Year 2040) Without Project conditions:

- Alabama Street (NS) at Orange Avenue (EW)—No. 5
  - Restripe the eastbound approach to provide a dedicated left turn lane.
  - Restripe the westbound approach to provide a dedicated left turn lane.

The study intersections are projected to operate within acceptable LOS (C or better) during the peak-hours for General Plan Buildout (Year 2040) Without Project conditions, with improvements (see Table 10).

General Plan Buildout (Year 2040) With Project

The intersection LOS for General Plan Buildout (Year 2040) With Project conditions, without and with improvements, are shown in Table 10, below. The study intersections are projected to operate within acceptable LOS (C or better) during the peak-hours for General Plan Buildout (Year 2040) With Project conditions, except for the following study intersection that is projected to operate at unacceptable LOS F without improvements (see Table 10):

- Alabama Street at Orange Avenue—No. 5 (PM peak-hour)

The previously identified improvements under General Plan Buildout (Year 2040) Without Project would also maintain acceptable LOS at the study intersections for General Plan Buildout (Year 2040) With Project conditions. Therefore, no additional improvements are recommended beyond the required implementation of MM TRANS-1.

The study intersections are projected to operate within acceptable LOS (C or better) during the peak-hours for General Plan Buildout (Year 2040) With Project traffic conditions, with improvements (see Table 10).

Table 10: General Plan Buildout (Year 2040) Intersection Levels of Service

ID Study Intersection	Traffic Control[1]	General Buildout Without Project				General Buildout With Project			
		AM Peak-hour		PM Peak-hour		AM Peak-hour		PM Peak-hour	
		Delay[2]	LOS[3]	Delay	LOS	Delay	LOS	Delay	LOS
1. Iowa Street at Orange Avenue	AWS	17.7	C	16.0	C	20.0	C	17.3	C
2. Alabama Street at Redlands Boulevard	TS	32.3	C	32.1	C	32.8	C	32.7	C
3. Alabama Street at Park Avenue	TS	22.4	C	20.3	C	22.6	C	20.5	C
4. Alabama Street at Citrus Avenue	TS	20.4	C	22.0	C	20.5	C	22.0	C
5. Alabama Street at Orange Avenue	TS	19.8	B	53.7	D	20.7	C	82.4	F
—With Improvements	TS	15.1	B	15.8	B	16.2	B	16.8	B
6. Project West Driveway at Orange Ave	CSS	—	—	—	—	13.5	B	13.7	B
7. Project East Driveway at Orange Avenue	CSS	—	—	—	—	14.6	B	16.7	C

Notes:
[1] TS = Traffic Signal; CSS = Cross Street Stop; AWS = All Way Stop
[2] Delay is reported for all study intersections. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).
[3] LOS = Level of Service

The traffic analysis concludes that under "With Project" traffic conditions, project generated trips would result in a significant impact at one study intersection for General Plan Buildout (Year 2040) traffic conditions. However, with the implementation of MM TRANS-1, impacts would be reduced to a less than significant level.

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

Less than significant impact. According to CEQA Guidelines Section 15064.3, land use projects within 0.5 mile of a major transit stop or a stop along a high-quality transit corridor should be presumed to have a less than significant transportation impact. "Major transit stop" means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. A "high-quality transit corridor" is a corridor with fixed route bus service with service intervals that do not exceed 15 minutes during

peak commute hours. (PRC §§ 21064.3, 21155.) According to the Omnitrans System Map, Routes 8 and 19 currently serve the project vicinity. There are nine existing bus stops within a 0.5-mile radius of the project site. Therefore, impacts related to vehicle miles traveled would be less than significant.

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

Less than significant impact with mitigation incorporated. Final project site plans would be subject to City review and approval, which would ensure that project driveway intersections and internal circulation are safe, with adequate sight distance, driveway widths and stop signs where necessary for entering and exiting the site. This would prevent any impacts due to a design feature. The project site is surrounded by vacant and residential uses, and would not create hazards due to incompatible uses because the project would introduce additional residential uses to the project area. Currently there is a pedestrian activated flashing beacon across Orange to allow for the safe travel of pedestrians in the project area. The area of Orange Avenue between Iowa and Nevada is a school zone with appropriate signage. The City of Redlands Municipal Utilities & Engineering Department will reevaluate this street as part of their ongoing efforts to promote school safety at all schools in Redlands. Driver speed feedback signs could be incorporated in the future through a Safe Routes to School grant or other funding source.

Furthermore, a construction work site traffic control plan shall be submitted to the City for review and approval prior to the start of any construction work (MM TRANS-2). The plans shall show the location of any roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. Temporary traffic controls used around the construction area should adhere to the standards set forth in the California Manual of Uniform Traffic Control Devices (2014) and construction activities should adhere to applicable local ordinances. Consequently, on-site improvements and improvements adjacent to the site will be required in conjunction with the proposed development to ensure adequate circulation within the project. With the implementation of MM TRANS-2 through MM TRANS-4, impacts would be less than significant.

d) Result in inadequate emergency access?

