THE RESIDENCE AT CASA LOMA

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

Lead Agency:
City of Redlands
35 Cajon Street, Suite 20
Redlands, CA 92373

Project Applicant:
Dynamic Redlands, LLC
3140 East Pico Blvd.
Los Angeles, CA 90023
(213) 614-8887

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1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.); and
- California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000 et seq.).

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed Project. As required by State CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, The City of Redlands, in consultation with other jurisdictional agencies, to determine if a Negative Declaration, Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR) is required for the Project.

This Initial Study informs The City of Redlands decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the Project. A "significant effect" or "significant impact" on the environment means "*a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project*" (Guidelines §15382). As such, the documents intent is to adhere to the following CEQA principles:

- Provide meaningful early evaluation of site planning constraints, service and infrastructure requirements, and other local and regional environmental considerations. (Pub. Res. Code §21003.1)
- Encourage the applicant to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. (State CEQA Guidelines §15004[b][3])
- Specify mitigation measures for reasonably foreseeable significant environmental effects and commit The City of Redlands and the applicant to future measures containing performance standards to ensure their adequacy when detailed development plans and applications are submitted. (State CEQA Guidelines §15126.4)

Existing Plans, Programs, or Policies (PPPs)

Throughout the impact analysis in this Initial Study, reference is made to requirements that are applied to all development on the basis of federal, state, or local law, and Existing Plans, Programs, or Policies currently in place which effectively reduce environmental impacts. Existing Plans, Programs, or Policies are collectively identified in this document as PPPs. Where applicable, PPPs are listed to show their effect in reducing potential environmental impacts. Where the application of these measures does not reduce an impact to below a level of significance, a project-specific mitigation measure is introduced. The City of Redlands will include these PPPs along with mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for the Project to ensure their implementation.

1.2 DOCUMENT ORGANIZATION

This IS/MND includes the flowing sections:

Section 1.0 Introduction

Provides information about CEQA and its requirements for environmental review and explains that an Initial Study/MND was prepared by the City of Redlands to evaluate the proposed Project's potential to impact the physical environment.

Section 2.0 Project Setting

Provides information about the proposed Project's location.

Section 3.0 Project Description

Includes a description of the proposed Project's physical features and construction and operational characteristics.

Section 4.0 Environmental Checklist

Includes the Environmental Checklist and evaluates the proposed Project's potential to result in significant adverse effects to the physical environment.

Section 5.0 Document Preparers and Contributors

Includes a list of the persons that prepared this IS/MND.

2 ENVIRONMENTAL SETTING

2.1 PROJECT LOCATION

The Project is located at 1010 East Lugonia Avenue and 1205-1219 North University Street in the northwestern portion of the City of Redlands. The City of Redlands encompasses approximately 36 square miles of land within San Bernardino County and is bounded by Loma Linda to the west; the unincorporated community of Mentone to the east; Highland to the north; and Riverside County and Moreno Valley to the south.

The Project site is located on the south side of East Lugonia Avenue, east side of Occidental Drive, west side of North University Street, and north of Purdue Avenue. As shown on Figure 1, *Project Location*, regional access to the Project site is provided by Interstate (I) 210 to Lugonia Avenue; and by I-10 to 6th Street. Local access to the site is provided by Route 38/Lugonia Avenue and Occidental Drive.

2.2 EXISTING SETTING

The Project site encompasses approximately 5.7-acres and 17 parcels of contiguous land that is within an urbanized residential area northwest of the University of Redlands. The 17 Assessor's Parcel Numbers (APNs) of the Project site are listed in Table 1 below.

Table 1: Assessor's Parcel Numbers

1212-371-01-0000	1212-371-13-0000
1212-371-05-0000	1212-371-14-0000
1212-371-06-0000	1212-371-15-0000
1212-371-07-0000	1212-371-16-0000
1212-371-08-0000	1212-371-17-0000
1212-371-09-0000	1212-371-18-0000
1212-371-10-0000	1212-371-19-0000
1212-371-11-0000	1212-371-20-0000
1212-371-12-0000	

The Project site is partially developed with a concrete driveway and cul-de-sac within the southwestern portion of the site, and three residences (two occupied residences and one vacant residence) within the southeastern portion of the site (1205, 1215, and 1219 North University Street [(APN) 1212-371-05-0000, 1212-371-06-0000, 1212-371-07-0000]), all of which will be removed and demolished prior to construction of the proposed project.

The undeveloped portions of the site are previously disturbed areas that are surrounded by chain link fencing. The Project site is adjacent to two sides of an existing multi-family residential development located at the northeasterly corner of the project site. The Project site includes several mature trees and shrubs around the perimeter of the site, as well as adjacent to the existing residences. The residences on the Project site (to be demolished) consist of one-story single-family residences with paved driveways and fenced yards. The Project site's existing conditions are shown in Figure 2, *Project Vicinity* and Figures 3A through 3D, *Site Photos*.

2.3 EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

As shown on Figure 4, *General Plan Land Use Map*, the Project site has two different General Plan designations. Approximately 1.05 acre of the site is located within the High Density Residential General Plan land use designation, which allows single-family and multiple-family residential uses at a maximum of 27 units per acre, and approximately 4.71 acres is located within the Low Density Residential land use designation, which allows single-family residential uses at a maximum of 6 dwelling units per acre (du/ac). The Low Density Residential designation provides for residential lot sizes between 7,200 and 10,000 square feet.

As shown on Figure 5, *Existing Zoning*, the Project site has three different zoning designations. Approximately 1.45 acres of the site is zoned A-1 (Agricultural); 3.15 acres is zoned R-1 (Single Family Residential); and 1.1 acres is zoned R-2 (Multiple Family Residential) District. As indicated in the City's Municipal Code, the following uses are intended for these zones: agricultural, single-family residential, and multi-family residential.

2.4 SURROUNDING LAND USES, GENERAL PLAN, AND ZONING DESIGNATIONS

The Project site is located within a developed area of the City of Redlands and is surrounded by the following land uses and designations:

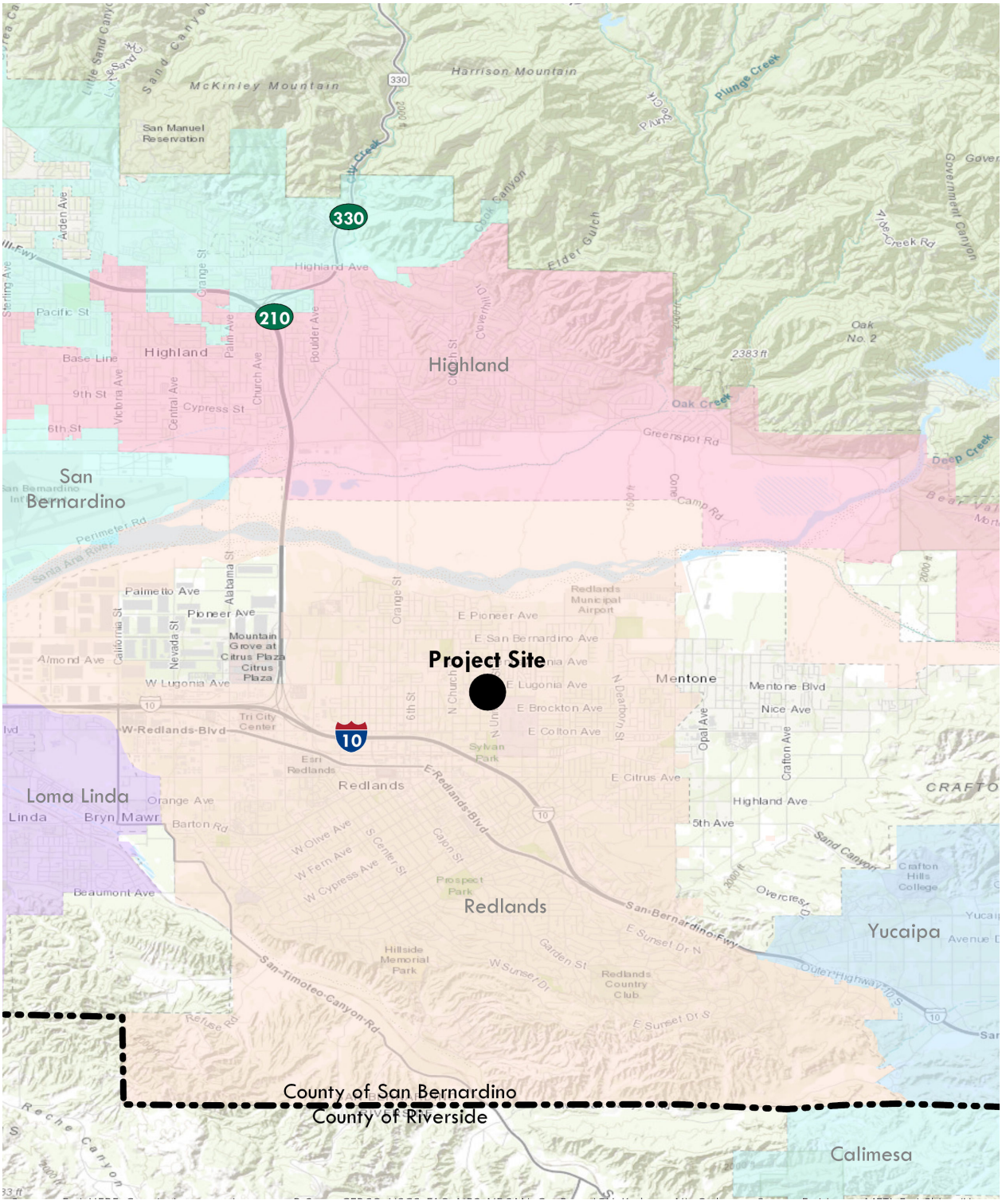
North: Immediately north of the Project site are multi-family residential uses (northeasterly corner of the project site), designated as High Density Residential in the General Plan and zoned Multi-Family Residential (R-2). In addition, East Lugonia Avenue is adjacent to a portion of the northwest corner of the project site, followed by single-family residential development to the north of Lugonia Avenue.

West: Across the street (Occidental Drive) from the Project site are single-family residential uses, designated as Low Density Residential in the General Plan and zoned Single-Family Residential (R-1).

South: Immediately south of the Project site are single family residential uses, designated as Low Density Residential in the General Plan and zoned Single-Family Residential (R-1). In addition, an area of vacant land immediately south of the Project site is designated as Public/Institutional in the General Plan and zoned Public Institution (E) and this site is a part of the University of Redlands campus that is located to the southeast of the Project site.

East: Across the street (North University Street) from the Project site are multi-family residential uses, designated as High Density Residential in the General Plan and zoned Multi-Family Residential (R-2-2000).

Regional Map



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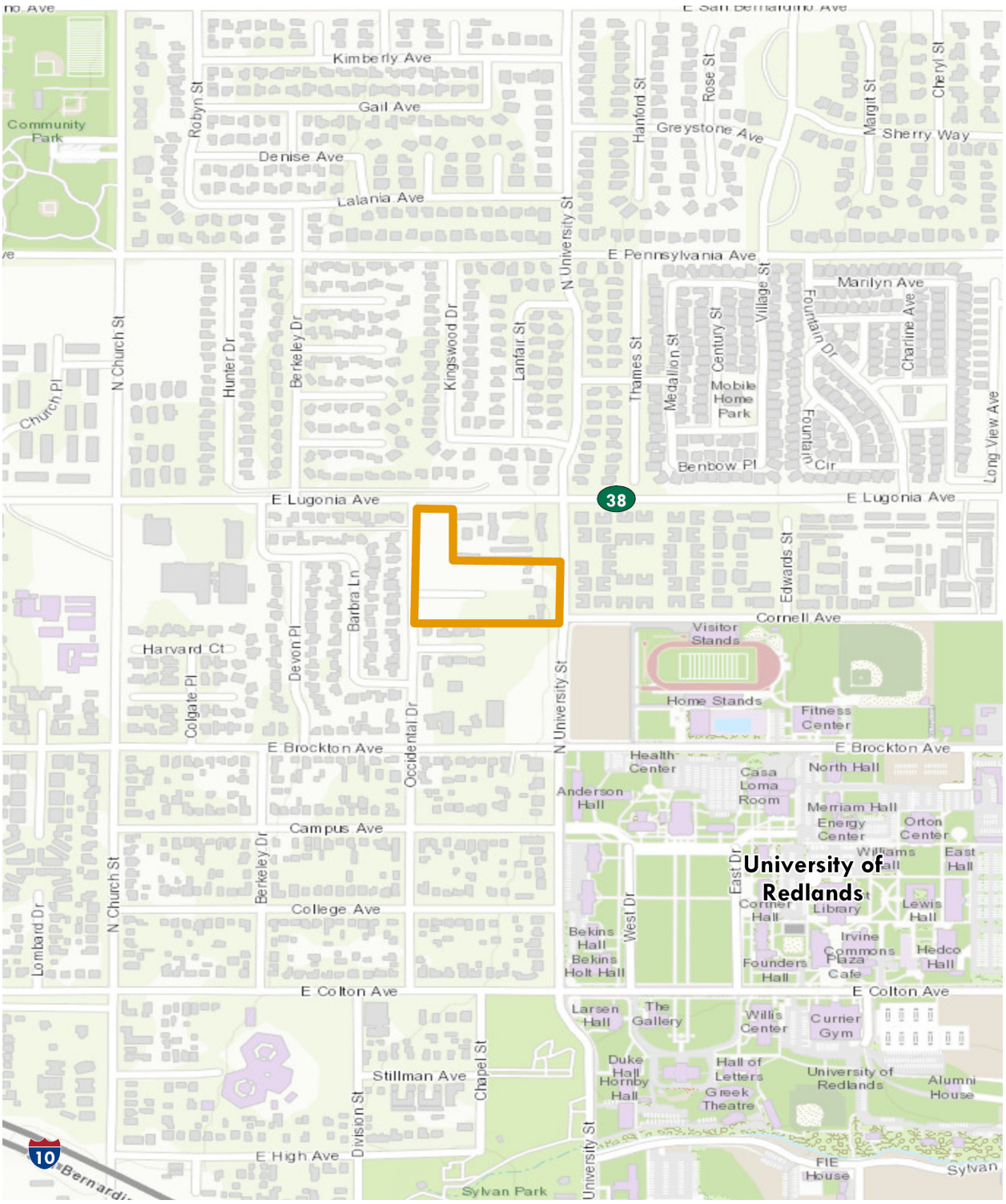
Local Vicinity



Project Site

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Site Photos

Existing Homes along the east edge of the Project Site.

Existing gate that runs along the west edge of the Project Site and existing cul-da-sac.

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Site Photos (cont.)

View of south end of the site looking southeast.

View of north end of the site looking northeast.

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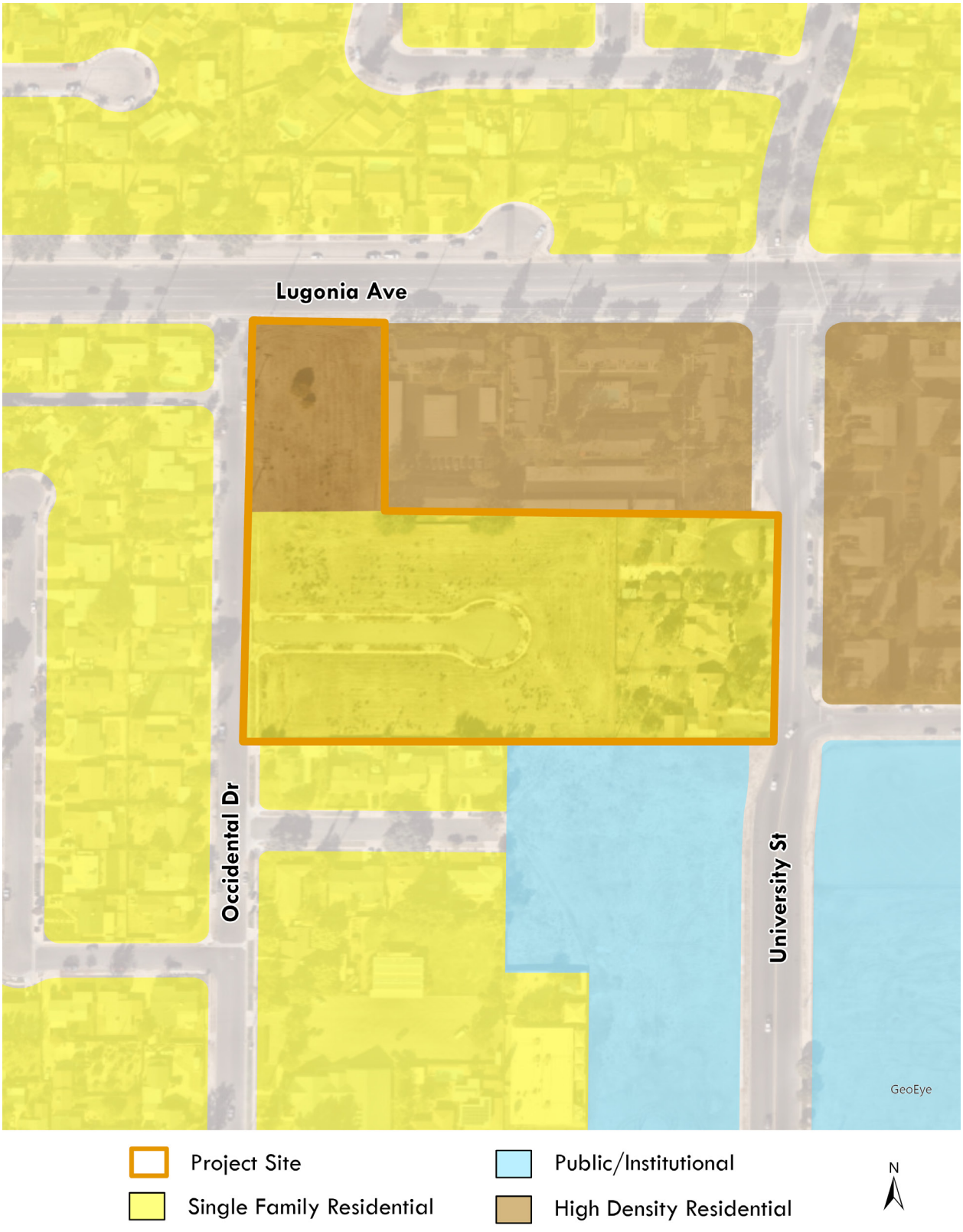
General Plan Land Use Map



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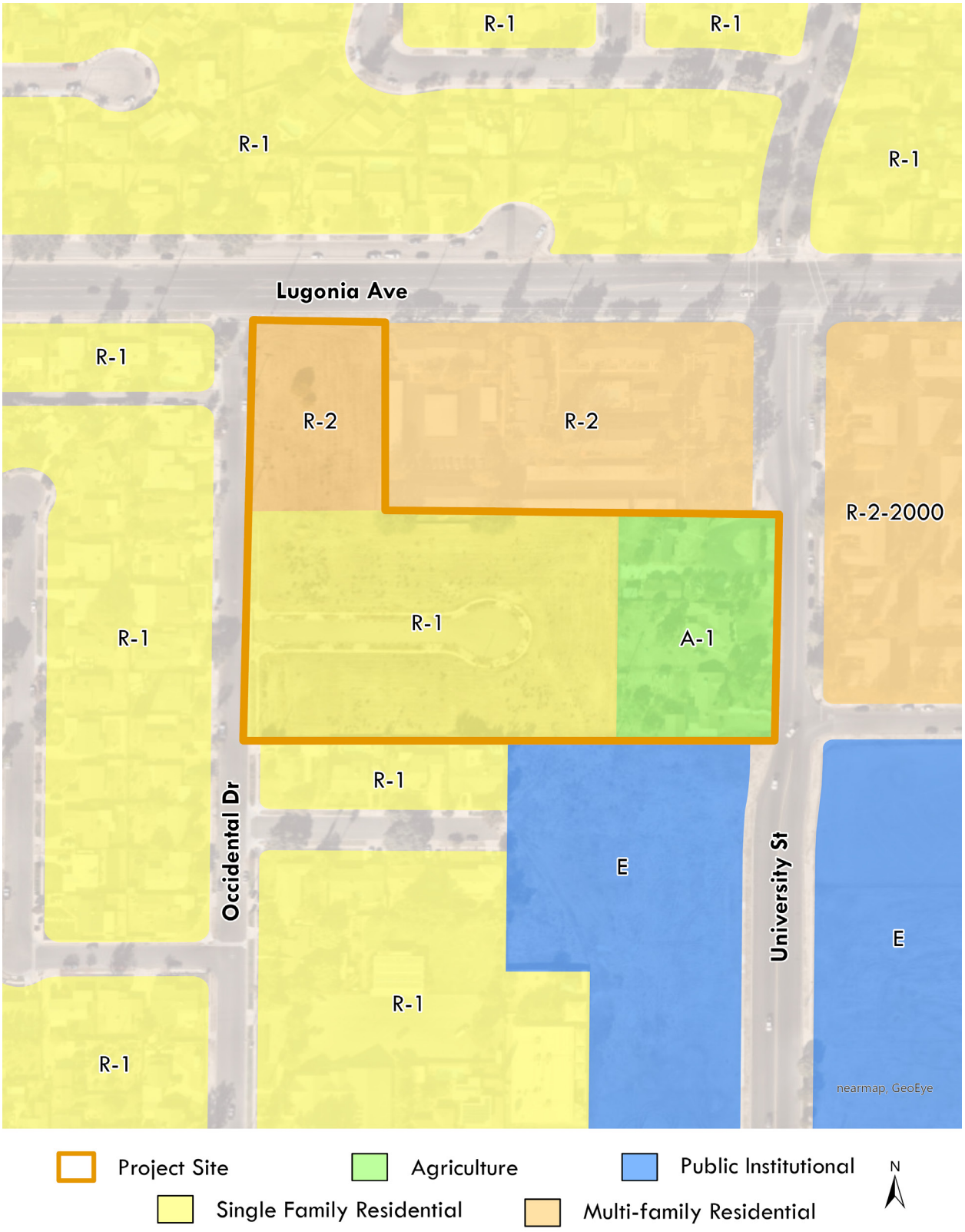
Existing Zoning



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3 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The proposed Project would involve development of the 5.7–acre project site with 147 multi-family residential units within three 3-story buildings. The Project would also include provision of onsite parking and recreation areas, vacation of the existing right-of-way on the site (unused existing cul-de-sac "Crystal Ct."), and consolidation of 17 parcels into one lot for development purposes.

Residential Development
The proposed project would remove the three existing single-family residential units on the project site and consolidate the site under one parcel to redevelop it with three three-story multi-family residential buildings. Building 1 would be 52,407 sq. ft. and provide 64 residences, Building 2 would be 45,662 sq. ft. and provide 53 residences, and Building 3 would be 27,133 sq. ft. and provide 30 residences. The project would result in a total building space of 125,202 sq. ft. and 147 residential units. Figure 6, *Conceptual Site Plan*, illustrates the proposed site configuration following Project completion.

The proposed residential units include studio, one-bedroom, and two-bedroom floor plans that range from 603 sq. ft. to 1,086 sq. ft. The breakdown of the proposed residences are provided in Table 2.

Table 2: Residential Unit Breakdown

Building #	Studio	One Bedroom	Two Bedroom	Total Units	Building Footprint (Net)
Building 1	10 units	37 units	17 units	64 units	52,407 sq. ft.
Building 2	12 units	17 units	24 units	53 units	45,662 sq. ft.
Building 3	0 units	11 units	19 units	30 units	27,133 sq. ft.
Total Building Units	**22 units**	**65 units**	**60 units**	**147 units**	**125,202 sq. ft.**

Access to the proposed residences would be provided via two driveways on North University Street, which would lead to a gate that provides access to the internal driveway. The proposed internal driveway would loop around the proposed buildings and parking areas. The Project would also vacate the 350 linear foot onsite public right-of-way identified as "Crystal Court."

Architectural Design
The proposed three-story multi-family residential buildings would be designed with contemporary Spanish architectural elements, as shown in Figures 7A to 7F. Architectural elements would include stucco finishes, detailed roof elements, aluminum awnings, metal deck railings, and decorative vinyl windows and doors in the exterior design. Heating, ventilation, and air conditioning (HVAC) equipment and solar panels would be installed on the roofs of the buildings and would be screened or shielded from view. The tallest point of the residential buildings would be a decorative tower with a height of approximately 49 feet. The tallest roofline would be approximately 44 feet in height.

Parking
The proposed Project would provide 251 on-site parking spaces, including 72 garage spaces, 105 carport spaces, and 74 open stall "guest" spaces. This would meet code requirements for on-site and resident parking (177 covered spaces required and 177 covered spaces provided; 74 open stall spaces provided and 74 open stalls required).

Table 3: Proposed Parking

	Quantity	Percent
Total Garage Parking	72	28.7%
Total Carport Parking	105	41.8%
Total Open Stall Parking	74	29.5%
Total Parking Provided	251	100%
Parking to Unit Ratio	1.71 / DU	

Recreation and Open Space
Community facilities throughout the development would include a main pool with sitting areas, a Cabana (745 sq. ft.), a walking loop and community garden, dog park, and a playground. The Project also includes a Fitness Center (2,356 sq. ft.) and Clubhouse (4,335 sq. ft.).

Landscaping
The Project would install 68,308 sq. ft. of landscaping, which would encompass approximately 29% of the Project site. The Project would include installation of 24-inch to 60-inch box trees along the frontages of North University Street and Occidental Drive, along the site boundaries, in the open space, recreation, and parking lot areas, as well as adjacent to the entrance and exit driveways of the complex. In addition, shrubs and groundcovers would be provided adjacent to buildings and throughout open space areas. The landscaping would include a variety of drought tolerate species. The proposed landscape plan is illustrated in Figure 8, *Landscape Plan*.

Lighting
Lighting proposed as part of the Project would be typical of residential uses and would consist of primarily of wall-mounted lighting, as well as pole-mounted lights along the proposed internal roadway. Trellis lighting would be used as accent lighting in community recreation areas. All of the Project's outdoor lighting would be directed downward and shielded to minimize off-site spill, as required by General Plan Action 2-A.35.

Infrastructure Improvements
Water and Sewer
The proposed Project would install new onsite water and sewer lines that would connect to the existing water and sewer infrastructure along Occidental Drive and North University Street.

Drainage
The proposed Project would install an onsite storm drain system that would convey runoff to a pre-treatment unit then to an underground infiltration/detention system. The proposed outlet pipes and parkway drains would discharge the allowable flow to Occidental Drive.

3.2 PARCEL CONSOLIDATION

A Tentative Tract Map is included as part of the project to consolidate the 17 parcels that make up the project site into one approximately 5.7-acre parcel (see Figure 9, *Tentative Tract Map*).

3.3 GENERAL PLAN AND ZONING

The Project site has an existing General Plan land use designation of High Density Residential (0-27.0 units/acre) and Low Density Residential (0-6.0 units/acre). As part of the Project, a General Plan Amendment is proposed to designate the 4.71 acres of Low Density Residential on the project site as High Density Residential, , as shown on Figure 10, *Proposed General Plan Land Use Map*.

The Project includes a zone change of approximately 1.5 acres from A-1 (Agricultural), 3.15 acres of R-1 (Single Family Residential), and 1.1 acre of R-2 (Multiple Family Residential) District to R-3 (Multiple-Family Residential) District, as shown on Figure 11, *Proposed Zoning*.

3.4 CONSTRUCTION DURATION AND PHASING

Construction activities include demolition of the existing residential structures, rectangular concrete pads, pavement, utility infrastructure, grubbing, grading, excavation and re-compaction of soils; utility and infrastructure installation; building construction; pavement; and architectural coatings. The proposed excavation and grading would result in 24,230 cubic yards (CY) of fill and 30 CY of cut. Thus, approximately 24,200 CY of import would be required for the project.

Table 4: Construction Phasing

Phase Name	Days
Site Preparation	10
Grading	20
Building Construction	230
Architectural Coating	20
Paving	20

Construction activities are anticipated to last 14 months, as indicated in Table 4 above, and would comply with the City of Redlands Municipal Code Chapter 8.06.120 (Noise Ordinance), which states that construction shall occur only between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, with no construction allowed on Sundays and Federal holidays.

3.5 DISCRETIONARY APPROVALS AND PERMITS

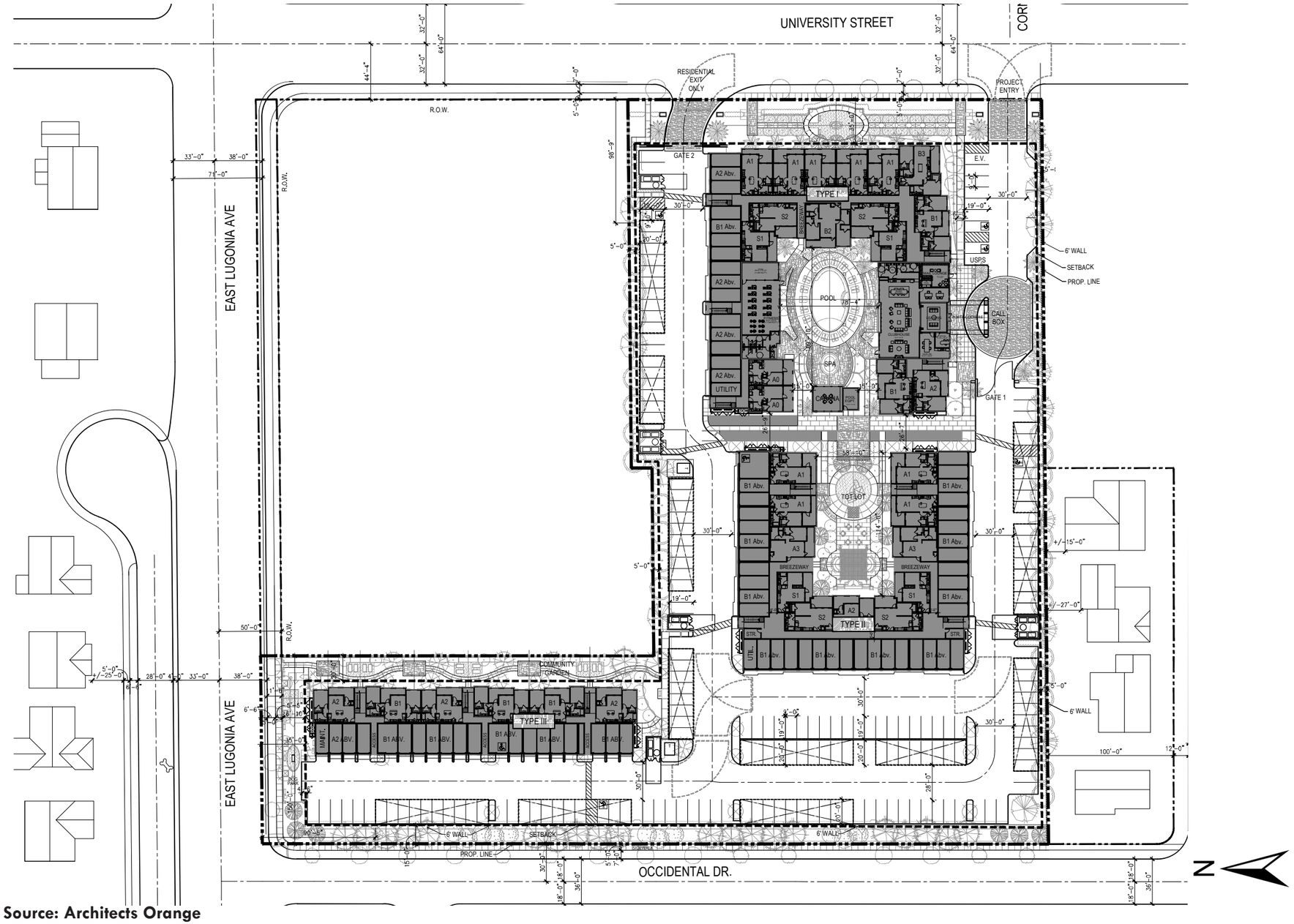
The following discretionary approval and permits are anticipated to be necessary for implementation of the proposed Project:

CITY OF REDLANDS

- *General Plan Amendment* from Low Density Residential to High Density Residential
- *Zone Change* from A-1 (Agricultural), R-1 (Single Family Residential), and R-2 (Multiple Family Residential) District to R-3 (Multiple-Family Residential) District

- *Tentative Tract Map* to consolidate 17 parcels into 1 parcel
- *Site Plan Approval*
- *Grading Permits*
- *Water Quality Management Plan (WQMP) and Storm Water Storm Water Pollutant and Prevention Plan (SWPPP) approval*

Conceptual Site Plan



Source: Architects Orange

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NORTH ELEVATION

SOUTH ELEVATION

Source: Architects Orange

Plan 1

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EAST ELEVATION

WEST ELEVATION

Source: Architects Orange

Plan 1

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NORTH ELEVATION

SOUTH ELEVATION

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Plan 2

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EAST ELEVATION

WEST ELEVATION

Source: Architects Orange

Plan 2

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NORTH ELEVATION

SOUTH ELEVATION

Plan 3

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EAST ELEVATION

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WEST ELEVATION

Plan 3

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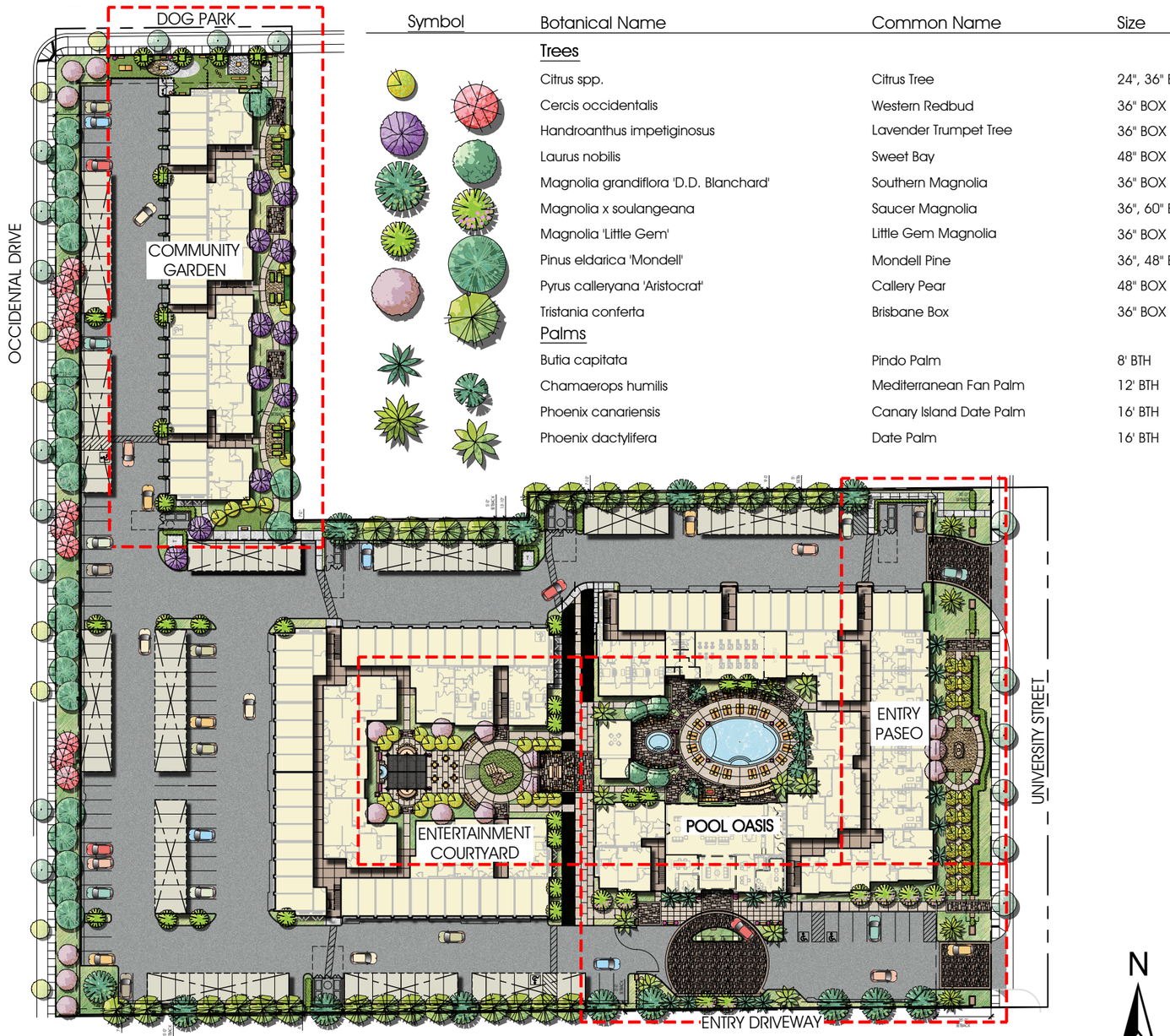
PLANTING LEGEND (Sunset Zone: 18)

Symbol	Botanical Name	Common Name	Size	Form	WUCOLS Region 4
	Trees				
	Citrus spp.	Citrus Tree	24", 36" BOX	Standard	Mod
	Cercis occidentalis	Western Redbud	36" BOX	Standard	Low
	Handroanthus impetiginosus	Lavender Trumpet Tree	36" BOX	Standard	Mod
	Laurus nobilis	Sweet Bay	48" BOX	Standard	Low
	Magnolia grandiflora 'D.D. Blanchard'	Southern Magnolia	36" BOX	Standard	Mod
	Magnolia x soulangeana	Saucer Magnolia	36", 60" BOX	Standard	Mod
	Magnolia 'Little Gem'	Little Gem Magnolia	36" BOX	Standard	Mod
	Pinus eldarica 'Mondell'	Mondell Pine	36", 48" BOX	Standard	Low
	Pyrus calleryana 'Aristocrat'	Callery Pear	48" BOX	Standard	Mod
	Tristania conferta	Brisbane Box	36" BOX	Standard	Mod
	Palms				
	Butia capitata	Pindo Palm	8' BTH	Skinned	Low
	Chamaerops humilis	Mediterranean Fan Palm	12' BTH	Multi-Trunk	Low
	Phoenix canariensis	Canary Island Date Palm	16' BTH	Skinned	Low
	Phoenix dactylifera	Date Palm	16' BTH	Skinned	Low



Source: Conceptual Design & Planning Company

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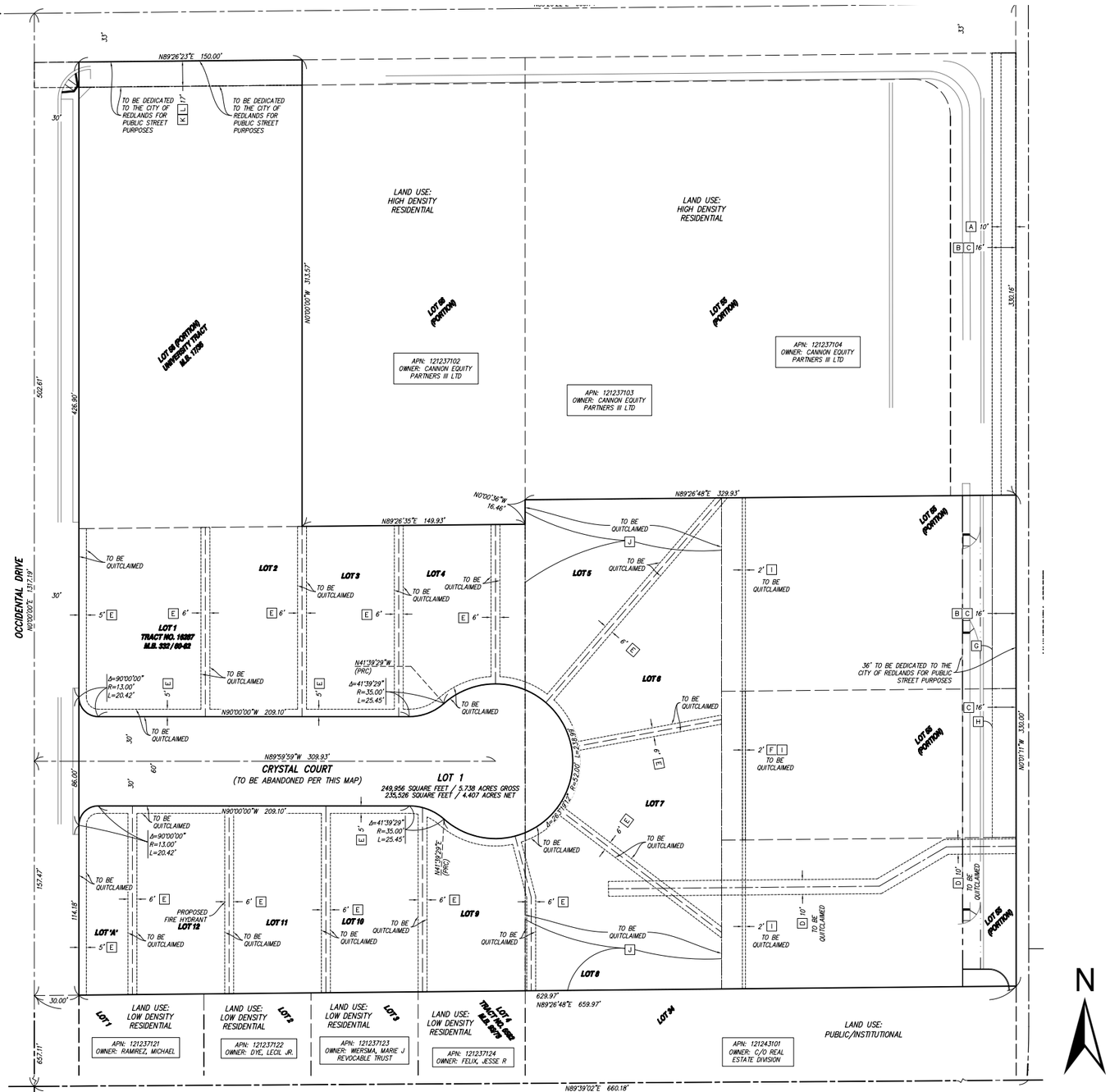
Tentative Tract Map



Source: DRC Engineering Inc.