Less than significant with mitigation incorporated. The project has multiple accesses to allow for emergency vehicles. The proposed secondary access on Orange Avenue will provide residential egress and emergency access. Proposed project access on Alabama Street will also be gated and provide secondary access for emergency vehicles only. The project access designs (width, grade, slope, vertical clearance, gate type, gate width and gate entry feature) shall be provided to the City and/or Fire Authority for review and approval of adequate access. For emergency access roadways with a cross-section of less than 36 feet in width, the local Fire Authority should be consulted for minimum width and parking restrictions. Final project site plans would be subject to City review and approval, which would ensure that project driveway intersections and internal circulation are safe, with adequate sight distance, driveway widths and stop signs where necessary for entering and exiting the site. Additionally, implementation of MM TRANS-2 through TRANS-4 are required to

address on-site and off-site improvements. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM TRANS-1 **Off-site Improvements.** The project applicant shall contribute its fair share, through the adopted development impact fee program, to the following mitigation measure improvements for General Plan Buildout (Year 2040) Without and With Project:

Alabama Street (NS) at Orange Avenue (EW) - No. 5

- Restripe the eastbound approach to provide a dedicated left turn lane.
- Restripe the westbound approach to provide a dedicated left turn lane.

Improvements at the project driveways are project design features which shall be constructed by the project. Site-adjacent roadway improvements shall also be constructed in conjunction with the project.

The project fair share is based on the proportion of project peak hour traffic volume contributed to the improvement location relative to the total new peak hour traffic volume for General Plan Buildout (Year 2040) With Project conditions. The project proportional trip contributions have been calculated (as shown in Table 9 of Appendix G) and the project fair share cost estimate is $3,867.

The project fair share shown above represents a rough order of magnitude; it is intended only for the discussion purposes of this traffic impact analysis and does not imply any legal responsibility or formula for contributions or mitigation.

MM TRANS-2 A construction work site traffic control plan shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of any construction work. The plans shall show the location of any roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. Temporary traffic controls used around the construction area must adhere to the standards set forth in the California Manual of Uniform Traffic Control Devices (2014) and construction activities should adhere to applicable local ordinances.

Site development would require the use of haul trucks during site clearing and excavation and the use of a variety of other construction vehicles throughout the construction work at the site. Transportation of heavy construction equipment and or materials, which requires the use of oversized vehicles, will require the appropriate transportation permit. The City shall review all proposed development and construction work site traffic control plans to ensure that public, pedestrian, and school safety are addressed.

MM TRANS-3 The project shall implement the following recommended improvements as provided in the TIA:

Project West Driveway (NS) at Orange Avenue (EW)

- Construct the southbound approach to consist of one shared left/right turn with stop-control.
- Install appropriate "Exit Only" signage.

Project East Driveway (NS) at Orange Avenue (EW)

- Construct the northbound approach to consist of one shared left/through/right turn lane with stop-control.
- Construct the southbound approach to consist of one shared left/through/right turn lane with stop-control.

Alabama Street (NS) at Emergency Vehicle Access (EW)

- Construct emergency vehicle access driveway to the satisfaction of the City of Redlands Fire Department.
- Install appropriate emergency vehicle access only signage.

MM TRANS-4 On-site Improvements

- On-site improvements and improvements adjacent to the site shall be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 39 of the TIA).
- Construct Alabama Street from the north project boundary to the south project boundary at its ultimate half-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Construct Orange Avenue from southwest project boundary to Alabama Street at its ultimate full cross-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Construct Orange Avenue from Iowa Street to Alabama Street at its ultimate north half-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Sight distance at each project access shall be reviewed with respect to California Department of Transportation/City of Redlands standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project. On-site traffic control plans shall comply with the California Manual of Uniform Traffic Control Devices (2014).
- The project site shall provide sufficient parking spaces to meet City of Redlands parking code requirements in order to service on-site parking demand.

Off-site Improvements

- All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable engineering standards and to the satisfaction of the City of Redlands Municipal Utilities and Engineering Department.
- Site adjacent roadways shall be constructed or repaired at their ultimate half section width including roadway improvements, sidewalks, street lighting, bicycle lanes, transit stops and landscaping in conjunction with development, or as otherwise required by the City of Redlands Municipal Utilities and Engineering Department.
- On-site traffic signing and striping plans shall be submitted for City of Redlands approval in conjunction with detailed construction plans for the project. The applicant shall submit Iowa Street and Orange Avenue signing and striping plans to the City of Redlands for approval in conjunction with project frontage roadway construction plans.
- Off-street parking shall be provided to meet City of Redlands Municipal Code requirements.
- The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met in accordance with applicable City of Redlands/California Department of Transportation sight distance standards.
- As is the case for any roadway design, the City of Redlands shall periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Environmental Issues	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
18. Tribal Cultural Resources *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Environmental Evaluation

Analysis for this section is based on the Historical/Archaeological Resources Survey Report prepared by CRM TECH on January 5, 2018. The Historical/Archaeological Resources Survey Report has been included in this document as Appendix C.

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

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

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than significant impact with mitigation incorporated. No evidence of any prehistoric cultural resources was encountered within or adjacent to the project site during the archaeological field survey. The site is highly disturbed as a result of past agricultural use, and therefore it is unlikely for

any prehistoric or early historic cultural remains to survive intact. Potential historic resources identified in the project area included Morey Arroyo, four residences at 139, 149, and 159 Alabama Street and 1600 Orange Avenue, in addition to the three streets in and adjacent to the project area, Alabama Street, Iowa Street, and Orange Avenue. However, these potential historic resources do not exhibit any distinctively historic characteristics.