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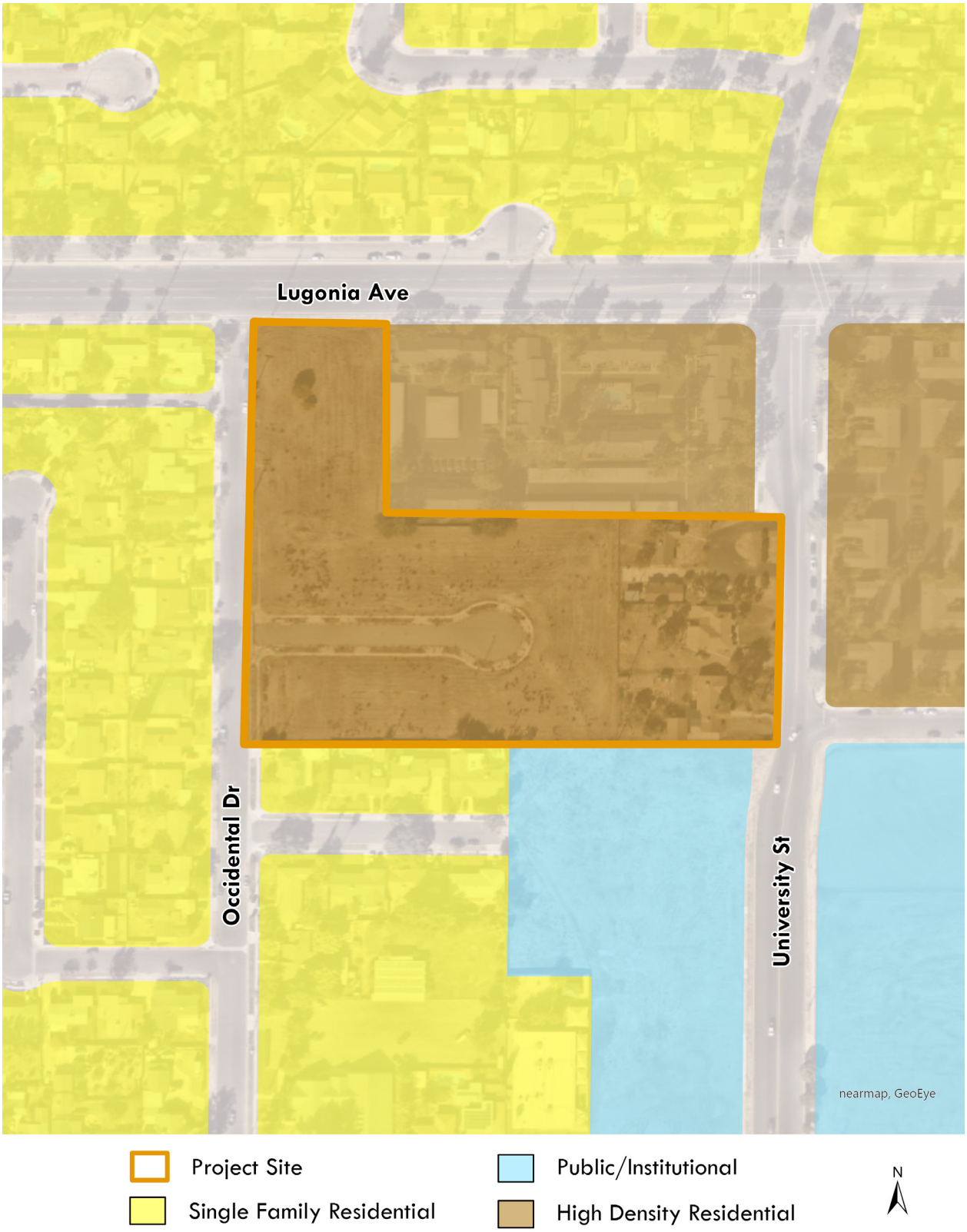
Proposed General Plan Land Use Map



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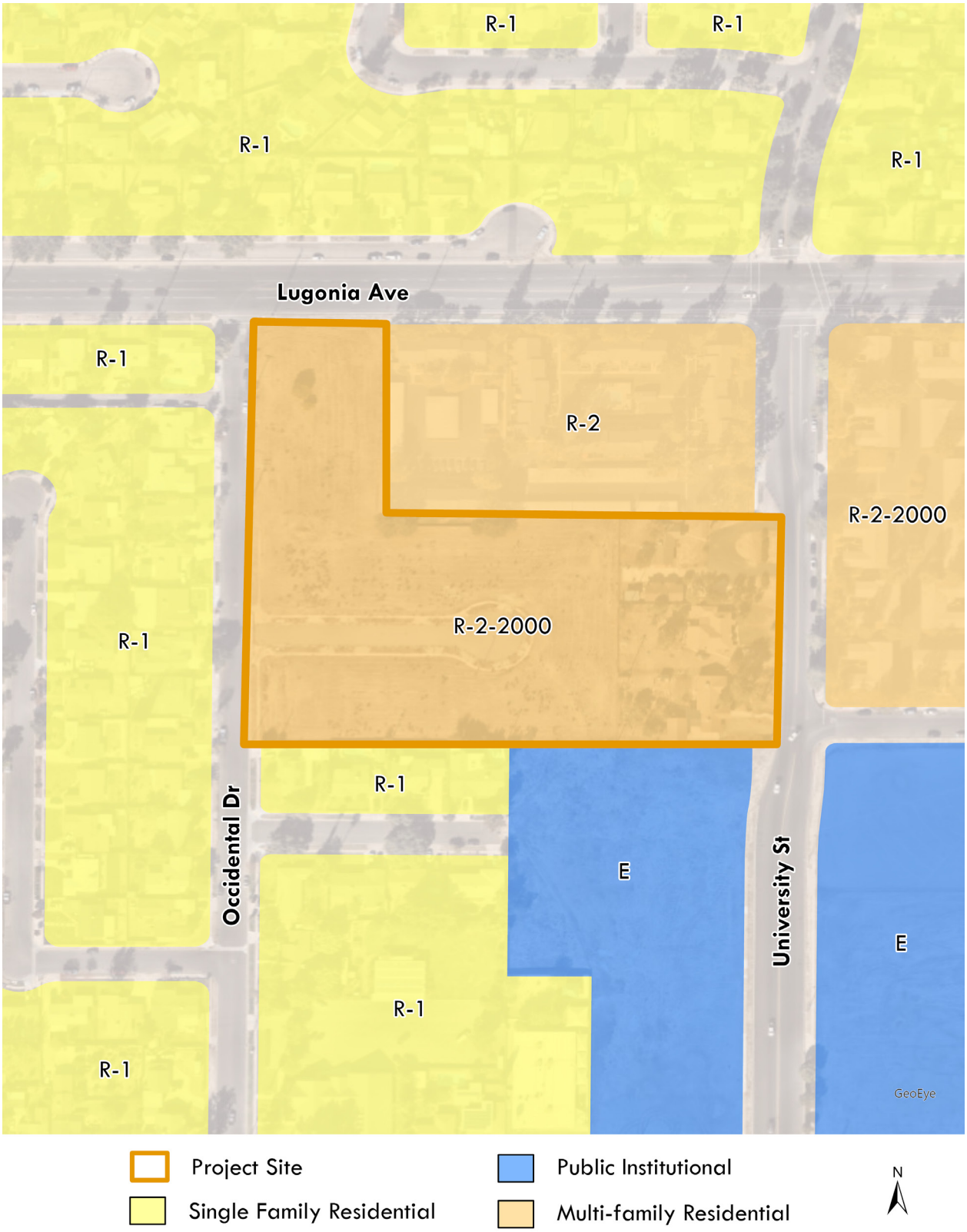
Proposed Zoning



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4 ENVIRONMENTAL CHECKLIST

This section includes the completed environmental checklist form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed Project. The checklist form identifies potential Project effects as follows: 1) Potentially Significant Impact; 2) Less Than Significant with Mitigation Incorporated; 3) Less Than Significant Impact; and, 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5 (Environmental Evaluation). Included in the discussion for each topic are standard condition/regulations and mitigation measures, if necessary, that are recommended for implementation as part of the proposed Project.

4.1 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" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

Environmental Factors Potentially Affected

☐	Aesthetics	☐	Agriculture and Forest Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards and Hazardous Materials
☐	Hydrology/Water Quality	☐	Land Use/Planning	☐	Mineral Resources
☒	Noise	☐	Population/Housing	☐	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

4.2 DETERMINATION

(To be completed by the Lead Agency) 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 measures 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.

Signature Date

Printed Name For

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than

significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analysis," as described in (5) below, may be cross-referenced).

5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(d). In this case, a brief discussion should identify the following:

   (a) Earlier Analysis Used. Identify and state where they are available for review.

   (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

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4.3 ENVIRONMENTAL CHECKLIST QUESTIONS

	Potentially Significant Impact	Less Than Significant 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 buildings 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?	☐	☐	☒	☐

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

Less Than Significant Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting. A scenic vista can be impacted in 2 ways: a development project can have visual impacts by either directly diminishing the scenic quality of the vista or by blocking the view corridors or "vista" of the scenic resource. Important factors in determining whether the proposed Project would block scenic vistas include the Project's proposed height, mass, and location relative to surrounding land uses and travel corridors.

Scenic vistas in the City are defined as scenic corridors and views to and from open spaces, hillsides, groves, Canyonlands, and the San Bernardino Mountains. Views of the San Bernardino Mountains to the north are available from the Project site and the surrounding roadway corridors. The Project site is in an urbanized area and surrounded by one- and two-story development (residential and commercial land uses), roadways, lined with ornamental landscaping and power lines. The proposed multi-family residential development would replace the existing vacant areas and residential uses and would develop three three-story apartment buildings on the Project site. The buildings would be a maximum building height of 49 feet (approximately 44 feet to tallest roofline) that would be greater in height, size and scale than the existing onsite structures.

However, the proposed apartment buildings would have a setback of 35-feet along East Lugonia Avenue, approximately 40-feet along Occidental Drive, approximately 40-feet from residences along Purdue Avenue, and 35-feet along North University Street. The proposed apartment buildings, at their nearest point to offsite single-family residences, would be approximately 75 feet to residences to the south, and approximately 133 feet to residences to the west. These setbacks would allow for the continuation of the existing long-range public views of the San Bernardino Mountains from the roadway corridors. Thus, redevelopment of the Project site with three multi-family apartment buildings would not obstruct, interrupt, or diminish a scenic vista; and impacts would not occur.

b) Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated state scenic highways in the vicinity of the proposed Project (Caltrans 2020). The closest Eligible State Scenic Highway to the Project site is Interstate 210 (I-210) between Redlands and Highland and I-10 at the junction of I-210, which is located approximately 2 miles west of the Project site. State Route 38 (SR-38), which is approximately 0.5 miles to the southeast of the project site. There is substantial distance and existing visual obstructions between the Eligible State Scenic Highways portions of I-210 and I-10 and the Project site is not within the viewshed of either highway. Therefore, impacts related to scenic resources within a state scenic highway would not 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. As described previously, the Project site is located within an urbanized residential area that is surrounded by roadways. Beyond the roadways, lands are developed with single-family residential and educational uses. The existing character of the Project site and surrounding area is neither unique nor of special aesthetic value or quality. The proposed multi-family residential development would replace the existing vacant areas and residential uses, and would develop three three-story apartment buildings on the Project site.

General Plan. According to the General Plan Land Use Element (Section 4.3), a 1.05 acre portion of the Project site currently has a General Plan land use designation of High Density Residential (0-27.0 units/acre), and the remainder of the Project site currently has a General Plan land use designation of Low Density Residential (0-6.0 units/acre). As part of the Project, a General Plan Amendment is proposed to designate approximately 4.65 acres of the Project site from Low Density Residential to High Density Residential, which would allow residential densities ranging from 0 to 27 du/ac. The Project's proposed density of approximately 25.7 du/ac would be lower than the maximum allowable density of 27.0 du/ac. Thus, the Project would not conflict with applicable General Plan buildout densities that govern scenic quality. In addition, the project would be consistent with the General Plan Land Use Element goals and policies related to scenic quality, as shown in Table AES-1.

Table AES-1: Consistency with Livable Community Element Goals and Policies Related to Scenic Quality

Goal or Policy	Project Consistency
Policy 4-P.10: Ensure that the scale and character of new development is appropriate for surrounding terrain and the character of existing development.	**Consistent.** The proposed Project would be a maximum of three stories with a maximum building height of 49 feet, which would be greater in height, size and scale than the existing onsite structures. The proposed apartment buildings would have a setback of 35-feet along East Lugonia Avenue, approximately 40-feet along Occidental Drive, approximately 40-feet from residences along Purdue Avenue, and 35-feet along N University Street, which would minimize the perceived scale of the proposed buildings. However, the Project's setbacks are larger than the adjacent multi-family residences to the north of the Project site, which have a setback of approximately 30-feet along East Lugonia Avenue and 30-feet along N University Street. The additional setbacks provided by the Project would ensure that the scale of the new residential development is consistent with existing residential developments within the Project area. In addition, the Project would include a decorative tower that would be consistent in scale and character to the existing structures within the University of Redlands campus, which are also adjacent to the Project site. The Project also includes similar Spanish architectural styles and exterior materials, such as stucco finishes, detailed roof elements, and decorative vinyl windows and doors that can also be found in the adjacent homes. Thus, the Project would be consistent with the character of the existing development adjacent to the Project site. Approximately 24,200 cy of import would be required for the Project, which would balance the Project site with the surrounding terrain. Therefore, the project would be consistent with Policy 4-P.10.
Policy 4-A.14: Discourage changes in residential areas that would disturb the character of or clearly have a destabilizing effect on the neighborhood.	**Consistent.** The Project would demolish three existing one-story single-family homes along N University Street that have become deteriorated and blighted over time, as well as the vacant parcels along Occidental Drive that are inconsistent with the existing two-story multi-family residential uses to the north and east of the Project site. In addition, as discussed above, the Project would add a residential neighborhood that is cohesive and compatible with the existing residential neighborhoods adjacent to the Project site. Therefore, the Project would not have a destabilizing effect on the neighborhood as the Project would redevelop a vacant and underutilized site with multi-family residential uses that are consistent adjacent residential uses. Therefore, the Project would be consistent with Policy 4-A.14.
Policy 4-A.15: Promote the preservation, maintenance, and improvement of property through code enforcement to mitigate or eliminate deterioration and blight conditions, and to help encourage new development and reinvestment.	**Consistent.** As discussed above, the proposed Project would remove the existing single-family residences on the Project site that have become deteriorated and blighted over time, as well as vacant ruderal parcels to construct multi-family residences with a modern design

	similar to other new residential developments. The Project would include contemporary Spanish architectural elements, such as stucco finishes, detailed roof elements, aluminum awnings, metal deck railings, and decorative vinyl windows and doors in the exterior design. In addition, the Project would create a residential community with a Homeowner's Association that would ensure long-term maintenance of the Project site. The Project would also be evaluated through the City's permitting process to ensure that the Project complies with all applicable City codes related to scenic quality. Therefore, the Project would promote the preservation, maintenance, and improvement of property and mitigate or eliminate deterioration and blight conditions. Therefore, the Project would be consistent with Policy 4-A.15.

In addition, as part of the Project entitlement process, the City conducts a review of all building and site plans. The purpose of this review is to ensure that the design of a proposed development is consistent with all applicable requirements, standards, and regulations set forth by the City's Municipal Code, as well as other relevant local, State, and federal regulations. Included as part of this review, is an assessment of a Project's architecture to ensure that the project includes an integrated architectural theme that is compatible with surrounding land uses.

Zoning. The Project site currently has three zoning designations: 1.5 acres of A-1 (Agricultural); 3.15 acres of R-1 (Single Family Residential); and 1.1 acres of R-2 (Multiple Family Residential) District. As such, the Project would require a zone change of approximately 1.5 acres from A-1 (Agricultural), 3.15 acres of R-1 (Single Family Residential), and 1.1 acre of R-2 (Multiple Family Residential) District to R-3(Multiple-Family Residential) District. As shown in the Project plans incorporated herein, upon the Zone Change and Site Plan Approval requested by the Project Applicant, the proposed Project would be consistent with the setbacks, maximum height requirements, and all additional development standards outlined in Chapter 18.52 of the City's Municipal Code.

Thus, the Project would not conflict with applicable zoning and other regulations governing scenic quality. As the Project would develop the site with multi-family housing, which is consistent with the land uses adjacent to the site, the Project would be visually compatible with the surrounding single-family and similar to the adjacent multi-family residential uses. Hence, the proposed Project would not degrade the visual character of the project site and surrounding area; and impacts 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. Spill light occurs when lighting fixtures such as streetlights, parking lot lighting, exterior building lighting, and landscape lighting are not properly aimed or shielded to direct light to the desired location and light escapes and partially illuminates a surrounding location. Sensitive uses (e.g., residential uses) surrounding the Project site could be impacted by the light from development within the boundaries of the Project site if light spill occurs.

Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare may also refer to the sensation experienced looking into

an excessively bright light source that causes a reduction in the ability to see or causes discomfort. Glare generally does not result in illumination of off-site locations but results in a visible source of light viewable from a distance. Glare could also occur from building materials of the new structures, including glass and other reflective materials.

The Project site is currently developed with three single-family residential developments, as well as areas of vacant undeveloped parcels. Thus, the existing light and glare generated from the site is limited. The proposed Project would introduce new sources of light from new building security lighting, streetlights within parking areas, interior lights shining through building windows, and headlights from nighttime vehicular trips generated from the Project. Thus, the Project would increase lighting and could increase glare on-site compared to the existing condition. However, the proposed Project would be subject to the City's General Plan Action 2-A.35 that requires shielding of light to minimize lighting of adjacent off-site areas and generation of glare.

Glare can emanate from many different sources, some of which include direct sunlight, sunlight reflecting from cars or buildings, and bright outdoor or indoor lighting. Glare in the project vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the project site that would generate substantial glare since most of the buildings are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

As described above, the exterior of the proposed buildings would be finished with stucco and cement roof tiles, which are not reflective surfaces. Additionally, installation of outdoor lighting would be required to meet the City's General Plan Action 2-A.35, as included as PPP AE-1, which would reduce the potential to generate glare from new lighting fixtures. Thus, with implementation of PPP AES-1, impacts associated with new lighting would be less than significant.

In addition, the proposed Project includes rooftop solar panels. However, solar panels do not reflect substantial amount of sunlight. Conversely, solar panels use "high transmission, low iron glass" which absorbs more light, producing smaller amount of glare and reflectance than normal glass does. Therefore, installation of rooftop solar photovoltaic panels on the proposed residential buildings would not increase glare in the area. As a result, the proposed project would not create a substantial source of glare, and impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP AES-1: Pursuant to City's General Plan Action 2-A.35, ensure that exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) is minimized, restricted to low-intensity fixtures, shielded, and concealed to the maximum feasible extent, and that perimeter lighting and lighting for sports and other private recreational facilities is limited to reduce light pollution visible from public viewing areas.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☒

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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. The Project site is currently developed and located in an urbanized area that is not used for agriculture. In addition, the Project site is designated as "Urban and Built-Up Land" on maps prepared pursuant to the California Department of Conservation Important Farmland Finder (CDC 2020). The Project site and adjacent areas are not designated as Prime, Unique, or Farmland of Statewide Importance. No areas of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be affected by the Project or converted to a non-agricultural use. Thus, no impact would occur.

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

No Impact. The Williamson Act (California Land Conservation Act of 1965) restricts the use of agricultural and open space lands to farming and ranching by enabling local governments to contract with private landowners for indefinite terms in exchange for reduced property tax assessments. Approximately 1.5 acres of the Project site is zoned A-1 (Agricultural)which allows agricultural uses as well as residential development at a density of one dwelling unit per 2.5 acres. No agricultural uses exist on or adjacent to the site, or in the Project area. The Project includes a zone change of the 1.5 acres from A-1 (Agricultural) to R-3 (Multiple-Family Residential) District, which allow up to 27 du/ac. Therefore, rezoning and development of the site would not result in the loss of agricultural land or affect any Williamson Act contracts. In addition, no parcels in the Project vicinity have Williamson Act contracts. Therefore, implementation of the Project would not conflict with existing zoning for agricultural use or a Williamson Act contract, and 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. As discussed previously, the Project site within an urbanized area and is developed with single-family residences and associated structures. The Project site and vicinity is void of forest land or timberland. As described previously, the Project site is currently zoned for A-1 (Agricultural); R-1 (Single Family Residential); and R-2 (Multiple Family Residential) District and is surrounded by areas zoned for residential or public institution uses. No areas designated or zoned as forest land or timberland, or for timberland production, exist on or near the project site. Thus, no impact would occur from implementation of the proposed Project.

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

No Impact. The project site contains a limited number of trees and does not include forestland or timberland. Additionally, the project site is not zoned as forestland, and is surrounded by urban development on all sides. The project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production. 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?