CRM TECH conducted a project specific cultural resources assessment for the project that included archaeological and historic record searches and a pedestrian survey (Appendix C). CRM TECH, Archaeologist, Nina Gallardo, conducted a records search at the SCCIC, California State University Fullerton, on November 14, 2017. The records search revealed that the project area had not been surveyed for cultural resources in the past. Outside of the project boundaries, more than 60 cultural resources studies were completed between 1974 and 2015. Fifty-four historical/archaeological sites and one isolate were previously recorded within a 1-mile radius of the site. However, none were located on the project site. The records on file at the SCCIC indicated that there are no known historical/archaeological sites within the project boundaries. CRM TECH submitted a written request to the NAHC for a records search in the Sacred Lands File (SLF). The NAHC stated that the SLF search identified Native American cultural resources within the area with the potential to be impacted by the project. The NAHC provided a list of potential contacts in the region that may have information about the site. Following the NAHC's recommendations, CRM TECH contacted 26 Native American representatives in the region between November 16 and 21, 2017, for additional information on potential Native American cultural resources in the project vicinity. Correspondence between CRM TECH and the Native American Representatives and a complete list of the tribal contacts is attached as Appendix 2 of the Historical/Archaeological Resources Survey Report.

AB 52 specifies that a project that may cause a substantial adverse change to a defined TCRs may result in a significant effect on the environment. AB 52 requires tribes interested in development projects within a traditionally and culturally affiliated geographic area to notify a lead agency of such interest and to request notification of future projects subject to CEQA prior to determining if a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. The lead agency is then required to notify the tribe within 14 days of deeming a development application subject to CEQA complete to notify the requesting tribe as an invitation to consult on the project. AB 52 identifies examples of mitigation measures that would avoid or minimize impacts to TCRs. The Bill makes the above provisions applicable to projects that have a notice of preparation or a notice of intent to adopt a negative declaration/mitigated negative declaration circulated on or after July 1, 2015. AB 52 amends Sections 5097.94 and adds Sections 21073, 21074, 2108.3.1., 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3 to the California Public Resources Code, relating to Native Americans.

The project will have no impact on cultural resources, pending the completion of Native American Consultation by the City of Redlands pursuant to AB 52 to ensure the proper identification of potential TCRs. If tribal cultural resources are discovered during construction, the implementation of MM TCR-1, MM TCR-2, MM TCR-3, MM TCR-4 and MM CUL-1 (described in detail in Section 5, Cultural Resources) will be required. Therefore, impacts would be less than significant with mitigation incorporated.

Mitigation Measures

MM TCR-1 **Tribal Monitoring Plan.** A Native American Monitor from the consulting tribe(s), who wish to partake in monitoring, alongside an archaeological monitor meeting the Secretary of the Interior's standards shall be present during all ground disturbing proceedings, on a simultaneous or rotating basis, based on the scope of work; including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery. Monitoring agreements with the consulting tribe(s) shall be provided to the City prior to issuance of a grading permit.

The Applicant shall retain a Secretary of Interior Standards qualified archaeological monitor. The monitor shall be present during all ground-disturbing activities to identify any known or suspected archaeological and/or cultural resource. The qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site. The plan shall be developed in coordination with the City of Redlands and consulting tribe(s) and shall include, but shall not be limited to:

a. Project grading and development scheduling.
b. A rotating or simultaneous monitoring schedule based on the scope of work, during all ground related activities, including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery on the project site. The monitoring plan shall include scheduling, safety requirements, duties, scope of work, and a discussion of the Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with the Project Archaeologists.
c. The protocols and stipulations that the Applicant, City of Redlands, Native American Tribal Monitor(s) and Project Archaeologist shall follow in the event of previously unknown cultural resources discoveries that could be subject to a cultural resources evaluation.

MM TCR-2 **Treatment and Disposition of Tribal Cultural Resources.** In the event that tribal cultural resources, including historic and pre-contact materials, are discovered during the course of ground disturbance, the following procedures shall be implemented:

1. All work in the immediate vicinity of the find (within a 100-foot buffer) shall cease and the find shall be assessed by an archaeologist meeting the Secretary of the Interior's standards. Work on the other portions of the project, outside of the buffered area, may continue during this assessment period.
2. Notification and information regarding the nature of the find shall be made to the representatives of all consulting tribe(s).

3. Temporary Curation and Storage: During construction, any cultural resources discovered shall be temporarily curated in a secure on-site location, as determined appropriate with consideration of input from consulting tribe(s). The removal of any cultural resources from the project site shall be thoroughly inventoried and overseen by the Native American Tribal Monitor(s).
4. Treatment and Final Disposition: The Applicant shall relinquish ownership of all cultural resources, including sacred items, burial goods, archaeological artifacts, and non-human remains discovered during construction of the proposed project. The Applicant shall relinquish the cultural resources through one or more of the following methods and provide the City of Redlands with evidence of same:
    a. Accommodate the on-site reburial of the discovered cultural resources in consultation with the consulting Native American tribe(s) or band(s). The reburial area shall be protected from any future impacts. All reburials are subject to a reburial agreement that shall be developed between the landowner and the consulting tribes outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Reburial shall not occur until all cataloguing and recordation have been completed.
    b. In the event that reburial is infeasible, and/or if more than one Native American tribe or band is involved with the proposed project and cannot come to a consensus as to the disposition of cultural resources within one hundred and twenty (120) days from the initial recovery of the items, the cultural resources shall be curated. The landowner shall relinquish all ownership and rights to this material and confer with the consulting tribes to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.
    c. Within 60 days following the completion of ground disturbing activities, a Phase IV Monitoring Report shall be submitted to the City of Redlands. The Monitoring Report shall document monitoring activities conducted by the Project Archaeologist and Native Tribal Monitor(s) including: any impact to cultural resources discovered on the project site; how each mitigation measure was fulfilled; the type of cultural resources recovered and the disposition of such resources; evidence of completion of pre-grading cultural sensitivity training required for the construction staff; and daily/weekly monitoring notes from the archaeologist in a confidential appendix. The

Phase IV Monitoring Report shall be submitted to the City of Redlands, the South Central Coastal Information Center, and the consulting tribe(s).

MM TCR-3 **Archaeological/Cultural Documents.** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to consulting tribe(s).

MM TCR-4 **Discovery of Human Remains.** In the event that human remains are encountered on the project site, the construction contractors, Project Archaeologist, and designated Native American Tribal Monitor shall immediately stop all work within 100 feet of the discovery. The Applicant shall immediate notify the San Bernardino County Coroner, the City of Redlands Police Department, and the City of Redlands Development Services Department. The County Coroner shall be permitted to examine the remains consistent with the requirements of California Code of Regulations (CCR) §15064.5(e). State Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) §5097.98. If the remains are determined to be Native American, the County Coroner shall notify the Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

The specific location of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the Project Archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).

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

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

Environmental Evaluation

Would the project:

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

Less than significant impact. The Municipal Utilities and Engineering Department maintains the water system in the City of Redlands, including the East Valley Corridor area where the project is located. The project would utilize existing water and wastewater facilities, therefore not requiring construction of new facilities or the expansion or current facilities.

According to the Los Angeles CEQA Thresholds Guide (Exhibit M.2-12), applying the wastewater generation factor of 120 gallons per day (gpd) per dwelling unit for 1 bedroom apartments, 160 gpd

per dwelling unit for 2 bedroom apartments, and 200 gpd for 3 bedroom apartments, the proposed project would generate approximately 37,640 gpd (18,960 total gpd for all 1 bedroom units, 13,280 for all 2 bedroom units, and 5,400 gpd for all 3-bedroom units). The City of Redlands anticipates that the current capacity for wastewater treatment will accommodate population growth over the next 20 years.

Connections to local water and sewer mains would involve temporary and less than significant construction impacts that would occur in conjunction with other on-site improvements. No additional improvements are needed to either sewer lines or treatment facilities to serve the proposed project. Standard connection fees would address any incremental impacts of the proposed project. In addition, the City of Redlands has implemented a Water Conservation Plan, outlined in the Redlands Municipal Code Title 13, Chapter 13.06 to reduce water use. With implementation of these required water saving measures, water demand for the proposed project is expected to be within the estimated citywide water demand numbers. Therefore, the project would result in less than significant impacts as a result of new or expanded wastewater treatment facilities. Impacts would be less than significant.

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

Less than significant impact. The project could result in significant impacts if the project required additional water supplies than are currently entitled. The proposed project would develop a 328-unit luxury apartment complex. The project would require water for irrigation and day to day activities within the complex. The City of Redlands Municipal Utilities Department would provide water services to the project site. The City of Redlands, which obtains water from purchased imported water, groundwater, surface water and recycled water (City of Redlands, 2017f).

The 2015 San Bernardino Valley Regional UWMP, amended in June 2017, was prepared for the City of Redlands and therefore accounts for the water usage that would be attributed to development of the project site, consistent with its existing land use designation and zoning classification. The UWMP concludes that the City has adequate supplies to meet projected demands under multiple dry year scenarios, taking into account the recent prolonged drought. The proposed project will have sufficient water supplies available to serve the project from existing entitlements and resources. Therefore, impacts associated with water supplies would be less than significant.

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

Less than significant impact. The Redlands Wastewater Treatment Facility would serve the project and treats approximately 6 million gallons per day (mgd) with a capacity of 9.5 mgd. The proposed project would generate approximately 37,640 gpd. As such, the Redlands Wastewater Treatment Facility would have adequate capacity to serve the project. The proposed project would connect to and operate under capacity of the current water treatment facility, allowing for sufficient service to the project area. In addition, the proposed project remains consistent with the land use designations

of the project area. As such, the current treatment facility would have adequate capacity to serve the project, and impacts would be less than significant.

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

Less than significant impact. Significant impacts could occur if the proposed project would exceed the existing permitted landfill capacity or violates federal, State, and local statutes and regulations. Waste collection services are provided within Redlands city limits by the Quality of Life Department. Solid waste originating from Redlands is primarily disposed of by the Quality of Life Department at the California Street Landfill and by the County of San Bernardino at the San Timoteo Sanitary Landfill. Both landfills are within City limits. The California Street Landfill has a maximum capacity of 10,000,000 cubic yards, with a remaining capacity of 6,800,000 cubic yards. California Street Landfill accepts a maximum of 829 tons per day. The San Timoteo Sanitary Landfill has a maximum capacity of 20,400,000 cubic yards, with a remaining capacity of 11,402,000 cubic yards. San Timoteo Sanitary Landfill accepts a maximum of 2,000 tons per day.