No Impact. As discussed previously, the Project site is in an urbanized residential area of the City of Redlands and is developed with three single-family residences and associated structures on a small portion of the total project site. It is currently not used for agricultural purposes and is not designed or zoned for forest land. The proposed Project would not convert farmland to a nonagricultural use or convert forest land to a non-forest use. Likewise, the proposed Project would not contribute to environmental changes that could result in conversion of farmland to a nonagricultural use or conversion of forest land to a non-forest use. Thus, no impact would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measure

None.

	Potentially Significant Impact	Less Than Significant 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) affecting a substantial number of people?	☐	☐	☒	☐

The discussion below is based on the Casa Loma Residential Focused Air Quality and Greenhouse Gas Emissions Memo, prepared by Urban Crossroads, included as Appendix A.

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

Less Than Significant Impact. The Project site is located in the South Coast Air Basin and is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, SCAQMD and SCAG uses regional growth projections to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed Project would result in growth that is substantially greater than what was anticipated, then the proposed Project would conflict with the AQMP. On the other hand, if a Project's density is within the anticipated growth of a jurisdiction, its emissions would be consistent with the assumptions in the AQMP, and the Project would not conflict with SCAQMD's attainment plans. In addition, the SCAQMD considers a Project consistent with the AQMP if the Project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.

Furthermore, The South Coast Air Basin (SCAB) is in a non-attainment status for federal ozone standards, federal carbon monoxide standards, and state and federal particulate matter standards. Any development in the SCAB, including the proposed Project, could cumulatively contribute to these pollutant violations. Should construction or operation of the proposed Project

exceed these thresholds a significant impact could occur; however, if estimated emissions are less than the thresholds, impacts would be considered less than significant.

The proposed Project is a redevelopment Project on a site that has been previously used for single-family residential uses and is located within a residential neighborhood. The proposed Project would remove the single-family residences and develop 147-unit multi-family residential development on the site. As further described in Section 14, *Population and Housing*, the 147 new residences would result in an 0.005 percent increase in residential units within the City. This limited level of growth on within a developed area would not exceed growth projections and would be consistent with the assumptions in the AQMP.

In addition, as detailed below, the emissions generated by construction and operation of the proposed Project would not exceed thresholds, and the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation. Therefore, impacts related to conflict with the AQMP from the proposed project would be less than significant.

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. The South Coast Air Basin (SCAB) is in a non-attainment status for federal ozone standards, federal carbon monoxide standards, and state and federal particulate matter standards. Any development in the SCAB, including the proposed project, could cumulatively contribute to these pollutant violations. Evaluation of cumulative air quality impacts of the proposed project has been completed pursuant to SCAQMD's cumulative air quality impact methodology, SCAQMD states that if an individual project results in air emissions of criteria pollutants (ROG, CO, NOx, SOx, PM_{10}, and $PM_{2.5}$) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of the criteria pollutant(s) for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

SCAQMD published its *Final Localized Significance Threshold Methodology* in July 2008, recommending that all air quality analyses include an assessment of both construction and operational impacts on the air quality of nearby sensitive receptors from emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$. The methodologies from the SCAQMD CEQA Air Quality Handbook are used in evaluating Project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1.

Table AQ-1: SCAQMD Regional Daily Emissions Thresholds

Pollutant	Construction (lbs/day)	Operations (lbs/day)
NOx	100	*55*
VOC	*75*	*55*
PM10	150	150
PM2.5	*55*	*55*
SOx	150	150
CO	*550*	*550*
Lead	3	3

Source: Urban Crossroads 2019 (Appendix A)

Construction

Construction activities associated with the proposed Project would generate pollutant emissions from the following: (1) demolition of the existing structures and removal of the existing infrastructure and pavement, (2) site preparation, (3) grading, (4) building construction, (5) paving, and (6) architectural coating. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring.

It is mandatory for all construction Projects to comply with several SCAQMD Rules, including Rule 403 for controlling fugitive dust, PM_{10}, and $PM_{2.5}$ emissions from construction activities. Rule 403 requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the proposed Project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12-inches, and maintaining effective cover over exposed areas. Compliance with Rule 403 was accounted for in the construction emissions modeling and is included as PPP AQ-1. In addition, implementation of SCAQMD Rule 1113, which governs the VOC content in architectural coating, paint, thinners, and solvents was accounted for in construction emissions modeling, and is included as PPP AQ-2. As shown in Table AQ-2, CalEEMod results indicate that construction emissions generated by the proposed Project would not exceed SCAQMD regional thresholds with implementation of PPP AQ-1 and PPP AQ-2. Therefore, construction activities would result in a less than significant impact.

Table AQ-2: Project Construction Emissions and Regional Thresholds

Construction Emissions Comparison (lbs/day)						
Pollutant	**VOC**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer						
2020	5.65	79.72	27.92	0.16	11.48	6.65
2021	49.73	39.08	26.71	0.08	3.87	2.03
Winter						
2022	5.64	79.93	26.59	0.16	11.48	6.65
2023	49.73	39.06	25.47	0.07	3.87	2.03
Maximum Daily Emissions	**49.73**	**79.93**	**27.92**	**0.16**	**11.48**	**6.65**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Urban Crossroads 2019 (Appendix A)

Operation

Implementation of the proposed Project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products. Operational vehicular emissions would generate a majority of the emissions from implementation of the Project. In addition, compliance with SCAQMD Rule 445 that prohibits the use of wood burning stoves and fireplaces in new developments will also be included as PPP AQ-3 to ensure compliance.

Operational emissions associated with the proposed Project were modeled using CalEEMod and are presented in Table AQ-3. As shown, the proposed Project would result in long-term regional emissions of the criteria pollutants, however, these emissions would be below the SCAQMD's applicable thresholds. Therefore, the Project's operational emissions would not exceed the

NAAQS and CAAQS, would not result in a cumulatively considerable net increase of any criteria pollutant, and impacts would be less than significant.

Table AQ-3: Project Operational Emissions and Regional Thresholds

	Emissions (lbs/day)					
Operational Activities – Summer Scenario	**VOC**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Source	3.94	2.58	13.23	0.02	0.26	0.26
Energy Source	0.05	0.39	0.17	2.49E-03	0.03	0.03
Mobile	3.88	14.06	36.64	0.11	8.87	2.48
Total Maximum Daily Emissions	**7.87**	**17.03**	**50.03**	**0.12**	**9.17**	**2.78**
SCAQMD Regional Threshold	*55*	*55*	*550*	150	150	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
	Emissions (lbs/day)					
Operational Activities – Winter Scenario	**VOC**	**NOx**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Source	3.94	2.58	13.23	0.02	0.26	0.26
Energy Source	0.05	0.39	0.17	2.49E-03	0.03	0.03
Mobile	3.58	14.51	31.84	0.10	8.87	2.48
Total Maximum Daily Emissions	**7.57**	**17.48**	**45.23**	**0.12**	**9.17**	**2.78**
SCAQMD Threshold	*55*	*55*	*550*	150	150	*55*
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Urban Crossroads 2019 (Appendix A)

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation Incorporated. The SCAQMD's *Final Localized Significance Threshold Methodology* (SCAQMD 2008) recommends the evaluation of localized NO_2, CO, PM_{10}, and $PM_{2.5}$ construction-related impacts to sensitive receptors in the immediate vicinity of the Project site. Such an evaluation is referred to as a localized significance threshold (LST) analysis. According to the SCAQMD's *Final Localized Significance Threshold Methodology*, "off-site mobile emissions from the Project should not be included in the emissions compared to the LSTs" (SCAQMD 2008). SCAQMD has developed LSTs that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of NOx, CO, PM_{10}, and $PM_{2.5}$ pollutants for each of the 38 source receptor areas (SRAs) in the SCAB. The City of Redlands is located within SCAQMD SRA 35.

Sensitive receptors can include residences, schools, playgrounds, childcare centers, athletic facilities. The nearest sensitive receptors are existing residences are located adjacent to the project site. The distance between the Project site boundary and the closest existing residential structure is approximately 19-feet east of the Project. The LST Methodology explicitly states that "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters." As the existing residence is located less than 25-meters from the Project site, the 25-meter receptor distance is used for evaluation of localized impacts.

Construction

Construction of the proposed Project may expose nearby residential sensitive receptors to airborne particulates as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement measures to reduce or eliminate emissions by following SCAQMD's standard

construction practices (Rules 402 and 403, as included as PPP AQ-1 and PPP AQ-2). Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. However, as shown in Table AQ-4, project construction-source emissions have the potential to exceed the applicable SCAQMD LSTs for PM_{10} emissions during site preparation.

Table AQ-4: Localized Significance Summary of Construction Without Mitigation

	Emissions (lbs/day)			
Year	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-Site Site Preparation Maximum Daily Emissions	63.79	22.39	11.28	6.59
SCAQMD Localized Threshold	220	1,625	11	7
Threshold Exceeded	**No**	**No**	**Yes**	**No**
On-Site Grading Maximum Daily Emissions	42.41	16.71	5.15	2.99
SCAQMD Localized Threshold	187	1,324	8	6
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: Urban Crossroads 2019 (Appendix A)

Therefore, Mitigation Measure AQ-1 has been incorporated to require that off-road diesel construction equipment that complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 3 emissions standards and to prohibit construction equipment operated by diesel engine within 25 meters (or 82 feet) of a residential structure adjacent to the project site. As shown in Table AQ-5, this mitigation would reduce PM_{10} emissions below the thresholds of significance. Therefore, impacts would be less than significant with implementation of mitigation.

Table AQ-5: Localized Significance Summary of Construction With Mitigation

	Emissions (lbs/day)			
Year	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-Site Site Preparation Maximum Daily Emissions	41.44	25.98	10.15	5.60
SCAQMD Localized Threshold	220	1,625	11	7
Threshold Exceeded	**No**	**No**	**No**	**No**

Source: Urban Crossroads 2019 (Appendix A)

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

Less Than Significant Impact. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor issues include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The proposed project would implement residential development within the project area. Residential uses do not involve the types of activities that would emit objectionable odors affecting a substantial number of people. In addition, odors generated by new and existing non-residential land uses are required to be in compliance with SCAQMD Rule 402 to prevent odor nuisances on sensitive land uses. SCAQMD Rule 402, Nuisance, states:

> *A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the*

comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

During construction, emissions from diesel equipment, use of volatile organic compounds from architectural coatings, and paving activities may generate some nuisance odors. However, these odors would be temporary and are not expected to affect a substantial number of people. Therefore, emission impacts relating to both operational and construction activity odors would be less than significant.

Existing Plans, Programs, or Policies

PPP AQ-1: Rule 403. All applicable measures included in Rule 403, shall be incorporated into Project plans and specifications as implementation of Rule 403, which include but are not limited to (1):

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

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

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

PPP AQ-3: Rule 445. The following measures shall be incorporated into Project plans and specifications as implementation of SCAQMD Rule 445 (3):

- Rule 445 prohibits the use of wood burning stoves and fireplaces in new developments.

Mitigation Measures

MM AQ-1: Prior to receipt of a demolition or grading permit the, all project construction plans, specifications and permits will clearly state that during the site preparation activities, all road diesel construction equipment greater than 150 horsepower (>150 HP) shall comply with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 3 emissions standards and be tuned and maintained in accordance with the manufacturer's specifications. Construction equipment operated by diesel engine shall be prohibited, stationary or idling, within 25 meters (or 82 feet) of a residential structure adjacent to the project site along the north or south property boundary.

	Potentially Significant Impact	Less Than Significant 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, regulations or by the California Department of Fish and Game or US 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 native 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?	☐	☐	☐	☒

The discussion below is based on the CEQA Level Biological Assessment for the Residences at Casa Loma Development Site Redlands, San Bernardino Co., CA, prepared by The Planning Associates, included as Appendix B.

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 Project site is heavily disturbed, graded, and consists of mostly vacant land other than the three single-family residences and associated structures on the eastern portion of the Project site. In its existing condition, the Project site contains a variety of ornamental trees and other landscaping adjacent to the existing residential areas on the eastern portion of the site. The majority of the vacant areas on the Project site have little to no landscaping and contain mainly non-native ruderal vegetation.

The CEQA Level Biological Assessment determined that the Project site does not provide suitable habitat for any special-status plant or wildlife species due to the disturbed status of the site. The plant species observed on the Project site include: Slender sunflower, *Helianthus gracilentus*; Common fiddleneck, *Amsinckia menziesii intermedia*; Black mustard, *Brassica nigra*; Russian thistle, *Salsola tragus*; Burr-clover, *Medicago polymorpha*; Long-beaked filaree, *Erodium botrys*; Common bedstraw, *Galium aparine*; Slender wild oat, *Avena barbata*; Wild oat, *Avena fatua*; Ripgut brome, *Bromus diandrus*; Soft chess, *Bromus hordeaceus*; Foxtail chess, *Bromus madritensis rubens*; Annual rabbitsfoot grass, *Polypogon monspeliensis*; Common Mediterranean grass, *Schismus barbatus*; Smilo grass, *Stipa miliacea*; Rattail Fescue, *Vulpia myuros myuros*; and American Tobacco, *Nicociana glauca*.

The CEQA Level Biological Assessment describes that the wildlife observed were limited to avian species, including: American kestrel, *Falco sparverius*; Rock dove, *Columbia livia*; Morning dove, *Zenaida macroura*; Song sparrow, *Melospiza melodia*; House finch, *Carpodacus mexicanus*; Northern mockingbird, *Mimus polyglottos*; European starling, *Sturnus vulgaris*; and House wren, *Troglodytes adeon*; Cooper's hawk, *Accipiter cooperii*; American crow, *Corvus brachyrhynchos*; Say's phoebe, *Sayornis saya*; California towhee, *Melozone crissalis*; Anna's hummingbird, *Calypte anna*; and Costa's hummingbird, *Calypte costae*.

The existing trees on the site have the potential to provide habitat for nesting migratory birds. Many of these trees would be removed during construction. Therefore, the proposed Project has the potential to impact active bird nests if vegetation and trees are removed during the nesting season. Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) (United States Code Title 33, Section 703 et seq.; see also Code of Federal Regulations Title 50, Part 10) and Section 3503 of the California Fish and Game Code. Any activities that occur during the nesting/breeding season of birds protected by the federal Migratory Bird Treaty Act (MBTA), could result in a potentially significant impact if requirements of the MBTA are not followed. Therefore, implementation of MM BIO-1 would ensure MTBA compliance and would require a nesting bird survey to be conducted prior to the commencement of construction during nesting season, which would reduce potential impacts related to nesting avian species and native wildlife nursery sites to a less than significant level.

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

No Impact. Riparian habitats are those occurring along the banks of rivers and streams. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors. As described above, the Project site is heavily disturbed, graded, and consists of mostly vacant land other than a small cluster of single-family residences and associated structures on the eastern portion of the Project site. According to the National Wetlands Inventory

managed by the USFWS, the Project site does not contain riparian habitat (USFWS 2019). There are no riparian habitat or other sensitive natural communities as identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS (TPA 2019). Therefore, no impact would occur.

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?

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. As previously discussed, according to the National Wetlands Inventory managed by the USFWS, the Project site does not contain federally protected wetlands (USFWS 2019). In addition, the Project site does not contain any jurisdictional areas that would be subject to Section 404 of the Clean Water Act, and the proposed Project does not involve any hydrological interruption on any existing water resources. Therefore, the redevelopment of the Project site would not result in impacts to wetlands.

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

Less than Significant Impact with Mitigation Incorporated. Wildlife corridors are linear features that connect areas of open space and provide avenues for the migration of animals and access to additional areas of foraging. The project site does not contain, or is not adjacent to, any wildlife corridors. The project site is surrounded by roadways and developed areas. Areas of residential, undeveloped graded land, university athletic uses, and additional roadways are located beyond the roadways adjacent to the site. Development of the site would not result in impacts related to established native resident or migratory wildlife corridor.

As described previously, the project site contains ornamental vegetation that provides potentially suitable habitat for nesting birds. Therefore, if vegetation is required to be removed during nesting bird season, Mitigation Measure BIO-1 has been included to require a nesting bird survey to be conducted prior to vegetation removal. With the implementation of Mitigation Measure BIO-1, impacts related to native wildlife nursery sites would be reduced to a less than significant level.

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

No Impact. Chapter 12.52 of the City of Redlands's Municipal Code regulates trees and tree protection along streets and in public places. As part of the Project, existing trees around the perimeter of the Project site and throughout the existing residential areas of the Project site would be removed and replaced with a variety of trees and ornamental landscaping. However, none of the trees that would be removed are located within the City or any other public space. Therefore, the project would not conflict with the City's tree preservation policy.

In addition, the City General Plan outlines policies that protect biological resources; however, these policies pertain to ecological areas such as San Timoteo Canyon, Live Oak Canyon, the Crafton Hills, and the Santa Ana River, Mill Creek, and other riparian areas within the City. The Project site is in an urbanized area of the City and is not located in an area identified by the City as having ecological value. Therefore, implementation of the proposed Project would not conflict with any local policies or ordinances protecting biological resources, and 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 project site is developed and within an urbanized area. The project site is not located within the boundaries of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, implementation of the proposed project 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. No impact would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

MM BIO-1: Pre-construction Nesting Bird Survey. Construction plans and Project specifications shall state that if construction or other Project activities are scheduled to occur during the bird breeding season (February through August for raptors and March through August for most migratory bird species), a pre-construction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project area and adjacent areas where proposed Project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise. If an active nest is identified, a qualified biologist shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

	Potentially Significant Impact	Less Than Significant 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 pursuant to in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

The discussion below is based on the Cultural Resources Assessment for the Residence at Casa Loma Project, Redlands, CA, prepared by VCS Environmental (VCS 2019), and the Historic Resources Evaluation Report (Daly 2018) included as Appendix C.

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

No Impact. According to the *State CEQA Guidelines*, a historical resource is defined as something that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Resources; (2) listed in a local register of historical resources as defined in Public Resources Code (PRC) Section 5020.1(k); (3) identified as significant in a historical resources survey meeting the requirements of PRC Section 5024.1(g); or (4) determined to be a historical resource by the Project's Lead Agency. Implementation of the proposed Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines, as there are no eligible historical resources on the Project site.

The California Register of Historical Resources defines a "historical resource" as a resource that meets one or more of the following criteria: (1) associated with events that have made a significant contribution to the broad patterns or local or regional history of the cultural heritage of California or the United States; (2) associated with the lives of persons important to local, California, or national history; (3) embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or (4) has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

In addition, Section 2.62 of the Redlands Municipal Code states that a structure with esthetics, architectural, historical value which is 50 years old or older may be designated as a Historic Resource. A structure with exceptional esthetics, architectural, or historical value may be designated as a Landmark Resource. The criteria, any one of which may be used to determine such designation, are as follows:

A. It [a nominated resource] has significant character, interest, or value as part of the development, heritage or cultural characteristics of the city of Redlands, state of California, or the United States;

B. It is the site of a significant historic event;

C. It is strongly identified with a person or persons who significantly contributed to the culture, history or development of the city;

D. It is one of the few remaining examples in the city possessing distinguishing characteristics of an architectural type or specimen;

E. It is a notable work of an architect or master builder whose individual work has significantly influenced the development of the city;

F. It embodies elements of architectural design, detail, materials, or craftsmanship that represents a significant architectural innovation;

G. It has a unique location or singular physical characteristics representing an established and familiar visual feature of a neighborhood, community, or the city;

H. It has unique design or detailing;

I. It is a particularly good example of a period or style;

J. It contributes to the historical or scenic heritage or historical or scenic properties of the city (to include, but not be limited to, landscaping, light standards, trees, curbings, and signs);

K. It is located within a historic and scenic or urban conservation district, being a geographically definable area possessing a concentration of historic or scenic properties which contribute to each other and are unified aesthetically by plan or physical development.

The Project site includes three single-family residences (1205, 1215, and 1219 North University Street) that were developed in 1946, 1947, and 1962 and are over 50 years in age. Therefore, a Historic Resources Evaluation Report (Daly 2018) was prepared to evaluate the potential for the existing residences to be historic resources, which is summarized below.

1205 North University Street; APN 121-237-107-0000

The residence located at 1205 North University Street was developed in 1962 with 1,392 square feet of living space. However, the house was expanded in 1968 to 1,992 square feet, and the front entrance porch that projects from the main block with a cross gable roof, was constructed between 2005 and 2009. The architecture is a modest interpretation of ranch style; and has not retained the levels of physical integrity of the original design, materials, workmanship, and feeling, to convey historic significance (Daly 2018). In addition, the Historic Resources Evaluation Report describes that the property is not associated with events that made a significant contribution to the broad patterns of history in Redlands, San Bernardino County, or California. Therefore, the property has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, and is not considered a historic resource pursuant to the National Register or California Register. In addition, the property does not meet any of the City Municipal Code 2.62.170 criteria (A through K) and is not a local historic resource (Daly 2018).

1215 North University Street; APN 121-237-106-0000

The residence located at 1215 North University Street was developed in 1947 with 842 square feet of living space. However, the house was expanded by 436 square feet and a second addition of 684 square feet in 1985. the Historic Resources Evaluation Report describes that the property is not eligible for listing because it has been substantially altered from its original appearance and has lost significant levels of physical integrity. In addition, the property is not associated with events that made a significant contribution to the broad patterns of history in Redlands, San Bernardino County, or California. Therefore, the property has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, and is not considered a historic resource pursuant to the National Register or California Register. In addition, the property does not meet any of the City Municipal Code 2.62.170 criteria (A through K) and is not a local historic resource (Daly 2018).

1219 North University Street; APN 121-237-105-0000

The residence located at 1219 North University Street was developed in 1946 with 842 square feet of living space. However, the house was expanded to 1,162 square feet with the construction of an addition onto the south elevation in 1959. The Historic Resources Evaluation Report describes that the property is not eligible for listing because it has been substantially altered from its original appearance and has lost significant levels of physical integrity including character-defining features and architectural details; and that it is not possible to identify the original style of architecture. In addition, the property is not associated with events that made a significant contribution to the broad patterns of history in Redlands, San Bernardino County, or California. Therefore, the property has not yielded, nor does it appear to have the potential to yield, information important to the history of the local area, and is not considered a historic resource pursuant to the National Register or California Register. In addition, the property does not meet any of the City Municipal Code 2.62.170 criteria (A through K) and is not a local historic resource (Daly 2018).

Based on the findings of the Historic Resources Evaluation Report (Appendix C), the existing residences on the Project site do not meet the criteria for being historic resources. Therefore, no historic resources exist, and no impacts would occur.

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

Less than Significant Impact with Mitigation Incorporated. In its existing setting, the Project site is heavily disturbed, graded, and consists of vacant land, paved areas, and three single-family residences. A records search for the Project site was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) that included California Points of Historical Interest (PHI), California Historical Landmarks (CHL), the CRHR, the NRHP, the California State Historic Resources Inventory (HRI), and historic topographic maps. The records search revealed that four cultural resources have been recorded within one-half mile of the Project site. However, none are located on the Project site.

As described previously, the project site has been previously disturbed from various past uses that involve grading and installation of utility infrastructure. As a result, the potential for archaeological resources exists on site are low. However, Mitigation Measure CUL-1 has been

included to require archaeological monitoring of ground disturbing activities to ensure that inadvertent discovery of resources during ground-disturbing activities are less than significant.

Mitigation Measure CUL-1 requires retention of an archaeologist that would observe ground disturbing activities and recover archaeological resources as necessary. In addition, the archaeologist would be present at the pre-grading conference to establish procedures for archeological resource surveillance. Mitigation CUL-1would also halt work within 50 feet of a find until it can be evaluated by the qualified on-call archaeologist. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation, may be warranted and shall be discussed in consultation with the appropriate regulatory agency(ies). With implementation of Mitigation Measure CUL-1, impacts related to archaeological resources would be less than significant.

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

No Impact. The Project site has been previously disturbed, as described above, and has not been previously used as a cemetery. It is not anticipated that implementation of the proposed Project would result in the disturbance of human remains. In addition, compliance with California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, included as PPP CUL-1, mandate the process to be followed in the event of an accidental discovery of any human remains. Specifically, California Health and Safety Code Section 7050.5 requires that if human remains are discovered, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of death, and made recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Compliance with existing law would ensure that impacts to human remains would not occur.

Existing Plans, Programs, or Policies

PPP CUL-1: Should human remains be discovered during project construction, the project would be required to comply with State Health and Safety Code Section 7050.5, which states that no further disturbance may occur in the vicinity of the body until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine the identity of and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD must complete the inspection within 48 hours of notification by the NAHC.

Mitigation Measures

MM CUL-1: **Inadvertent Discoveries.** The Applicant shall retain a Secretary of Interior Standards qualified archaeologist to be present at pre-grade meetings and to

perform archaeological monitoring for all initial ground disturbing activities. The archaeological monitor shall be present during initial 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 include a scope of work, project grading and development scheduling, a monitoring schedule during all ground related activities, safety requirements, and protocols to follow in the event of previously unknown cultural resources discoveries that could be subject to a cultural resources evaluation. The plan shall be submitted to the City for review and approval. The Monitoring and Treatment Plan shall incorporate the components described in Mitigation Measure TCR-1.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☒

The discussion below is based on the Casa Loma Residential Energy Tables, prepared by Urban Crossroads, included as Appendix I.

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

Less Than Significant Impact.

Construction

During construction of the proposed Project would consume energy in three general forms:

1. Petroleum-based fuels used to power off-road construction vehicles and equipment on the project sites, construction worker travel to and from the project site, as well as delivery truck trips;
2. Electricity associated with providing temporary power for lighting and electric equipment; and
3. Energy used in the production of construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Construction activities related to the proposed multi-family development and the associated infrastructure is not expected to result in demand for fuel greater on a per-unit-of-development basis than other development projects in Southern California. Table E-1 details the construction fuel usage over the Project's 14-month construction period, as shown in Table E-1 below.

Table E-1: Construction Equipment Fuel Consumption Estimates

Activity/Duration	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption (gal. diesel fuel)
Site Preparation (10 days)	Crawler Tractors	212	4	8	0.43	2,917	1,577
	Rubber Tired	247	3	8	0.40	2,371	1,282
Grading (20 days)	Crawler Tractors	212	3	8	0.43	2,188	2,365
	Excavators	158	1	8	0.38	480	519

	Graders	187	1	8	0.41	613	663
	Rubber Tired	247	1	8	0.40	790	854
Building Construction (230 days)	Cranes	231	1	8	0.29	536	6,663
	Crawler Tractors	212	3	8	0.43	2,188	27,200
	Forklifts	89	3	8	0.20	427	5,311
	Generator Sets	84	1	8	0.74	497	6,182
	Welders	46	1	8	0.45	166	2,059
Paving (20 days)	Pavers	130	2	8	0.42	874	944
	Paving Equipment	132	2	8	0.36	760	822
	Rollers	80	2	8	0.38	486	526
Architectural Coating	Air Compressors	78	1	8	0.48	300	324
Total Construction Fuel Demand (Gallons Diesel Fuel)							**57,292**

Source: Urban Crossroads (Appendix I)

Construction of the Project would result in fuel consumption from the use of construction tools and equipment, vendor and haul truck trips, and vehicle trips generated from construction workers traveling to and from the site. There are no unusual project characteristics that would cause the use of construction equipment that would be less energy efficient compared with other similar construction sites in other parts of the State. Therefore, construction-related fuel consumption by the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other construction sites in the region, and impacts would be less than significant.

Operation

Once operational, the Project would generate demand for electricity, natural gas, as well as gasoline for fuel tanks. Operational use of energy includes the heating, cooling, and lighting of the building, water heating, operation of electrical systems and plug-in appliances, parking lot and outdoor lighting, and the transport of electricity, natural gas, and water to the areas where they would be consumed. This use of energy is typical for urban development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

The State of California provides a minimum standard for building design and construction standards through Title 24 of the California Code of Regulations (CCR). Compliance with Title 24 is mandatory at the time new building permits are issued by local governments. The City's administration of the Title 24 requirements includes review of design components and energy conservation measures that occurs during the permitting process, which ensures that all requirements are met. Typical Title 24 measures include insulation; use of energy-efficient heating, ventilation and air conditioning equipment (HVAC); solar panels on each residential building; energy-efficient indoor and outdoor lighting systems; reclamation of heat rejection from refrigeration equipment to generate hot water; and incorporation of skylights, etc. In complying with the Title 24 standards, impacts to peak energy usage periods would be minimized, and impacts on statewide and regional energy needs would be reduced. Thus, operation of the Project would not use large amounts of energy or fuel in a wasteful manner, and no operational energy impacts would occur. As detailed in Table E-2, operation of the proposed Project is estimated to result in the annual use of approximately 1.55 million thousand British thermal units (kBTU) of natural gas, and approximately 594,064 kilowatt-hour (kWh) of electricity.

Table E-2: Project Annual Operational Energy Demand Summary

Natural Gas Demand	kBTU/year
Apartments	1,545,840
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Parking Lot	0
Total Project Natural Gas Demand	**1,545,840**
Electricity Demand	**kWh/year**
Apartments	582,986
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Parking Lot	11,078
Total Project Electricity Demand	**594,064**

Source: Urban Crossroads (Appendix I)

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

Less than Significant Impact. As previously discussed, the City of the Redlands Municipal Code Chapter 15.18 requires that all new residential development comply with the California Green Building Standards, Title 24, Part 11 (CalGreen). CALGreen Code includes provisions related to insulation and design aimed at minimizing energy consumption. In addition, the proposed Project would be consistent with applicable plans related to renewable energy and energy efficiency, including the implementation of solar energy. Implementation of the requirements are ensured through the City's development permitting process. As such, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and impacts would not occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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 waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

The discussion below is based on the *Geotechnical Engineering Investigation* for The Residence at Casa Loma, prepared by Moore Twining Associates, Inc. (MTA 2019), included as Appendix D.

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?

No Impact. In 1972, the Alquist-Priolo Special Studies Zones Act was signed into law and renamed the Alquist-Priolo Earthquake Fault Zoning Act (A-P Act) in 1994. The primary purpose of the Act is to mitigate the hazard of fault rupture by prohibiting the location of structures for human occupancy access the trace of an active fault. The A-P Act requires the State Geologist (Chief of the California Geology Survey) to delineate "Earthquake Fault Zones" along with faults that are "sufficiently active" and "well-defined." The boundary of an "Earthquake Fault Zone" is generally about 500 feet from major active faults and 200 to 300 feet from well-defined minor faults. The A-P Act dictates that cities and counties withhold development permits for sites within an Alquist-Priolo Earthquake Zone until geologic investigations demonstrate that the site zones are not threatened by surface displacements from future faulting.

The Project site does not contain and is not in the vicinity of an earthquake fault, is not affected by a state-designated AP Earthquake Fault Zone. The closest active fault is the San Andreas Fault, which is located approximately 3.6 northeast of the site. Accordingly, the potential for ground rupture at the site is considered low (MTA 2019). Thus, the proposed Project would not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault that is delineated on an Alquist-Priolo Earthquake Fault Zoning Map, and impacts would not occur.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The Project site is located within a seismically active region of Southern California. As mentioned previously, the San Andreas Fault is located approximately 3.6 northeast of the Project site. Thus, moderate to strong ground shaking can be expected at the site. The amount of motion can vary depending upon the distance to the fault, the magnitude of the earthquake, and the local geology. Greater movement can be expected at sites located closer to an earthquake epicenter, that consists of poorly consolidated material such as alluvium, and in response to an earthquake of great magnitude.

Structures built in the City are required to be built in compliance with the California Building Code (CBC [California Code of Regulations, Title 24, Part 2]), included in the Municipal Code as Chapter 15.04. In addition, PPP GEO-1 has been included to provide provisions for earthquake safety based on factors including occupancy type, the types of soils onsite, and the probable strength of the ground motion. Compliance with the CBC would include the incorporation of: 1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; 2) proper building footings and foundations; and 3) construction of the building structures so that it would withstand the effects of strong ground shaking. Because the proposed Project would be constructed in compliance with the CBC, the proposed Project would result in a less than significant impact related to strong seismic ground shaking.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, located within approximately 50 feet of the ground surface, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. During the loss of stress, the soil acquires "mobility" sufficient to permit both horizontal and vertical movements. Soil properties and soil conditions such as type, age, texture, color, and consistency, along with historical depths to ground water are used to identify, characterize, and correlate liquefaction susceptible soils.

Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Lateral spreading is a form of seismic ground failure due to liquefaction in a subsurface layer.

The depth of groundwater on the Project site is anticipated to be at a depth of 100 feet or greater, therefore, the potential for liquefaction to occur is low (MTA 2019). Compliance with the CBC, as included as PPP GEO-1, would require specific engineering design recommendations be incorporated into grading plans and building specifications as a condition of construction permit approval to ensure that project structures would withstand the effects of seismic ground movement, including liquefaction and settlement. Compliance with the requirements of the CBC and City's Municipal Code for structural safety (included as PPP GEO-1) would reduce hazards from seismic-related ground failure, including liquefaction and settlement to a less than significant level.

iv. Landslides?

No Impact. Landslides and other slope failures are secondary seismic effects that are common during or soon after earthquakes. Areas that are most susceptible to earthquakes induced landslides are steep slopes underlain by loose, weak soils, and areas on or adjacent to existing landslide deposits.

As described above, the Project site is located in a seismically active region subject to strong ground shaking. However, the site is located in a relatively flat and developed area. The closest elevated area with any measurable amount of slope is approximately 3.5 miles northeast of the Project site. Therefore, the Project would not cause potential substantial adverse effects related to slope instability or seismically induced landslides.

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

Less Than Significant Impact. In its existing condition, the Project site is developed with three existing single-family residences, a paved road and cul-de-sac, and ornamental vegetation. The Project would involve the demolition of the existing single-family residences and construction of a 147-unit multi-family residential development on the Project site. During construction activities, soil would be exposed and there would be an increased potential for soil erosion compared to existing conditions. Additionally, during a storm event, soil erosion could occur at an accelerated rate. The increased erosion potential could result in short-term water quality impacts.

As discussed in further detail in Section 10, *Hydrology and Water Quality*, the proposed Project would increase the impervious surface area on the Project site compared to existing conditions. This would change the volume of stormwater runoff generated from the Project site. However, since the Project site is relatively flat, soil erosion would be controlled via implementation of

standard erosion control practices required by a Stormwater Pollution Prevention Plan (SWPPP) during construction (included as PPP WQ-1).

Once developed, the Project's implementation would not increase the volume of runoff from the Project site because the proposed Project would include landscaped pervious surfaces intended to capture stormwater runoff, as well as new drainage infrastructure designed to accommodate the increase in stormwater runoff, which is further described in Section 10, *Hydrology and Water Quality*. In addition, implementation of the project requires City approval of a site specific Water Quality Management Plan (WQMP), which would ensure that the City's Municipal Code, RWQCB requirements, and appropriate operational BMPs would be implemented to minimize or eliminate the potential for soil erosion or loss of topsoil to occur. As a result, potential impacts related to substantial soil erosion or loss of topsoil 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 offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. As described above, the Project site is relatively level, and does not contain nor is adjacent to any significant slope or hillside area. The Project would not create slopes. Thus, on or off-site landslides would not occur from implementation of the Project.

Lateral spreading, a phenomenon associated with seismically induced soil liquefaction, is a display of lateral displacement of soils due to inertial motion and lack of lateral support during or post liquefaction. It is typically exemplified by the formation of vertical cracks on the surface of liquefied soils, and usually takes place on gently sloping ground or level ground with nearby free surface such as drainage or stream channel. According to the Geotechnical Engineering Investigation for the proposed Project, the depth of groundwater is anticipated to be at a depth of 100 feet or greater, therefore, the potential for liquefaction to occur is low (MTA 2019). Thus, the soils are not susceptible to lateral spreading and impacts related to liquefaction and lateral spreading would be less than significant.

Differential settlement or subsidence could occur if buildings or other improvements are built on low-strength foundation materials (including imported fill) or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause building damage over time. Soils susceptible to seismically induced settlement typically include loose, granular materials (MTA 2019).

With implementation of the requirements of the CBC, as included as PPP GEO-1, the potential for settlement or collapse of soils is considered low (MTA 2019). Therefore, compliance with the requirements of the CBC as identified in the site geotechnical design recommendations that would be reviewed by the City for appropriate inclusion, as part of the building plan check and development review process, would reduce potential impacts related to ground collapse to a less than significant level.

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 contain certain types of clay minerals that shrink or well as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experiences, such as southern California, have a higher potential of expansive soils than areas with higher rainfall and more constant soil moisture.

The Geotechnical Engineering Investigation performed an evaluation of the potential for expansive soils at the site and expansion index testing was performed on representative samples of the near surface soils which are anticipated to be within the zone of influence of the planned improvements. The results of expansion index testing indicated that the near surface samples tested are granular in nature and expansive soil conditions are not anticipated (MTA 2019). In addition, as described previously, compliance with the CBC, as included as PPP GEO-1, would require specific engineering design recommendations be incorporated into grading plans and building specifications as a condition of construction permit approval to ensure that Project structures would withstand the effects of related to ground movement, including expansive soils. Thus, impacts related to expansive soils would be 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 Project would not use septic tanks or alternative methods for disposal of wastewater into subsurface soils. Furthermore, the proposed Project would connect to existing public wastewater infrastructure. Therefore, the Project would not result in any impacts related to septic tanks or alternative wastewater disposal methods.

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

Less than Significant Impact with Mitigation Incorporated. As mentioned previously, the proposed Project is located on a previously disturbed site within an urbanized residential area of the City of Redlands. As discussed within the Cultural Resources Assessment prepared for the Project site, the site soils consist of younger Quaternary Alluvium that is underlain by older Quaternary deposits.

The younger Quaternary Alluvium is derived predominately as alluvial fan deposits from the Crafton Hills and the San Bernardino Mountains to the east via the Santa Ana River that flows just to the north. Typically, these types of deposits do not contain significant vertebrate fossils in the uppermost layers. However, these deposits have the potential to contain significant fossil vertebrate remains in the lower layers.

A records search at the Natural History Museum of Los Angeles County did not identify any previous finds of vertebrate fossil localities within the Project site. However, records of vertebrate fossil localities have been found in other local sedimentary deposits similar to those that occur on the Project site. Previous finds include a vertebrate fossil locality from somewhat similar deposits is located south-southeast of the Project area on the northeastern side of the San Jacinto Valley just west of Jack Rabbit Trail, that produced a specimen of fossil horse, *Equus*. In addition, a fossil vertebrate locality from similar deposits is located west-southwest of the site in the Jurupa Valley north of Norco and west of Mira Loma, that produced a fossil specimen of coachwhip, *Masticophis flagellum*, at a depth of 9 to 11 feet below the surface.

Therefore, Project related excavations that extend down into older Quaternary deposits may encounter fossil vertebrates. As a result, Mitigation Measure PAL-1 is included to require that any substantial excavations below three feet be monitored to identify and recover any significant fossil remains. With implementation of Mitigation Measure PAL-1, impacts to paleontological resources would be less than significant.

Existing Plans, Programs, or Policies

PPP GEO-1: California Building Code. The Project is required to comply with the California Building Code as included in the City's Municipal Code Chapter 15.04 to preclude significant adverse effects associated with seismic hazards. California Building Code related and geologist and/or civil engineer specifications for the Project are required to be incorporated into grading plans and specifications as a condition of Project approval.

PPP WQ-1: SWPPP. As listed below in Section 10, *Hydrology and Water Quality*.

Mitigation Measures

MM PAL-1: Paleontological Resources. Prior to the issuance of the first grading permit, the applicant shall provide a letter to the City of Redlands Planning Department, or designee, from a paleontologist selected from the roll of qualified paleontologists maintained by the County, stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. The PRIMP shall also require periodic paleontological spot checks if excavation reaches or exceeds into older Quaternary deposits.

In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered.

Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the Applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

	Potentially Significant Impact	Less Than Significant 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 an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

The discussion below is based on the Casa Loma Residential Focused Air Quality and Greenhouse Gas Emissions Memo, prepared by Urban Crossroads, included as Appendix A.

Technical Background

Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth's radiation amount by trapping infrared radiation from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), ozone (O_3), water vapor, nitrous oxide (N_2O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses.

Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride[1]. Emissions of CO_2 and N_2O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. These regulations require the use of alternative energy, such as solar power. The California Energy Commission passed a measure as an update to the state's 2019 Title 24, Part 6, Building Energy Efficiency Standards, which requires that all new homes under three stories high install solar panels starting January 1, 2020, and that solar systems must

[1] Section 38505(g), Health and Safety Code; and Section 21083.05, Public Resources Code

be sized to net out the annual kilowatt-hour energy usage of the dwelling[2]. All new residential projects under three stories, including the proposed project, are required to comply with these new standards.

GHG Thresholds

The City of Redlands has an adopted Climate Action Plan (CAP)[3], which was adopted December 5, 2017, however the CAP does not itself establish a numeric threshold of significance for determining impacts with respect to GHG emissions. Notwithstanding, the City has utilized a screening threshold of 3,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) per year to determine if a potential GHG related impact would occur from a project. This approach is a widely accepted screening threshold used by the City of Redlands and numerous agencies in the SCAB.

In addition, SCAQMD methodology for Project's construction are to average them over 30-years and then add them to the Project's operational emissions to determine if the Project would exceed the screening values listed above.

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

Less Than Significant Impact. GHG emissions associated with Project construction would occur over the short term and would consist primarily of emissions from equipment exhaust. Long-term regional emissions would also be associated with new vehicular trips and stationery-source emissions (i.e., natural gas used for heating and electricity usage for lighting). The calculations presented below include construction emissions in terms of annual CO_2e GHG emissions from increased energy consumption, water usage, and solid waste disposal, as well as estimated GHG emissions from vehicular traffic that would result from implementation of the proposed Project.

As discussed previously, during construction of the proposed Project, GHGs would be emitted through the operation of construction equipment, as well as emissions from worker and vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. As shown on Table GHG-1 construction of the project would result in 32.55 CO2e amortized over 30 years.