Considering the availability of landfill capacity, project solid waste disposal needs can be adequately met without a significant impact on the capacity of the nearest and optional, more distant, landfills. Therefore, it is not expected that the proposed project would impact the City's compliance with State-mandated (AB 939) waste diversion requirements. Impacts would be less than significant.

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

No impact. The proposed project is required to comply with all applicable federal, State, County, and City statutes and regulations related to solid waste as a standard project condition of approval. Therefore, no impact would occur.

Mitigation Measures

None required.

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

Environmental Evaluation

Would the project:

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

No impact. The proposed project will be required to comply with the City of Redlands' Emergency Plan and Hazard Mitigation Plan and the emergency access requirements of the California Fire Code, which include but are not limited to, providing access with adjoining uses and providing suitable access for emergency vehicles. The project area will include a fire lane compliant with Fire Department requirements for adequate access. Emergency access to the site would be maintained during construction. There would be no impact.

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

No impact. According to the Redlands General Plan 2035, high fire risk areas in Redlands include San Timoteo and Live Oak Canyons in addition to Crafton Hills (City of Redlands 2018). Additionally, according to the Redlands General Plan 2035, open spaces in the City are susceptible to destructive

wildland fires, often exacerbated by dry weather and Santa Ana winds. The proposed project is not located in or near a State Responsibility Area nor on lands classified as Very High Fire Hazard Severity Zones. The project site is relatively level and does not have slope or other factors that would exacerbate wildfire risks. The proposed project is located in the West End of Redlands, which contains warehouses, logistics, and distribution centers in addition to apartment complexes, where the risk for wildland fire is lower. City of Redlands General Plan 2035, Fire Hazards, Figure 7-4, indicates that the project site is located in an area with little to no threat of fire hazard. The proposed project site would not be located in a critical fire danger zone or adjacent to wildlands subject to wildfires. Urban levels of fire protection would be provided to the project area. In addition, the project would adhere to building codes and any conditions included through review by the fire department. Therefore, there would be no impact.

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

No impact. The project proposes to develop an apartment complex with associated parking and landscaping on a site that contains residential and commercial structures, vacant land, and a closed commercial nursery. The proposed residential uses on-site would not include any features that would have the potential to exacerbate fire risk or result in temporary or ongoing impacts to the environment. The project would provide access with adjoining uses and suitable access for emergency vehicles. The project area will include a fire lane compliant with Fire Department requirements for adequate access. Emergency access to the site would be maintained during construction. There would be no impact.

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

No impact. There are no channels or creeks running through the project site. The project site is at an elevation of 1,215 to 1,240 feet above mean sea level, and natural slopes across the site are approximately 2 percent. Water flow in the northern parcel of the site tends to be sheet flow in a southeasterly to northwesterly direction until reaching the nearby Morey Arroyo Channel. The majority of the northern parcel is within the FEMA Flood Zone AO. Zone AO is considered a Special Flood Hazard Area and is defined as areas with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain) with average depths determined and indicated on the FEMA FIRM panel. The existing natural drainage on the southern parcel of the site is primarily sheet flow southeast to northwest. Stormwater flows from the southeast to northwest. The stormwater flows from the southern parcel are intercepted by Orange Avenue and conveyed westerly to a storm drain inlet located at the southeast corner of Iowa Street and Orange Avenue. The southern parcel is located within the FEMA Flood Zone X. Zone X is determined to be outside of the 0.2 percent annual chance floodplain. As such, the project has been designed in compliance with City of Redlands Ordinance No. 2837 for the purpose of providing for the sound use and development of areas of special hazards including properties located in special flood hazard areas. These conditions preclude the possibility

of subjecting people or structures to significant risks related to post-fire slope instability and landslides. There would be no impact.

Mitigation Measures

None required.

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

Environmental Evaluation

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

Less than significant with mitigation. With project implementation, development would be concentrated in the 21.84-acre site. The project would result in the permanent loss of 21.84 acres of disturbed habitat, as well as the demolition and removal of the existing uses on the site. The project has been designed to reflect and is consistent with the planned growth for the area, and the operation of the project would not be considered to substantially degrade the quality of the environment. The project is not within or adjacent to—and would not conflict with—the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Given the potential for undiscovered cultural and tribal cultural resources on the project site, implementation of MM CUL-1 through MM CUL-5, and MM TCR-1 and MM TCR-2 would be required to avoid the accidental destruction or disturbance of

previously undiscovered cultural resources, including paleontological, archaeological, and tribal cultural resources, as well as human remains. With implementation of these measures, described above, the project would not have the potential to degrade the quality of the environment and, overall, impacts would be less than significant with the implementation of mitigation.