Table GHG-1: Total Project GHG Emissions

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual construction-related emissions amortized over 30 years	32.41	0.01	0.00	32.55
Area	37.78	3.10E-03	6.50E-04	38.06
Energy	271.77	0.01	3.13E-03	272.94
Mobile Sources	1,529.70	0.09	0.00	1531.83
Waste	13.73	0.81	0.00	34.01

[2] 2019 California Energy Code, Title 24, Part 6, Section 110.10(b), https://codes.iccsafe.org/content/CAEC2019/subchapter-2-all-occupancies-mandatory-requirements-for-the-manufacture-construction-and-installation-of-systems-equipment-and-building-components

[3] City of Redlands, 2017. Climate Action Plan.

Water Usage	64.15	0.31	0.01	74.36
Total CO_2e	**1,983.74**			
SCAQMD Significance Threshold	3,000			
Threshold Exceeded?	**No**			

MT/yr = Metric Tons per Year
Source: Urban Crossroads 2019 (Appendix A)

During operations, the Project would generate long-term GHG emissions from vehicular trips; water, natural gas, and electricity consumption; and solid waste generation. Mobile-source emissions of GHGs would include project generated vehicle trips associated with resident trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance of proposed land uses, natural gas for cooking and heating, and other sources. Increases in stationary-source emissions would also occur at off-site utility providers as a result of demand for electricity, natural gas, and water by the proposed use.

As shown on Table GHG-1, the project would result in approximately 1,984 $MTCO_2e$ per year, which would be below the screening threshold of 3,000 MTCO2e per year. Therefore, construction and operation impacts related to greenhouse gas emissions would be less than significant.

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

No Impact. The Project would involve the demolition of the existing single-family residences and construction of a 147-unit multi-family residential development on the Project site. In 2006, the California State Legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires CARB 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. Therefore, as the proposed project meets the current interim emissions targets/thresholds established by SCAQMD, it would also be on track to meet the reduction target of 40 percent below 1990 levels by 2030, as mandated by the State. Furthermore, all of the post-2020 reductions in GHG emissions are addressed via regulatory requirements at the State level, and the proposed Project would be required to comply with these regulations as they come into effect.

As discussed previously, the City of Redlands has an adopted Climate Action Plan (CAP)[4], which was adopted December 5, 2017, however the CAP does not itself establish a numeric threshold of significance for determining impacts with respect to GHG emissions. Emissions from vehicles, which are the main source of operational GHG emissions associated with the Project (as shown in Table GHG-1), would be reduced through implementation of the state and federal fuel and vehicle emission standards. In addition, the Project would not exceed the screening threshold, as shown in Table GHG-1. Therefore, implementation of the proposed Project would not conflict with existing plans, policies, and regulations adopted for the purpose of reducing the emissions of greenhouse gas.

[4] City of Redlands, 2017. Climate Action Plan.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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 or excessive noise 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?	☐	☐	☐	☒

The discussion below is based on the Phase I Environmental Site Assessment prepared by Moore Twining Associates, Inc., included as Appendix E.

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. A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the environment. Hazardous materials include, but are not limited to, hazardous substances,

hazardous wastes, and any material that regulatory agencies have a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the home, workplace, or environment. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

Construction
The proposed construction activities would involve the transport, use, and disposal of hazardous materials such as paints, solvents, oils, grease, and caulking. In addition, hazardous materials would be needed for fueling and servicing construction equipment on the site. These types of materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials are regulated by federal and state requirements, which the project construction activities are required to strictly adhere to. These regulations include: the federal Occupational Safety and Health Act and Hazardous Materials Transportation Act; Title 8 of the California Code of Regulations (CalOSHA), and the state Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. As a result, the routine transport, use or disposal of hazardous materials during construction activities of the project would be less than significant. No mitigation measures are required.

Operation
The Project involves construction of a 147-unit multi-family residential development. Residential uses typically do not present a hazard associated with the accidental release of hazardous substances into the environment because residents are not anticipated to use, store, dispose, or transport large volumes of hazardous materials. Typically used hazardous materials include solvents, cleaning agents, paints, pesticides, batteries, fertilizers, and aerosol cans. These types of materials are not acutely hazardous and would only be used and stored in limited quantities within the residential buildings. The normal routine use of these hazardous materials products pursuant to existing regulations would not result in a significant hazard to people or the environment in the vicinity of the Project. Therefore, the Project would not result in a significant hazard to the public or to the environment through the routine transport, use, or disposal of hazardous waste, and impacts would be less than significant. No mitigation measures are required.

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.

Construction
Accidental Releases. While the routine use, storage, transport, and disposal of hazardous materials in accordance with applicable regulations during construction activities would not pose health risks or result in significant impacts; improper use, storage, transportation and disposal of hazardous materials and wastes could result in accidental spills or releases, posing health risks to workers, the public, and the environment. To avoid an impact related to an accidental release, the use of best management practices (BMPs) during construction are implemented as part of a Stormwater Pollution Prevention Plan (SWPPP) as required by the National Pollution Discharge Elimination System General Construction Permit (and included as PPP WQ-1). Implementation of an SWPPP would minimize potential adverse effects to workers, the public, and the environment.

Construction contract specifications would include strict on-site handling rules and BMPs that include, but are not limited to:

- Establishing a dedicated area for fuel storage and refueling and construction dewatering activities that includes secondary containment protection measures and spill control supplies;
- Following manufacturers' recommendations on the use, storage, and disposal of chemical products used in construction;
- Avoiding overtopping construction equipment fuel tanks;
- Properly containing and removing grease and oils during routine maintenance of equipment; and
- Properly disposing of discarded containers of fuels and other chemicals.

Asbestos-Containing Materials. The use of asbestos-containing materials (a known carcinogen) and lead paint (a known toxin) was common in building construction prior to 1978 (the use of asbestos-containing materials in concrete products was common through the 1950s). Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the federal Environmental Protection Agency (EPA). Federal asbestos requirements are found in the Code of Federal Regulations (CFR) Title 40, Part 61, Subpart M, and are enforced in the project area by the SCAQMD. SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities.

Based on the age of the onsite residences, it is possible that asbestos-containing building materials are present in the existing structures on the Project site. As a result, asbestos surveys and abatement would be required prior to demolition of the existing building pursuant to the existing SCAQMD, Cal/OSHA, and Section 19827.5 of the California Health and Safety Code requirements.

SCAQMD Rule 1403 requires notification of the SCAQMD prior to commencing any demolition or renovation activities that involve asbestos containing materials. Rule 1403 also sets forth specific procedures for the removal of asbestos and requires that an onsite representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of asbestos-containing materials. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with asbestos-containing materials. With compliance with AQMD Rule 1403, potential impacts related to asbestos being released into the environment would be less than significant. No mitigation measures are required.

Lead Based Paint. Based on the age of the existing residences, it is also possible that lead-based paint may be present. Pursuant to existing regulations, a lead-based paint survey shall be completed prior to any activities with the potential to disturb suspected lead based painted surfaces. The regulations specify actions to manage and control exposure to lead-based paint (per the Code of Federal Regulations Title 29, Section 1926.62 and California Code of Regulations Title 8 Section 1532.1) that cover the demolition, removal, cleanup, transportation, and disposal of lead-containing material. The regulations outline the permissible exposure limit, protective measures, monitoring and compliance to ensure the safety of construction workers

exposed to lead-based materials. In addition, Cal/OSHA's Lead in Construction Standard requires the project to develop and implement a lead compliance plan when lead-based paint would be disturbed during construction. The plan must describe activities that could emit lead, methods for complying with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities. Cal/OSHA requires 24-hour notification if more than 100 square feet of lead-based paint would be disturbed. With compliance to the Cal/OSHA requirements, potential impacts related to lead-based paint being released into the environment would be less than significant. No mitigation measures are required.

Operation
Operation of the proposed multi-family residences and associated areas involve use and storage of common hazardous materials such as paints, solvents, cleaning products, fuels, lubricants, adhesives, sealers, and pesticides/herbicides. Normal routine use of these typical commercially used products pursuant to existing regulations would not result in a significant hazard to the environment, residents, or workers in the vicinity of the Project. No mitigation measures are required.

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

Less Than Significant Impact. As described previously, the proposed residential Project would not produce hazardous emissions or handle acutely hazardous materials, substances, or wastes. The nearest school to the Project site is the University of Redlands, which is located approximately 600 feet southeast of the Project site. As noted in Response 4.9(a), the proposed Project is not anticipated to release hazardous emissions or handle hazardous or acutely hazardous materials, substances, or wastes in significant quantities. Construction activities associated with the proposed Project would use a limited amount of hazardous and flammable substances/oils during heavy equipment operation for site excavation, grading, and construction. The amount of hazardous chemicals present during construction is limited and would be in compliance with existing regulations. In addition, operation of the proposed residences would not require the use, storage, disposal, or transport of large volumes of hazardous materials that could cause serious environmental damage in the event of an accident. Operational hazardous materials would be limited and used and disposed of in compliance with federal, state, and local regulations, which would reduce the potential for accidental release into the environment near the school. Therefore, impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or wastes within 0.25 mi of an existing or proposed school 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?

No Impact. According to the California Department of Toxic Substances Control (DTSC) EnviroStor database, the Project site is not located on a federal Superfund site, State response site, voluntary cleanup site, school cleanup site, corrective action site, or tiered permit site (DTSC 2019). Therefore, the proposed Project would not result in an impact related to a known hazardous materials site pursuant to Government Code Section 65965.5 and would not create a significant hazard to the public or the environment.

e) For a project 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. The proposed Project is not within an airport land use plan; however, the proposed Project is located approximately 1.5 miles southwest from the Redlands Municipal Airport. According to the Figure 7-7: Airport Hazards, within the City's General Plan, the Project site is not within a A: Runway Protection Zone, B1: Approach/Departure Zone, B2: Extended Approach/Departure Zone, C: Common Traffic Pattern, D: Other Airport Environ, or within an Area of Special Compatibility Concern. Additionally, the proposed multi-family residential development would be a maximum of three stories and approximately 49 ft in height at the tallest point. Thus, the residential development would not be of a sufficient height to require modifications to the existing air traffic patterns at the airport and would not affect aviation traffic levels or otherwise result in substantial aviation-related safety risks. Therefore, the proposed Project would not result in an impact to an airport land use plan and would not result in a safety hazard or excessive noise for people residing or working in the project area.

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

Less Than Significant Impact. The proposed Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan.

Construction
The proposed construction activities, including equipment and supply staging and storage, would occur within the Project site, and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of new driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed Project would not require closure of East Lugonia Avenue, North University Street, or Occidental Drive. Any temporary lane closures needed for utility connections or driveway construction would be required to implement appropriate measures to facilitate vehicle circulation, as included within construction permits. Thus, implementation of the project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access or evacuation impacts to a less than significant level.

Operation
Direct access to the Project site is would be provided from North University Street by two driveways. The project driveways and internal access would be required through the City's permitting procedures to meet the City's design standards to ensure adequate emergency access and evacuation. The Project is also required to provide fire suppression facilities (e.g., hydrants and sprinklers). The Fire Department and/or Public Works Department would review the development plans as part of the permitting procedures to ensure adequate emergency access pursuant to the requirements in Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), included as Municipal Code Chapter 15.20. As such, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, and impacts would 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?

No Impact. The Project site is within an urbanized residential area of the City of Redlands. The Project site is bounded by East Lugonia Avenue and a multi-family residential development to the north; North University Street to the east; single-family residences and educational uses to the south; and Occidental Drive to the west. The Project site is not adjacent to any wildland areas. According to the CAL FIRE Fire Hazard Severity Zone map, the Project site is not within an area identified as a Fire Hazard Area that may contain substantial fire risk or a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2019). As a result, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Existing Plans, Programs, or Policies

PPP WQ-1: SWPPP. As listed below in Section 10, *Hydrology and Water Quality*.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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 ground water 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?	☐	☐	☒	☐

The discussion below is based on the Conceptual Hydrology Study and the Preliminary Water Quality Management Plan for Casa Loma Apartments, prepared by DRC Engineering, Inc., included as Appendix F, and the Preliminary Water Quality Management Plan for Casa Loma Apartments, included as Appendix G.

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

Less Than Significant Impact. The proposed project involves demolition of three existing single-family residences, pavement, infrastructure, and construction of a 147-unit multi-family residential development on the Project site.

Construction
Construction of the Project would require grading and excavation of soils, which would loosen sediment, and then have the potential to mix with surface water runoff and degrade water quality. Pollutants of concern during Project construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and transport of sediment downstream compared to existing conditions. During a storm event, soil erosion could occur at an accelerated rate. In addition, construction-related pollutants, such as chemicals, liquid and petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste, could be spilled, leaked, or transported via stormwater runoff into adjacent drainages and into downstream receiving waters.

These types of water quality impacts during construction of the Project would be prevented through implementation of a stormwater pollution prevention plan (SWPPP). Construction of the Project would disturb more than one acre of soil; therefore, the proposed Project would be required to obtain coverage under the NPDES General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activity subject to this permit includes clearing, grading, and ground disturbances such as trenching, stockpiling, or excavation. The Construction General Permit requires implementation of a SWPPP that is required to identify all potential sources of pollution that are reasonably expected to affect the quality of storm water discharges from the construction site. The SWPPP would generally contain a site map showing the construction perimeter, proposed buildings, stormwater collection and discharge points, general pre- and post-construction topography, drainage patterns across the site, and adjacent roadways. The SWPPP would also include construction Best Management Practices (BMPs) such as:

- Maximize the permeable area,
- Incorporate landscaped buffer areas,
- Maximize canopy interception with drought tolerant landscaping
- Low flow infiltration within sand filter zones
- Site design with minimum design standards
- Landscape design with minimum to no impervious surfaces
- Isolated roof run-off into proposed Treatment Control Facility

Adherence to the existing requirements and implementation of the appropriate BMPs as ensured through the City's construction permitting process are included as PPP WQ-1, which would ensure that the Project would not violate any water quality standards or waste discharge requirements, potential water quality degradation associated with construction activities would be minimized, and impacts would be less than significant.

Operation
The proposed project would operate multi-family residences, which would introduce the potential for pollutants such as, chemicals from cleaners, pesticides and sediment from landscaping, trash and debris, and oil and grease from vehicles. These pollutants could potentially discharge into surface waters and result in degradation of water quality. However, in accordance with State

Water Resources Board Order No. 2012-0006-DWQ, NPDES No. CAS000002 the proposed Project would be required to incorporate a WQMP with post-construction (or permanent) Low Impact Development (LID) site design, source control, and treatment control BMPs. The LID site design would minimize impervious surfaces and provide infiltration of runoff into landscaped areas.

The source control BMPs would minimize the introduction of pollutants that may result in water quality impacts; and treatment control BMPs that would treat stormwater runoff. The proposed Project would install an onsite storm drain system that would convey runoff to a pre-treatment unit then to an underground infiltration/detention system. This system would remove coarse sediment, trash, and pollutants (i.e., sediments, nutrients, heavy metals, oxygen demanding substances, oil and grease, bacteria, and pesticides). The additional types of BMPs that would be implemented as part of the proposed project are listed in Table HWQ-1.

Table HWQ-1: Types of BMPs Incorporated into the Project Design

Type of BMP	Description of BMPs
LID Site Design	Optimize the site layout: The site has been designed so that runoff from impervious surfaces would flow to landscaping areas or to the pre-treatment unit then to the underground infiltration/detention system.
	Use pervious surfaces: 68,308 sf of landscaping is incorporated into the project design to increase the amount of pervious area and onsite retention of stormflows.
Source Control	Storm Drain Stenciling: All inlets/catch basins would be stenciled with the words "Only Rain Down the Storm Drain," or equivalent message.
	Need for future indoor & structural pest control: The buildings would be designed to avoid openings that would encourage entry of pests.
	Landscape/outdoor pesticide use: Final landscape plans would accomplish all of the following: • Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution. • Consider using pest-resistant plants, especially adjacent to hardscape. • To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions
	Roofing, gutters and trim: The architectural design would avoid roofing, gutters, and trim made of copper or other unprotected metals that may leach into runoff.
	Sidewalks and parking lots: Sidewalks and parking lots shall be swept regularly to prevent the accumulation of litter and debris. Debris from pressure washing would be collected to prevent entry into the storm drain system. Wash water containing any cleaning agent or degreaser would be collected and discharged to the sanitary sewer and not discharged to a storm drain.
Treatment Control	The pre-treatment unit and infiltration/detention system proposed for the project would detain runoff, filter it prior to discharge.

With implementation of the operational source and treatment control BMPs that are outlined in the preliminary WQMP (Appendix G) that would be reviewed and approved by the City during the project permitting and approval process, potential pollutants would be reduced to the maximum extent feasible, and implementation of the proposed project would not substantially degrade water quality. Therefore, impacts would be less than significant.

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. The proposed project would not deplete groundwater supplies. The City can produce water from the Bunker Hill Subbasin and Yucaipa Subbasin (UWMP 2015). The groundwater from Bunker Hill totals 51.1% of the City's annual water production. Water pumping from the Bunker Hill Subbasin is adjudicated, which limits the allowable groundwater extraction to ensure a safe yield. Because the groundwater basin is managed through this plan, which limits the allowable withdrawal of water from the basin by water purveyors, and the project would not pump water from the project area (as water supplies would be provided by the City), the proposed project would not result in a substantial depletion of groundwater supplies.

In addition, development of the proposed Project would result in large areas of impervious surfaces on the Project site. However, the project would install an onsite storm drain system that would convey runoff to a pre-treatment unit then to an underground infiltration/detention system that would capture and filter runoff. In addition, the project includes 68,308 sf of landscaping that would infiltrate stormwater onsite. As a result, the proposed project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The proposed project would have a less than significant impact.

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;

Less Than Significant Impact. As described previously, existing City regulations require the project to implement a project specific SWPPP during construction activities, that would implement erosion control BMPs, such as silt fencing, fiber rolls, or gravel bags, stabilized construction entrance/exit, hydroseeding, etc. to reduce the potential for siltation or erosion. In addition, the Project is required to implement a WQMP that would provide operational BMPs to ensure that operation of the multi-family residences would not result in erosion or siltation. With implementation of these regulations, impacts related to erosion or siltation onsite or off-site 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. As discussed previously, the project would install an onsite storm drain system that would convey runoff to a pre-treatment unit then to an underground infiltration/detention system that would capture and filter runoff. In addition, the project includes 68,308 sf of landscaping that would capture stormwater onsite. These drainage facilities have been designed to accommodate the Project, as detailed in the calculations provided in the Hydrology Study and the Preliminary Water Quality Management Plan. As such, impacts related to flooding resulting from alteration of drainage patterns 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. As discussed previously in Response 4.10(a), construction of the proposed Project has the potential to introduce pollutants to the storm drainage system from erosion, siltation, and accidental spills. However, as required by PPP WQ-1, a SWPPP would be implemented to reduce potential impacts to water quality, including those impacts associated with soil erosion, siltation, and spills, so as not to provide additional sources of polluted runoff to the storm drain system. Therefore, construction impacts related to the provision of substantial additional sources of polluted runoff would be less than significant, and no mitigation is required.

As discussed previously in Response 4.10(a), the Project would install an onsite storm drain system that would convey runoff to a pre-treatment unit then to an underground infiltration/detention system that would capture and filter runoff. In addition, the project includes 68,308 sf of landscaping that would capture stormwater onsite. These drainage facilities have been designed to accommodate the Project, and would reduce potential additional sources of polluted runoff to a less than significant level.

iv. impede or redirect flood flows?

No Impact. According to the Federal Emergency Management Agency (FEMA), the Project site not within a Floodway, 100-year floodplain, or 500-year floodplain (FEMA 2019). Because the Project would not include improvements or place structures within a 100-year floodplain, therefore would be no potential for the Project to alter the existing drainage pattern in a manner that would impede or redirect flood flows. Thus, no flood related impacts would occur.

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

No Impact. As discussed in Response 4.10(c)(iv), the Project site is not within a flood hazard area. As such, the Project site is not at risk of inundation during a storm event. Therefore, the proposed Project would not risk release of pollutants within a flood hazard area and no impacts would occur.

Tsunamis are generated ocean wave trains generally caused by tectonic displacement of the sea floor associated with shallow earthquakes, sea floor landslides, rock falls, and exploding volcanic

islands. The proposed Project is approximately 50 miles from the ocean shoreline. Based on the inland location of the Project site, the Project site is not at risk of inundation from tsunami. Therefore, the proposed Project would not risk release of pollutants from inundation from a tsunami and no impacts would occur.

Seiching is a phenomenon that occurs when seismic ground shaking induces standing waves (seiches) inside water retention facilities (e.g., reservoirs and lakes). Such waves can cause retention structures to fail and flood downstream properties. The Project site is not located adjacent to any water retention facilities. For this reason, the Project site is not at risk of inundation from seiche waves. Therefore, the proposed Project would not risk release of pollutants from inundation from seiche and no impacts would occur.

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

Less Than Significant Impact. As described previously, the project would be required to have an approved SWPPP, which would include construction BMPs to minimize the potential for construction related sources of pollution. For operations, the proposed Project would be required to implement source control BMPs to minimize the introduction of pollutants; and treatment control BMPs to treat runoff. With implementation of the operational source and treatment control BMPs that would be required by the City during the project permitting and approval process, potential pollutants would be reduced to the maximum extent feasible, and implementation of the proposed project would not obstruct implementation of a water quality control plan.

Also as described previously, groundwater is adjudicated, which limits the allowable groundwater extraction to ensure a safe yield. Because the groundwater basin is managed through this plan, which limits the allowable withdrawal of water from the basin by water purveyors, and the Project would not pump water from the project area (as water supplies would be provided by the City), the proposed Project would not conflict with or obstruct a groundwater management plan, and no impacts would occur.

Existing Plans, Programs, or Policies

PPP WQ-1: Prior to grading permit issuance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) pursuant to the Municipal Code Chapter 13.54. The SWPPP shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Redlands staff or its designee to confirm compliance.

PPP WQ-2: Prior to grading permit issuance, the project developer shall have a Water Quality Management Plan (WQMP) approved by the City for implementation. The project shall comply with the City's Municipal Code Section 13.54 and the Municipal Separate Storm Sewer System (MS4) permit requirements in effect for the Regional Water Quality Control Board (RWQCB) at the time of grading permit to control discharges of sediments and other pollutants during operations of the Project.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☒	☐

a) Physically divide an established community?

No Impact. The Project site is currently developed with three single-family residences and associated structures, a paved road with an unused cul-de-sac, and vacant parcels within an urbanized portion of the City surrounded by residential uses and the University of Redlands. The proposed Project would develop the site to provide 147 multi-family residential units, associated parking, and open space/common areas, consistent with surrounding residential uses. The Project would not physically divide an established community, and will be consistent with the predominantly residential character of the surrounding neighborhood. In addition, the Project would not change roadways, pedestrian bridges, or install any infrastructure that would result in a physical division. Thus, the proposed Project would not result in impacts related to physical division of 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?

Less Than Significant Impact. The main documents regulating land use for the Project site and immediate vicinity are the City's General Plan and its Municipal Code. The proposed Project's relationship to these planning documents is described below.

General Plan. The Project site currently has a 1.05 acre portion of the site within the High Density Residential land use designation and a 4.65 acre portion of the site within a land use designation of Low Density Residential (0-6.0 units/acre), which does not have the purpose of avoiding or mitigating an environmental effect.

The proposed Project is a multi-family residential development with a density of approximately 25.7 du/ac. The proposed Project includes a General Plan Amendment to change the Low Density Residential land use designation of the project site to High Density Residential, which would allow residential densities ranging from 0 to 27 du/ac. As the Project would develop residences at a density of 25.7 units per gross acre, it would be consistent with the proposed land use designation, and the proposed change in land use would be less than significant.

Municipal Code. According to Title 18 of the Municipal Code, the Project site currently has three zoning designations: 1.5 acres of A-1 (Agricultural); 3.15 acres of R-1 (Single Family Residential);

and 1.1 acres of R-2 (Multiple Family Residential) District. The Project would change the zoning of the entire project site to R-3, which would allow high density multi-family residential uses at a density range up to 27 du/ac consistent with the proposed General Plan land use designation. As detailed on the project plans, incorporated herein by reference, the proposed Project would be consistent with the development standards for the R-3 zoning district. Thus, the proposed Project would not conflict with any applicable zoning regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☒

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. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA), which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs): MRZ-1: An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence; MRZ-2: An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence; MRZ-3: An area containing mineral deposits, the significance of which cannot be evaluated; and MRZ-4: An area where available information is inadequate for assignment to any other MRZ zone.

As shown in Figure 6-4 of the City's General Plan, the Project site is not located within a Mineral Resources Zone. Therefore, development of the site would not result in the loss of availability of a known mineral resource and no impacts would occur.

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

No Impact. As discussed in Response 4.12(a), no known valuable mineral resources exist on or near the Project site, and no mineral resource extraction activities occur on the site. In addition, the Project site is currently developed with residential uses, as well as a paved road with a cul-de-sac. Therefore, no impacts related to the loss of availability of a locally important mineral resource recovery site, as delineated on a local general plan, specific plan, or other land use plan, would occur as a result of Project implementation.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☒

The discussion below is based on the Noise Impact Analysis prepared by Urban Crossroads, included as Appendix H.

Noise Element of the General Plan

The City's General Plan Noise Element (Section 7.5) establishes limitations on sound levels to be received by various land uses. New development may cause existing noise-sensitive land uses to be affected by noise generated from new developments, or it may locate a sensitive use in such a place that it is adversely affected by noise. Of particular attention to the City of Redlands are noise levels near loud transportation corridors, including roadways, the airport, railways. The Noise Element also states that typical noise standards for sensitive land uses include 60 dBA CNEL for exterior areas and 45 dBA CNEL for interior areas for single family, duplex, and multiple family land uses.

Municipal Code

Section 8.06.070 and Section 8.06.080 of the City's Municipal Code outline the exterior and interior noise standards for stationary noise sources, as shown in Table N-1 below.

Table N-1: Significance Thresholds

Receiving Land Use Category	Exterior Time Period	Exterior Noise Level - dBA	Interior Time Period	Interior Noise Level - dBA
Multi-family residential districts; public space; institutional	10:00 P.M. - 7:00 A.M.	50 dBA Leq	Anytime	45 dBA Leq
	7:00 A.M. - 10:00 P.M.	60 dBA Leq		

Source: City of Redlands's Municipal Code Sections 8.06.070 and 8.06.080

In addition, it is unlawful to cause the noise level on any residential property to exceed these interior noise standards:

1. For a cumulative period of more than 5 minutes in any hour;
2. Plus 5 dB(A) for a cumulative period of more than 1 minute in any hour; or
3. Plus 10 dB(A) for any period of time.

Section 8.06.120 of the City's Municipal Code states that the noise standards shall not apply to noise sources associated with new construction, remodeling, rehabilitation, or grading of any private property, provided such activities take place between the hours of 7:00 am and 8:00 pm on weekdays, including Saturdays, with no activity taking place at any time on Sundays or federal holidays. In addition, all motorized equipment used in such activities are required to be equipped with functioning mufflers.

Existing Noise Levels

As detailed in the Noise Impact Analysis (Appendix H), to identify the existing ambient noise level environment, 24-hour noise level measurements were taken at six locations in the Project study area. The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations, as possible to assess the existing ambient hourly noise levels surrounding the Project site. See Figure N-1, *Noise Measurement Locations*.

A description of the locations and the existing noise levels are provided in Table N-2.

Table N-2: 24-Hour Ambient Noise Level Measurements

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]		CNEL
		Daytime	Nighttime	
L1	Located on East Lugonia Avenue south of single - family residence at 1051 East Lugonia Avenue.	70.6	66.9	74.5
L2	Located in the northwest corner of the Palm Village Apartment complex near existing carport.	56.5	52.7	60.2
L3	Located adjacent to Project site in the southwest of the corner of the Palm Village apartment community.	67.9	67.1	73.9
L4	Located east of project site on North University Street near multi-family apartment community.	58.7	56.5	63.6
L5	Located on Occidental Drive adjacent to the southwestern corner of the Project site.	54.1	50.9	58.1
L6	Located west of the Project site on Occidental Drive near existing single-family homes.	55.7	51.2	58.9

[1] See Exhibit 5-A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix 5.2.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

Sensitive receptors adjacent to the Project site are shown in Figure N-2, *Receiver Locations*.

R1: Located approximately 157 feet north of the Project site, R1 represents the existing residential homes north of East Lugonia Avenue. A 24-hour noise measurement was taken near this location, L1.

R2: Location R2 represents the existing apartment complex located about 19 feet east of the Project site within the Palm Village Apartment community. A 24-hour noise measurement was taken near this location, L2.

R3: Location R3 represents the Palm Village Apartment community approximately 22 feet north from the Project site. A 24-hour noise measurement near this location, L3.

R4: Location R4 represents the ReNew Redlands apartment community on the east side of North University Street at about 131 feet from the Project site. A 24-hour noise measurement near this location, L4.

R5: Location R5 represents the existing residential homes about 24 feet south of the Project site. A 24-hour noise measurement was taken near this location, L5.

R6: Location R6 represents the existing residential homes on the east side of Occidental drive about 80 feet from the Project site. A 24-hour noise measurement was taken near this location, L6.

Figure N-1: Noise Measurement Locations

Figure N-2: Receiver Locations

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.

Construction
As described above, General Plan and Municipal Codes do not identify specific construction noise level limits and Section 8.06.120 of the City's Municipal Code exempts construction noise between the hours of 7:00 am and 8:00 pm on weekdays, including Saturdays, with no activity taking place at any time on Sundays or federal holidays. The project would comply with the City's construction hours regulations, as verified by standard City Conditions of Approval. Neither the City's General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. Thus, a construction-related noise level threshold is applied from the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health (NIOSH). A division of the U.S. Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. To evaluate whether the project would generate potentially significant short-term noise levels at off-site sensitive receiver locations a construction-related NIOSH noise level threshold of 85 dBA Leq is used (Urban Crossroads, 2020).

The highest construction noise levels are expected to occur when the temporary construction activities take place at the closest point for the center of Project construction activity to each of any nearby sensitive receiver locations. Noise generated by construction equipment would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Construction of the proposed Project is anticipated to occur in the following stages:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

The noise generated from construction of the Project has been estimated using reference construction equipment noise levels and the CadnaA noise prediction model, which are listed in Table N- below. For each phase of construction, the nearest piece of equipment was analyzed at the closest distance of the proposed activity to the nearest sensitive receptor. Construction noise would be temporary in nature as the operation of each piece of construction equipment would not be constant throughout the construction day, and equipment would be turned off when not in use. The typical operating cycle for a piece of construction equipment involves one or two minutes of full power operation followed by three or four minutes at lower power settings.

Table N-3: Construction Equipment Noise Levels

Construction Stage	Reference Construction Activity[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Highest Reference Noise Level (dBA L_{eq})
Demolition	Demolition Activity	67.9	71.9
	Backhoe	64.2	
	Water Truck Pass-By & Backup Alarm	71.9	
Site Preparation	Scraper, Water Truck, & Dozer Activity	75.3	75.3
	Backhoe	64.2	
	Water Truck Pass-By & Backup Alarm	71.9	
Grading	Rough Grading Activities	73.5	73.5
	Water Truck Pass-By & Backup Alarm	71.9	
	Construction Vehicle Maintenance Activities	67.5	
Building Construction	Foundation Trenching	68.2	71.6
	Framing	62.3	
	Concrete Mixer Backup Alarms & Air Brakes	71.6	
Paving	Concrete Mixer Truck Movements	71.2	71.2
	Concrete Paver Activities	65.6	
	Concrete Mixer Pour & Paving Activities	65.9	
Architectural Coating	Air Compressors	65.2	65.2
	Generator	64.9	
	Crane	62.3	

Source: Urban Crossroads 2020 (Appendix H)

The noise volumes in Table N-3 were applied to the locations of the closest sensitive receptors, the closest of which is R2 existing apartment complex located about 19 feet east of the Project site within the Palm Village Apartment community. As shown in Table N-4, the unmitigated construction noise levels are expected to range from 72.1 to 77.4 dBA L_{eq}, which would satisfy the 85 dBA L_{eq} significance threshold. Therefore, the noise impacts due to Project construction noise would be less than significant at all noise sensitive receiver locations.

Table N-4: Construction Equipment Noise Level Compliance

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	68.6	85	No
R2	77.4	85	No
R3	75.3	85	No
R4	72.1	85	No
R5	76.7	85	No
R6	73.9	85	No

Source: Urban Crossroads 2020 (Appendix H)

Operations

Development of the proposed Project would result in 147-unit multi-family residential development. Potential long-term noise impacts associated with Project operation would include exterior traffic noise, operational noise, and stationary equipment noise.

Traffic Noise

The Project would generate 1,076 weekday daily trips (one half arriving, one half departing), with 68 trips (16 inbound, 52 outbound) produced in the weekday AM peak hour and 82 trips (52 inbound, 30 outbound) produced in the weekday PM peak hour (LLG 2019). The noise generated from these vehicular trips has been identified through utilization of the FHWA

Roadway Noise Model, and a comparison of noise generated by traffic volumes with and without the project is provided in Table N-4.

Neither the General Plan nor Municipal Code quantifies what constitutes a significant degradation of the future acoustic environment. Therefore, thresholds from the FTA T*ransit Noise and Vibration Impact Assessment* (2018) have been utilized, which identifies noise impacts by comparing the existing noise levels and the future noise levels with the proposed project. Based on the FTA guidance, a substantial increase in ambient noise from vehicular traffic could occur when the noise levels at noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA CNEL and the project creates an increase of 3 dBA CNEL or greater noise level increase; or when noise levels range from 60 to 65 dBA CNEL and the project creates 2 dBA CNEL or greater noise level increase.

Table N-5 shows that in 2021 opening year, the cumulative plus Project off-site traffic noise level increases range from 0.0 to 0.2 dBA CNEL. Therefore, land uses adjacent to the study area roadway segments would experience less than significant noise level impacts due to unmitigated Project-related traffic noise levels.

Table N-5: Year 2021 Cumulative With Project Traffic Noise Level Increases

ID	Road	Segment	Adjacent Land Use[1]	CNEL at Receiving Land Use (dBA)[1]			Noise-Sensitive Land Use?	Exterior Noise Standard	Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition			Limit	Exceeded?
1	University St.	s/o Lugonia Av.	Industrial and Office	67.5	67.6	0.1	Yes	65	1.5	No
2	University St.	s/o Cornell Av.	Commercial/Business	67.8	68.0	0.2	Yes	65	1.5	No
3	University St.	s/o Brockton	Residential	68.2	68.4	0.2	Yes	65	1.5	No
4	Lugonia Av.	w/o University St.	Residential/Institutional	70.3	70.3	0.0	Yes	65	1.5	No

[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
Source: Urban Crossroads 2020 (Appendix H)

Table N-6 shows that the Project off-site traffic noise level increases range from 0.0 to 0.2 dBA CNEL in future year 2040. Therefore, land uses adjacent to the Project area roadway segments would experience less than significant noise level impacts due to unmitigated Project-related traffic noise levels in 2040.

Table N-6: Year 2040 Buildout With Project Traffic Noise Level Increases

ID	Road	Segment	Adjacent Land Use[1]	CNEL at Receiving Land Use (dBA)[1]			Noise-Sensitive Land Use?	Exterior Noise Standard	Incremental Noise Level Increase Threshold	
				No Project	With Project	Project Addition			Limit	Exceeded?
1	University St.	s/o Lugonia Av.	Industrial and Office	67.5	67.6	0.1	Yes	65	1.5	No
2	University St.	s/o Cornell Av.	Commercial/Business	67.8	68.0	0.2	Yes	65	1.5	No
3	University St.	s/o Brockton	Residential	68.2	68.4	0.2	Yes	65	1.5	No
4	Lugonia Av.	w/o University St.	Residential/Institutional	70.9	70.9	0.0	Yes	65	1.5	No

[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use.
Source: Urban Crossroads 2020 (Appendix H)

Operational Noise

It is expected the on-site Project-related noise sources would include sources such as roof-top air conditioning units, trash enclosure activity, parking lot vehicle movements, courtyard activity, outdoor pool/spa activity, and dog park activity. Using the reference noise levels to represent the proposed Project operations, operational source noise levels were calculated that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. The City's Municipal Code Section 8.06.070 does not allow exterior noise to substantially exceed 50 dBA between 10:00 p.m. and 7:00 a.m., and 60 dBA between 7:00 a.m. and 10:00 p.m. As shown in Table N-7, the daytime hourly noise levels at the off-site receiver locations are expected to range from 45.8 to 54.6 dBA L_{eq}. The nighttime hourly noise levels at the off-site receiver locations are expected to range from 42.5 to 47.7 dBA L_{eq}.

Table N-7: Operational Noise Level Compliance

Receiver Location	Project Operational Noise Levels (dBA Leq)		Noise Level Standards (dBA Leq)		Threshold Exceeded?	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
R1	47.2	42.5	60	50	No	No
R2	51.0	44.8	60	50	No	No
R3	54.6	47.7	60	50	No	No
R4	45.8	43.2	60	50	No	No
R5	48.9	44.0	60	50	No	No
R6	52.4	46.3	60	50	No	No

Source: Urban Crossroads 2020 (Appendix H)

Table N-7 shows the operational noise levels associated with the Project would satisfy the City's 60 dBA L_{eq} daytime and 50 dBA L_{eq} nighttime exterior noise level standards at all nearby receiver locations. The differences between the daytime and nighttime noise levels is largely

related to the duration of noise activity Noise activity associated with the trash enclosures, courtyard, pool/spa and dog park are expected to be limited to the daytime hours between 7:00 a.m. and 10:00 p.m. The Noise Impact Analysis prepared by Urban Crossroads, included as Appendix H includes the detailed noise analysis of operational noise levels from each noise source and activity, as well as model inputs including the existing perimeter walls used to estimate the Project operational noise levels presented in this section.

To describe the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise levels measurements for the nearby receiver locations to determine the Project increase. The Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. FICON identifies a readily perceptible 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance.

As indicated on Tables N-8 and N-9, the Project would generate an unmitigated daytime and nighttime operational noise level increases ranging from 0.0 to 1.7 dBA Leq at the nearby receiver locations. Project-related operational noise level contributions the increases at the sensitive receiver locations would be less than significant.

Table N-8 Daytime Project Operational Noise Level Contributions

Receiver Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Incremental Threshold	Incremental Threshold Exceeded?
R1	47.2	L1	70.6	70.6	0.0	1.5	No
R2	51.0	L2	56.5	57.6	1.1	5.0	No
R3	54.6	L3	67.9	68.1	0.2	1.5	No
R4	45.8	L4	58.7	58.9	0.2	5.0	No
R5	48.9	L5	54.1	55.2	1.1	5.0	No
R6	52.4	L6	55.7	57.4	1.7	5.0	No

Source: Urban Crossroads 2020 (Appendix H)

Table N-9 Nighttime Operational Noise Level Contributions

Receiver Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Incremental Threshold	Incremental Threshold Exceeded
R1	37.5	L1	66.9	66.9	0.0	1.5	No
R2	42.2	L2	52.7	53.1	0.4	5.0	No
R3	41.6	L3	67.1	67.1	0.0	1.5	No
R4	43.5	L4	56.5	56.7	0.2	5.0	No
R5	42.8	L5	50.9	51.5	0.6	5.0	No
R6	42.9	L6	51.2	51.8	0.6	5.0	No

Source: Urban Crossroads 2020 (Appendix H)

Therefore, the operational noise impacts are considered less than significant at the nearby noise-sensitive receiver locations.

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

Less Than Significant Impact.

Construction
Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are:

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.
- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). Construction activities that would have the potential to generate low levels of ground-borne vibration within the Project site include grading. Table N-9 presents the expected Project related vibration levels at each of the sensitive receiver locations.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), vibration-sensitive equipment and/or activities. Based on the reference vibration levels provided by the FTA, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec PPV at 25 feet. At distances ranging from 20 to 118 feet from Project construction activities, construction vibration velocity levels are expected to approach 0.124 in/sec PPV. Table N-10 shows the highest construction vibration levels in RMS are expected to approach 0.088 in/sec RMS and will exceed the City's perceptible vibration threshold of 0.01 in/sec RMS at receiver locations R2, R3, and R5.

Table N-10: Unmitigated Project Construction Vibration Levels

Receiver	Distance to Const. Activity (Feet)	Receiver Levels (in/sec) PPV[2]					Velocity Levels (in/sec) RMS	Threshold (in/sec) RMS	Threshold Exceeded?
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration			
R1	161'	0.0002	0.0021	0.0047	0.0054	0.0054	0.0039	0.01	No
R2	12'	0.0090	0.1052	0.2285	0.2676	0.2676	0.1900	0.01	Yes
R3	26'	0.0028	0.0330	0.0717	0.0839	0.0839	0.0596	0.01	Yes
R4	118'	0.0003	0.0034	0.0074	0.0087	0.0087	0.0062	0.01	No
R5	20'	0.0042	0.0489	0.1062	0.1244	0.1244	0.0883	0.01	Yes
R6	90'	0.0004	0.0051	0.0111	0.0130	0.0130	0.0093	0.01	No

Source: Urban Crossroads 2020 (Appendix H)

Mitigation Measure N-1 would be implemented as part of Project approval, which requires that no large loaded trucks and dozers shall be used on-site during Project construction activities that are capable of generating vibration levels in excess of 0.01 in/sec RMS at nearby sensitive receiver locations, and a 50-foot buffer zone from adjacent occupied sensitive residential uses shall be required in which no jack hammers are permitted to be used. With implementation of MM N-1, the mitigated vibration levels will satisfy the City's perceptible vibration threshold of 0.01 in/sec RMS at all receiver locations, as shown in Table N-11 below.