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

Less than significant impact with mitigation. The project would result in potentially significant impacts to aesthetics, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, noise, transportation and traffic, and tribal cultural resources. However, mitigation measures have been identified that reduce impacts to a less than significant level, as described above. In addition, it was determined in Section 3, Air Quality, that the project would have less than significant cumulative impacts related to air quality with the implementation of mitigation. The proposed use is consistent with the existing City of Redlands General Plan 2035 land use designation and zoning. Therefore, development of the proposed project would be consistent with the assumptions of current long-range planning for the provision of utilities, service systems and public services in the City of Redlands. Overall, in combination with past, present and reasonably foreseeable growth, the proposed project would not result in cumulatively considerable impacts.

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

Less than significant impact with mitigation. All potential impacts of the proposed project have been identified. Compliance with applicable existing laws and regulations and implementation of recommended mitigation (and improvement) measures would ensure that the project would not result in substantial adverse effects on human beings either directly or indirectly. Therefore, impacts would be less than significant and no additional mitigation measures are required.

Mitigation Measures

MM AES-1 The project lighting design shall limit glare and up-light and comply with all local codes and CALGreen standards.

MM AQ-1 Architectural coatings applied to project buildings are to be limited to 30 grams per liter volatile organic compounds (VOC) content.

MM AQ-2 The project applicant shall ensure that the construction contractor use construction equipment that have Tier 3 engines or better for any on-site construction activities.

MM BIO-1 Any grubbing, brush clearing, or tree removal should be conducted outside of the State identified nesting season for migratory birds, which is typically March 15 through September 1. If work cannot be conducted outside of nesting season, a

migratory nesting bird survey within and adjacent to the project site shall be conducted by a qualified biologist within 3 days prior to initiating the construction activities. If active nests are found during the pre-construction nesting bird surveys, a NBP will be prepared and implemented. At a minimum, the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, nesting sage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity.

MM CUL-1 A 50-foot buffer shall be established along the southern boundary of the additional project areas, to be landscaped in the future but strictly avoided during construction.

The linear depression and stone alignment shall be left undisturbed. If any disturbances to these features become necessary, a systematic archaeological testing program shall be required to ascertain the nature, extent, and condition of what remains of the Zanja at this location, both above and below the ground surface.

MM CUL-2 if buried cultural materials are discovered during any earth-moving operations associated with the project, all work in the immediate area shall be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

MM CUL-3 **Archaeological Monitoring:** The Applicant shall retain a Secretary of Interior Standards qualified archaeological monitor. The monitor shall be present during all ground-disturbing activities to identify any known or suspected archaeological and/or cultural resource. The qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site. The plan shall be developed in coordination with the City of Redlands and shall include, but shall not be limited to:

a. Project grading and development scheduling.
b. A rotating or simultaneous monitoring schedule based on the scope of work during all ground related activities, including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery on the project site. The monitoring plan shall include scheduling, safety requirements, duties, scope of work, and a discussion of the monitor's authority to stop and redirect grading activities.
c. The protocols and stipulations that the Applicant, City of Redlands and Project Archaeologist shall follow in the event of previously unknown archaeological/cultural resources discoveries that could be subject to a archaeological/cultural resources evaluation.

MM CUL-4 If significant cultural resources are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to Interested Tribe(s) for review and comment, as detailed within Tribal Cultural Resources (TCR)-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

MM CUL-5 In the event of an accidental discovery or recognition of any human remains or funerary objects, Public Resource Code Section 5097.98 must be followed. In this instance, once project-related earthmoving begins and if there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance of the site or any nearby area (within a 100-foot buffer of the find), as reasonably suspected to overlie adjacent human remains, until the City of Redlands Police Department and San Bernardino County Coroner are contacted to determine if the remains are Native American and if an investigation of the cause of death is required. If the County Coroner determines the remains to be Native American, the County Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the "most likely descendant" of the deceased Native American. The most likely descendant may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resource Code Section 5097.98, or
2. Where the following conditions occur, the landowner or his/her authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the most likely descendent or on the project area in a location not subject to further subsurface disturbance:
   - The NAHC is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 48 hours after being notified by the commission;
   - The descendent identified fails to make a recommendation; or
   - The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the NAHC fails to provide measures acceptable to the landowner.

MM GEO-1 A paleontological records search will be requested through the Natural History Museum of Los Angeles to determine the relative potential for paleontological resources to exist within the project site. If it is determined that fossil-bearing sediments are present, a qualified monitor should be present during any ground-disturbing activities during the project. In the event that fossils or fossil-bearing deposits are discovered during construction activities, excavations within a 100-foot radius of the find shall be temporarily halted or diverted. The Applicant shall retain a

qualified paleontologist to examine the discovery. The paleontologist shall document the discovery in accordance with Society of Vertebrate Paleontology standards. The paleontologist shall determine procedures that would be followed before construction activities are allowed to resume at the location of the find. If the Applicant determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of construction activities on the discovery. The plan shall be submitted to the City of Redlands for review and approval prior to implementation, and the Applicant shall adhere to the recommendations in the plan.

MM LUP-1 Prior to the issuance of building permits, the applicant shall submit to the City design specifications that demonstrate to the City's satisfaction that the following design measures are included in the project:

1. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need a Sound Transmission Class (STC) rating of at least 29 to meet the interior noise standard of 45 CNEL.
2. Windows facing or with a line of sight of Alabama Street, north of Orange Avenue, will need an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL.
3. For the proposed multi-family (low rise) attached residential dwelling units located adjacent to Orange Avenue, windows facing or with a line of sight of Orange Street should have an STC rating of at least 28 to meet the interior noise standard of 45 dBA CNEL.

MM NOI-1 In addition to adhering to the required City of Redlands's policies found in the City of Redlands General Plan Noise Element and City of Redlands Municipal Code limiting the construction hours of operation, the following measures shall be implemented to reduce construction noise and vibration emanating from the proposed project:

1. 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.
2. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.
3. Equipment shall be shut off and not left to idle when not in use.
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.
5. Jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded and noise shall be directed away from sensitive receptors.

MM NOI-2 The use of vibratory rollers is to be restricted within 25 feet of existing structures and the use of large bulldozers is to be restricted within 15 feet of existing structures.

MM TRANS-1 **Off-site Improvements.** The project applicant shall contribute its fair share, through the adopted development impact fee program, to the following mitigation measure improvements for General Plan Buildout (Year 2040) Without and With Project:

Alabama Street (NS) at Orange Avenue (EW)—No. 5

- Restripe the eastbound approach to provide a dedicated left turn lane.
- Restripe the westbound approach to provide a dedicated left turn lane.

Improvements at the project driveways are project design features which shall be constructed by the project. Site-adjacent roadway improvements shall also be constructed in conjunction with the project.

The project fair share is based on the proportion of project peak hour traffic volume contributed to the improvement location relative to the total new peak hour traffic volume for General Plan Buildout (Year 2040) With Project conditions. The project proportional trip contributions have been calculated (as shown in Table 9 of Appendix G) and the project fair share cost estimate is $3,867.

The project fair share shown above represents a rough order of magnitude; it is intended only for the discussion purposes of this traffic impact analysis and does not imply any legal responsibility or formula for contributions or mitigation.

MM TRANS-2 A construction work site traffic control plan shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of any construction work. The plans shall show the location of any roadway, sidewalk, bike route, bus stop or driveway closures, traffic detours, haul routes, hours of operation, protective devices, warning signs and access to abutting properties. Temporary traffic controls used around the construction area must adhere to the standards set forth in the California Manual of Uniform Traffic Control Devices (2014) and construction activities should adhere to applicable local ordinances.

Site development would require the use of haul trucks during site clearing and excavation and the use of a variety of other construction vehicles throughout the construction work at the site. Transportation of heavy construction equipment and or materials, which requires the use of oversized vehicles, will require the appropriate transportation permit. The City shall review all proposed development and construction work site traffic control plans to ensure that public, pedestrian, and school safety are addressed.

MM TRANS-3 The project shall implement the following recommended improvements as provided in the TIA:

Project West Driveway (NS) at Orange Avenue (EW)

- Construct the southbound approach to consist of one shared left/right turn with stop-control.
- Install appropriate "Exit Only" signage.

Project East Driveway (NS) at Orange Avenue (EW)

- Construct the northbound approach to consist of one shared left/through/right turn lane with stop-control.
- Construct the southbound approach to consist of one shared left/through/right turn lane with stop-control.

Alabama Street (NS) at Emergency Vehicle Access (EW)

- Construct emergency vehicle access driveway to the satisfaction of the City of Redlands Fire Department.
- Install appropriate emergency vehicle access only signage.

MM TRANS-4 On-site Improvements

- On-site improvements and improvements adjacent to the site shall be required in conjunction with the proposed development to ensure adequate circulation within the project itself (see Figure 39 of the TIA).
- Construct Alabama Street from the north project boundary to the south project boundary at its ultimate half-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Construct Orange Avenue from southwest project boundary to Alabama Street at its ultimate full cross-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Construct Orange Avenue from Iowa Street to Alabama Street at its ultimate north half-section width including roadway improvements, bicycle lanes, transit stops and landscaping in conjunction with development, as necessary.
- Sight distance at each project access shall be reviewed with respect to California Department of Transportation/City of Redlands standards in conjunction with the preparation of final grading, landscaping, and street improvement plans.
- On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project. On-site traffic control plans shall comply with the California Manual of Uniform Traffic Control Devices (2014).
- The project site shall provide sufficient parking spaces to meet City of Redlands parking code requirements in order to service on-site parking demand.

Off-site Improvements

- All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable engineering standards and to the satisfaction of the City of Redlands Municipal Utilities and Engineering Department.
- Site adjacent roadways shall be constructed or repaired at their ultimate half section width including roadway improvements, sidewalks, street lighting, bicycle lanes, transit stops and landscaping in conjunction with development, or as otherwise required by the City of Redlands Municipal Utilities and Engineering Department.
- On-site traffic signing and striping plans shall be submitted for City of Redlands approval in conjunction with detailed construction plans for the project. The applicant shall submit Iowa Street and Orange Avenue signing and striping plans to the City of Redlands for approval in conjunction with project frontage roadway construction plans.
- Off-street parking shall be provided to meet City of Redlands Municipal Code requirements.
- The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met in accordance with applicable City of Redlands/California Department of Transportation sight distance standards.
- As is the case for any roadway design, the City of Redlands shall periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

MM TCR-1 **Tribal Monitoring Plan.** A Native American Monitor from the consulting tribe(s), who wish to partake in monitoring, alongside an archaeological monitor meeting the Secretary of the Interior's standards shall be present during all ground disturbing proceedings, on a simultaneous or rotating basis, based on the scope of work; including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery. Monitoring agreements with the consulting tribe(s) shall be provided to the City prior to issuance of a grading permit.

The Applicant shall retain a Secretary of Interior Standards qualified archaeological monitor. The monitor shall be present during all ground-disturbing activities to identify any known or suspected archaeological and/or cultural resource. The qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site. The plan shall be developed in coordination with the City of Redlands and consulting tribe(s) and shall include, but shall not be limited to:

a. Project grading and development scheduling.

b. A rotating or simultaneous monitoring schedule based on the scope of work, during all ground related activities, including but not limited to, all site preparation/construction/demolition based activities, testing and data recovery on the project site. The monitoring plan shall include scheduling, safety requirements, duties, scope of work, and a discussion of the Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with the Project Archaeologists.
c. The protocols and stipulations that the Applicant, City of Redlands, Native American Tribal Monitor(s) and Project Archaeologist shall follow in the event of previously unknown cultural resources discoveries that could be subject to a cultural resources evaluation.

MM TCR-2 **Treatment and Disposition of Tribal Cultural Resources.** In the event that tribal cultural resources, including historic and pre-contact materials, are discovered during the course of ground disturbance, the following procedures shall be implemented:

1. All work in the immediate vicinity of the find (within a 100-foot buffer) shall cease and the find shall be assessed by an archaeologist meeting the Secretary of the Interior's standards. Work on the other portions of the project, outside of the buffered area, may continue during this assessment period.
2. Notification and information regarding the nature of the find shall be made to the representatives of all consulting tribe(s).
3. Temporary Curation and Storage: During construction, any cultural resources discovered shall be temporarily curated in a secure on-site location, as determined appropriate with consideration of input from consulting tribe(s). The removal of any cultural resources from the project site shall be thoroughly inventoried and overseen by the Native American Tribal Monitor(s).
4. Treatment and Final Disposition: The Applicant shall relinquish ownership of all cultural resources, including sacred items, burial goods, archaeological artifacts, and non-human remains discovered during construction of the proposed project. The Applicant shall relinquish the cultural resources through one or more of the following methods and provide the City of Redlands with evidence of same:
    a. Accommodate the on-site reburial of the discovered cultural resources in consultation with the consulting Native American tribe(s) or band(s). The reburial area shall be protected from any future impacts. All reburials are subject to a reburial agreement that shall be developed between the landowner and the consulting tribes outlining the determined reburial process/location, and shall include measures and provisions to protect the reburial area from any future impacts (vis a vis project plans, conservation/preservation easements, etc.). Reburial shall not occur until all cataloguing and recordation have been completed.

b. In the event that reburial is infeasible, and/or if more than one Native American tribe or band is involved with the proposed project and cannot come to a consensus as to the disposition of cultural resources within one hundred and twenty (120) days from the initial recovery of the items, the cultural resources shall be curated. The landowner shall relinquish all ownership and rights to this material and confer with the consulting tribes to identify an American Association of Museums (AAM)-accredited facility within the County that can accession the materials into their permanent collections and provide for the proper care of these objects in accordance with the 1993 CA Curation Guidelines. A curation agreement with an appropriate qualified repository shall be developed between the landowner and museum that legally and physically transfers the collections and associated records to the facility. This agreement shall stipulate the payment of fees necessary for permanent curation of the collections and associated records and the obligation of the Project developer/applicant to pay for those fees.
c. Within 60 days following the completion of ground disturbing activities, a Phase IV Monitoring Report shall be submitted to the City of Redlands. The Monitoring Report shall document monitoring activities conducted by the Project Archaeologist and Native Tribal Monitor(s) including: any impact to cultural resources discovered on the project site; how each mitigation measure was fulfilled; the type of cultural resources recovered and the disposition of such resources; evidence of completion of pre-grading cultural sensitivity training required for the construction staff; and daily/weekly monitoring notes from the archaeologist in a confidential appendix. The Phase IV Monitoring Report shall be submitted to the City of Redlands, the South Central Coastal Information Center, and the consulting tribe(s).

MM TCR-3 **Archaeological/Cultural Documents.** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to consulting tribe(s).

MM TCR-4 **Discovery of Human Remains.** In the event that human remains are encountered on the project site, the construction contractors, Project Archaeologist, and designated Native American Tribal Monitor shall immediately stop all work within 100 feet of the discovery. The Applicant shall immediate notify the San Bernardino County Coroner, the City of Redlands Police Department, and the City of Redlands Development Services Department. The County Coroner shall be permitted to examine the remains consistent with the requirements of California Code of Regulations (CCR) §15064.5(e). State Health and Safety Code §7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code (PRC) §5097.98. If the remains are determined to be Native American, the County Coroner shall notify the

Native American Heritage Commission (NAHC), which shall determine and notify a Most Likely Descendant (MLD). The MLD shall complete the inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The MLD recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials, preservation of Native American human remains and associated items in place, relinquishment of Native American human remains and associated items to the descendants for treatment, or any other culturally appropriate treatment.

The specific location of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the Project Archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).

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

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