Table N-11: Mitigated Project Construction Vibration Levels

Receiver	Distance to Const. Activity (Feet)	Receiver Levels (in/sec) PPV					Velocity Levels (in/sec) RMS	Threshold (in/sec) RMS	Threshold Exceeded?
		Small Bulldo-zer	Jack-hammer	Loaded Trucks	Large Bulldo-zer	Peak Vibration			
R1	161'	0.0002	0.0021	-6	-6	0.0021	0.0015	0.01	No
R2	50'	0.0011	0.0124	-6	-6	0.0124	0.0088	0.01	No
R3	50'	0.0011	0.0124	-6	-6	0.0124	0.0088	0.01	No
R4	118'	0.0003	0.0034	-6	-6	0.0034	0.0024	0.01	No
R5	50'	0.0011	0.0124	-6	-6	0.0124	0.0088	0.01	No
R6	90'	0.0004	0.0051	-6	-6	0.0051	0.0036	0.01	No

Source: Urban Crossroads 2020 (Appendix H)

Further, Project-related construction vibration levels do not represent levels capable of causing building damage to nearby residential homes. The peak Project-construction vibration levels approaching 0.012 in/sec PPV are below the FTA vibration level thresholds for building damage at the residential homes near the Project site. In addition, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period and would only occur during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Furthermore, construction at the Project site would be restricted to daytime hours consistent with City's Municipal Code requirements, thereby eliminating potential vibration impact during the sensitive nighttime hours. Therefore, impacts would be less than significant.

Operation

The proposed residential uses would not include any equipment that would result in high vibration levels, which are more typical for large industrial projects. While groundborne vibration within and surrounding the Project site may occur from heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on the nearby local roadways, this would not result in significant vibration impacts to the proposed Project. As such, vibration impacts associated with operation of the proposed Project would be less than significant.

The Project is required to satisfy the City of Redlands 45 dBA CNEL residential interior noise level standards as a part of the permit issuance and building plan check process. Additionally, operational noise from HVAC units would be required to comply with the Municipal Code Section 8.06.070, which does not allow exterior noise to substantially exceed 50 dBA between 10:00 p.m. and 7:00 a.m., and 60 dBA between 7:00 a.m. and 10:00 p.m. Compliance with the Municipal Code would ensure that a substantial permanent increase in ambient noise levels would not occur, and noise related to HVAC units would be 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 proposed Project is not within an airport land use plan. The proposed Project is located approximately 1.5 miles southwest from the Redlands Municipal Airport; however, the Project site is located outside of the 60 and 65 dBA CNEL noise contours of the Redlands Municipal Airport. In addition, there are no private airstrips within the Project's vicinity. Therefore, proposed Project would not expose people residing or working in the Project area to excessive noise levels from aircraft. No impacts would occur from aircraft noise.

Existing Plans, Programs, or Policies

PPP N-1: The project plans shall state the project is required to comply with construction hours of operation outlined in Section 8.06.120 of the City's Municipal Code; construction activities shall take place between the hours of 7:00 am and 8:00 pm on weekdays, including Saturdays, with no activity taking place at any time on Sundays or federal holidays. In addition, all motorized equipment used in such activities are required to be equipped with functioning mufflers

Mitigation Measures

MM N-1: Prior to issuance of demolition or grading permits, all project construction plans, specifications and permits will clearly state that a 50-foot buffer zone from adjacent occupied sensitive residential uses is established within which large loaded trucks and bulldozers (those weighing more than 81,500 lbs) and use of jackhammers shall be prohibited to comply with the 0.01 in/sec root mean square (RMS) threshold of the City of Redlands.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☒	☐

a) Induce substantial unplanned population growth in an area, either directly or indirectly?

Less Than Significant Impact. The Project would demolish three existing residential units on the Project site and construct 147-unit multi-family residences.

The California Department of Finance (CDF) data details that the City of Redlands had a residential population of 71,839 and 27,045 residential units in 2019. According to the City's General Plan EIR, the City has an average of 2.65 persons per household. The 147 new residential units would generate approximately 390 new residents. The addition of 390 new residents would represent a population increase of one-half of one percent (assuming all new residents come to Redlands and no existing Redlands residents relocate from other housing already within the city. The new housing units would result in one-half of one percent increase in residential units within the City, and will assist the City with complying with its Regional Housing Needs Assessment numbers identified in the 2013-2021 Housing Element. The increase in population resulting from the proposed Project is not considered significant and comprises only a small portion (less than 1 percent) of the total population of Redlands, and does not represent a substantial increase in population.

The proposed Project is located in an urbanized residential area of the City of Redlands and is surrounded primarily by residential uses, and the University of Redlands athletic facilities to the southeast across University Street. The proposed Project does not propose to substantially expand surrounding utility infrastructure (e.g., water, electricity, cell tower, gas, sanitary sewer, and stormwater drains) in the Project vicinity. All on-site systems would be provided and maintained by the property owner, as well as connect to existing infrastructure within adjacent roadways. In addition, vehicular access will be provided by new driveways on North University Street. Additionally, because the Project proposes redevelopment of a site in an already built-out neighborhood, it would not indirectly induce population growth through the extension of roads or other infrastructure. Furthermore, the proposed Project would not create permanent employment opportunities that could induce population growth (i.e., future employees in the project would be expected to already reside in Redlands or the vicinity). Therefore, potential impacts related to inducement of unplanned population growth, either directly or indirectly, would be less than significant.

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

Less than Significant Impact. As described above, the proposed Project would involve the demolition of three existing homes on the Project site and construction of a 147-unit multi-family residential development. The proposed Project would involve the demolition of the three existing residential uses on the Project site, but would not displace a substantial number of existing people. The Project would replace those units with the development of 147 high-quality residential units on the Project site. Therefore, there would be less than significant impacts related to the displacement of substantial numbers of existing people or housing.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

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

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for:

Fire protection?
Police protection?
Schools?
Parks?
Other public facilities?

***Fire Protection* – Less Than Significant Impact.** The Redlands Fire Department provides fire protection emergency operations, fire prevention services, and emergency medical services to the Project site. The Fire Department consists of approximately 55 total sworn personnel, (including 18 firefighter/paramedics and 37 firefighter/EMTs) and covers an area of 37 square miles. Each year, Redlands averages 264 fires, including 64 vegetation fires, 53 structure fires, 47 vehicle fires, and 100 miscellaneous fires.

The City of Redlands has four fire stations that provide service within the City. Additionally, the Redlands Fire Department has automatic mutual aid agreements with all surrounding fire agencies. The City's agreements with Loma Linda Stations 251 and 252 (to the west) and San Bernardino County Fire (Mentone Station 9 to the east, City of San Bernardino Station 228 and 231 to the north west) are facilitated by a consolidated dispatch center operated by CONFIRE.

CONFIRE is a multi-agency organization that functions as the result of a 25-year Joint Powers Agreement for the collective provision of fire, rescue, and emergency medical dispatch services.

Fire Station 263 would serve the Project and is located at 10 West Pennsylvania Avenue, approximately 1.3 miles northwest of the Project site. As part of the permitting process, the project Plans would be reviewed by the City's Fire Department and the Building Division (part of the Development Services Department) to ensure that the Project plans meet the fire protection requirements. Additionally, the proposed lot consolidation would be required to comply with City fire suppression standards including current California Building Code and adequate fire access.

Due to the small increase in onsite people that would occur from implementation of the Project, an incremental increase in demand for fire protection and emergency medical services would occur. However, the increase in residents onsite is limited (390 residents), and would not increase demands such that the existing fire station would not be able to accommodate servicing the Project in addition to its existing commitments, and provision of a new or physically altered fire station would not be required that could cause environmental impacts. In addition, the Project Applicant would be required to pay any applicable development impact fees pursuant to the Redlands Municipal Code, included as PPP PS-3 below. Therefore, impacts related to fire protection services from the proposed Project would be less than significant.

***Police Protection* – Less Than Significant Impact.** The City of Redlands receives public safety services from the Redlands Police Department. The main police station is located at 1270 West Park Avenue, with four other divisions located citywide. The Police Department personnel is made up of approximately 100 volunteers, 80 sworn officers and 58 full and part-time civilians, resulting in a service level of 1.12 officers per 1,000 residents. In 2015, the Department had an average response time of 6.5 minutes for police services and a service ratio of 1.1 officers per 1,000 residents. Although there are no industry standards for response time to emergency calls, according to the Redlands Police Department, a response time of 4.5 minutes is desirable in a city of this size.

Due to the small increase in onsite people that would occur from implementation of the Project, an incremental increase in demand for police protection would occur. As described previously, the residential population of the Project site at full occupancy would be approximately 390residents and based on the Police Department's staffing of 1.1 officers per 1,000 residents, the proposed Project would require 0.44 percent of an additional officer.

Since the need by the Project is less than one full-time officer, the Project would not require the construction or expansion of the City's existing policing facilities. Thus, substantial adverse physical impacts associated with the provision of new or expanded facilities would not occur. In addition, the Project Applicant would be required to pay any applicable development impact fees pursuant to the Redlands Municipal Code, included as PPP PS-3 below. Therefore, impacts related to police services would be less than significant.

***Schools* – Less Than Significant Impact.** The Project site is located within the Redlands Unified School District (RUSD), which serves Redlands and the surrounding communities of Mentone and Crafton in the Planning Area, as well as Loma Linda and the eastern portion of Highland. There are currently 17 elementary schools, 5 middle schools, and 6 high schools within the RUSD. The schools that serve the site are listed below:

- Franklin Elementary School located at 850 E Colton Ave, which is 0.7 miles from the Project site.
- Clement Middle School located at 501 E Pennsylvania Ave, which is 0.9 miles from the Project site.
- Redlands East Valley High School located at 31000 E Colton Ave, which is 2.9 miles from the Project site.

The Project would develop 147 multi-family residences. The RUSD student generation rate for multi-family residences is 0.21 students per residence for grades K-6; 0.06 students per residence for grades 7-8; and 0.09 students per residence for grades 9-12. As shown in Table PS-1 below, based on the existing capacity of the schools serving the Project area, and the number of students that would be generated by the Project, the existing elementary, middle, and high school would be able to serve the Project.

Table PS-1: School Capacity and Project Generated Students

School	Enrollment Capacity	2019-2020 Enrollment[1]	Existing Remaining Capacity	Students Generated by Project	Remaining Capacity with Project
Franklin Elementary School	749	653	96	31	65
Clement Middle School	1,264	1,008	256	9	247
Redlands East Valley High School	3,828	1,970	1,858	14	1,844

[1] Source: City of Redlands Revised Draft Environmental Impact Report of the Redlands General Plan Update and Climate Action Plan, Table 3.13-3: Redlands Unified School District Enrollment; Redlands Unified School District SY 2019/2020 Report Student Yield Factors – 7-Year Projections; 2019-2020 Enrollment Data obtained from the California Department of Education, Accessed: https://dq.cde.ca.gov/dataquest/

As shown, the schools serving the Project have existing capacity. In addition, pursuant to Government Code Section 65995 et seq., the need for additional school facilities is addressed through compliance with school impact fee assessment. SB 50 (Chapter 407 of Statutes of 1998) sets forth a state school facilities construction program that includes restrictions on a local jurisdiction's ability to condition a project on mitigation of a project's impacts on school facilities in excess of fees set forth in the Government Code. These fees are collected by school districts at the time of issuance of building permits for development projects. Pursuant to Government Code Section 65995 applicants shall pay developer fees to the appropriate school districts at the time building permits are issued; and payment of the adopted fees provides full and complete mitigation of school impacts. Therefore, with implementation of PPP PS-1, which would require the payment of applicable school development impact fees pursuant to Government Code Section 65995, impacts related to school facilities would be less than significant.

***Parks* – Less Than Significant Impact.** As discussed in Response 16(a) below, according to the City's General Plan Parks and Recreational Open Space Element (Section 7.2), there are several different kinds of parks in Redlands, including community parks, neighborhood parks, and pocket parks. The City establishes a parkland/recreational space standard of 5 acres per 1,000 residents, consistent with State law. The current (as of 2016) parkland exceeds this standard with a total parkland area of 424.2 acres. The parks closest to the project site include the following:

- Sylvan Park located at 601 N University St, which is 0.7 miles from the Project site. This park is 23 acres and contains the following facilities: baseball/softball fields, horseshoe pits, lawn bowling, open grassy areas, picnic areas, playground equipment, restrooms, shuffleboards, a stage/bandstand area, trails/nature study, and volleyball.

- Community Park located at E San Bernardino Ave & Church St, which is 1 mile from the Project site. This park is 9.1 acres and contains the following facilities: baseball/softball fields, football fields, open grassy areas, picnic areas, playground equipment, restrooms, snack bar, and soccer fields.

- The Terrace Park located at 416 The Terrace, which is 1 mile from the Project site. This park is 2.5 acres and contains the following facilities: trails/nature study.

The Project would develop a new 147-unit multi-family residential development, which would result in 390 new residences and an increase in the use of public parks. The project would result in a demand for 2 acres of parkland/recreational space. A portion of the Project's park demand would be met onsite with the provision of 56,790 sf of open space area, as well as recreational community amenities, consisting of a pool, sitting areas, a community garden, walkways, gathering spaces, barbeques, and a playground for use by residents within the complex. In addition, the Project would be required to pay parkland fees pursuant to Municipal Code Chapter 3.32, which requires that open space and parks fees shall be collected from all applicants for development projects (included as PPP PS-2), which would be used for the purpose of acquiring, developing, improving and expanding open space and park lands identified in the City's open space and park lands acquisition and development capital improvement plan in accordance with the amounts established by resolution of the City Council. The City currently has over 424.2 acres of parkland, with 34 acres within 1 mile of the Project site. Therefore, with implementation of PPP PS-2, which would require the payment of applicable park related fees, impacts related to the need to provide new or altered park and recreation facilities in order to maintain acceptable service ratios would be less than significant.

***Other Services* – Less Than Significant Impact.** The proposed Project would redevelop the Project site with 147 residential units within an area that already contains residential uses. The additional residences would result in a limited incremental increase in the need for additional services, such as public libraries and post offices, etc. Because the Project area is already served by other services and the Project would result in a limited increase in residences, the Project would not result in the need for new or physically altered facilities to provide other services, the construction of which could cause significant environmental impacts. Therefore, impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP PS-1: Schools Development Impact Fees. Prior to issuance of building permit, the Developer shall pay applicable school development impact fees levied by the Redlands Unified School District pursuant to the School Facilities Act (Senate Bill [SB] 50, Stats. 1998, c.407).

PPP PS-2: Park Fees. As a Condition of Approval of a tentative map, the Developer shall pay applicable park related fees pursuant to Redlands Municipal Code Chapter 3.32.

PPP PS-3: Development Impact Fees. As a standard requirement and included as a Condition of Approval for the Project, and prior to issuance of any building permits for the Project, the

Developer shall pay all applicable City of Redlands Development Impact Fees (DIF) pursuant to the Redlands Municipal Code and/or adopted fee schedules.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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?	☐	☐	☐	☒

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would be accelerated?

Less Than Significant Impact. According to the City's General Plan Parks and Recreational Open Space Element (Section 7.2), there are several different kinds of parks in Redlands, including community parks, neighborhood parks, and pocket parks. In addition to parks, the City of Redlands contains various recreational facilities, including the Redlands Community Center, the Community Senior Center, the Joslyn Senior Center, neighborhood community gardens, and the Carriage House. This also includes large open spaces, including the San Timoteo Canyon, Live Oak Canyon, and the Crafton Hills, which also provide recreational space.

The City establishes a parkland/recreational space standard of 5 acres per 1,000 residents, consistent with State law. As discussed previously, the Project would develop a new 147-unit multi-family residential development, which would result in 390 new residences and a modest increase in the use of public parks. Based on this formula, the project would result in a demand for 2 acres of parkland/recreational space. The Project would be required to pay parkland fees pursuant to Municipal Code Chapter 3.32, which requires that open space and parks fees shall be collected from all applicants for development projects (included as PPP PS-2), which would be used for the purpose of acquiring, developing, improving and expanding open space and park lands identified in the City's open space and park lands acquisition and development capital improvement plan in accordance with the amounts established by resolution of the City Council. In addition, as described previously, the City currently has over 424.2 acres of parkland, with 34 acres within 1 mile of the Project site. Therefore, impacts related to the increase the use of existing parks and recreational facilities, such that physical deterioration of the facility would be accelerated would be less than significant.

b) Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Project would include 56,790 sf of open space area, as well as recreational community amenities, consisting of a pool, sitting areas, a community garden,

walkways, gathering spaces, barbeques, and a playground for use by residents within the complex. In addition, private patio space is also available to residents in designated floor plans. The impacts of development of the park are considered part of the impacts of the proposed project as a whole and are analyzed throughout the various sections of this MND. For example, activities such as excavation, grading, and construction as required for the park are analyzed in the Air Quality, Greenhouse Gas Emissions, Noise, and Transportation Sections.

In addition, as discussed above, the Project would contribute park development fees pursuant to Municipal Code Chapter 3.32 to be used towards the future expansion or maintenance parks and recreational facilities, these fees are standard with every residential development, and the proposed Project would not require the construction or expansion of other recreational facilities that might have an adverse physical effect on the environment. As a result, impacts would be less than significant.

Existing Plans, Programs, or Policies

PPP PS-2: Park Fees. Listed previously in Section 15, *Public Services*.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing 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?	☐	☐	☒	☐

The discussion below is based on the Traffic Impact Analysis Report, Casa Loma Residential, Redlands, California, March 13, 2019 (update of December 7, 2018 Report), prepared by Linscott, Law, and Greenspan, Engineers (LLG); and the Vehicle Miles Traveled Screening Analysis for The Residences at Casa Loma, prepared by EPD Solutions, Inc., (EPD) included as Appendix K.

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

Less Than Significant Impact. The proposed Project involves the construction of a 147-unit multi-family residential development. Vehicular access to the Project site would be provided via ingress and egress driveways on North University Street. Vehicular traffic to and from the Project site would utilize the existing network of regional and local roadways that currently serve the Project area. The proposed Project includes internal driveways that would provide resident access to residential units.

According to the Traffic Impact Analysis Report (LLG 2019) prepared for the Project, the 147-unit multi-family residential development would generate approximately 1,076 weekday daily trips (one-half arriving, one-half departing), with 68 trips (16 inbound, 52 outbound) produced in the weekday AM peak hour and 82 trips (52 inbound, 30 outbound) produced in the weekday PM peak hour (LLG, 2019).

Senate Bill 743 (SB 743) was signed into law on September 27, 2013, and changed the way that public agencies evaluate transportation impact under CEQA. A key element of this law is the elimination of using auto delay, LOS, and other similar measures of vehicular capacity or traffic congestion as a basis for determining significant transportation impacts under CEQA. The legislative intent of SB 743 was to "more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions." According to

the law, "traffic congestion shall not be considered a significant impact on the environment" within CEQA transportation analysis.

SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e., a city's General Plan), studies, congestion management and transportation improvements, but these metrics may no longer constitute the basis for transportation impacts under CEQA analysis as of July 1, 2020. For example, in the City, the General Plan identifies LOS as being a required analysis, and even though it will no longer be a requirement of CEQA, unless the General Plan is amended, LOS will continue to be analyzed as part of project review.

The Governor's Office of Planning and Research (OPR) updated the CEQA Guidelines to establish new criteria for determining the significance of transportation impacts. Based on input from the public, public agencies, and various organizations, OPR recommended that Vehicle Miles Traveled (VMT) be the primary metric for evaluating transportation impacts under CEQA.

The City of Redlands has prepared Draft VMT analysis guidelines, which were accepted by the City Council on July 21, 2020; therefore, the City's adopted guidelines were consulted to determine whether a VMT analysis would be required for the Project. The City of Redlands VMT guidelines state projects that generate less than 3,000 metric tons (MT) of CO_2 equivalent per year (CO_2e/year) are exempt from preparing a VMT analysis. According to the City's guidelines, Multifamily residential (mid-rise) projects less than 299 dwelling units would generate less than 3,000 MT CO_2e/year.

Because the project proposes 147 multi-family dwelling units, the project would generate less than 3,000 MT CO_2e/year (EPD, 2020). No significant direct or cumulative VMT impacts would occur. Therefore, the Project would not conflict with an applicable plan, ordinance, or policy establishing measures of the effectiveness for the performance of the circulation system, and impacts would be less than significant.

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

No Impact. Section 15064.3 of the State CEQA Guidelines codifies that Project related transportation impacts are typically best measured by evaluating the Project's vehicle miles travelled (VMT). Specifically, subdivision (b) focuses on specific criteria related to transportation analysis and is divided into four subdivisions: (1) land use projects, (2) transportation projects, (3), qualitative analysis, and (4) methodology. Subdivision (b)(1) provides guidance on determining the significance of transportation impacts of land use projects using VMT; projects located within 0.5 mile of transit should be considered to have a less than significant impact. Subdivision (b)(2) addresses VMT associated with transportation projects and states that projects that reduce VMT, such as pedestrian, bicycle, and transit projects, should be presumed to have a less than significant impact. Subdivision (b)(3) acknowledges that Lead Agencies may not be able to quantitatively estimate VMT for every project type; in these cases, a qualitative analysis may be used. Subdivision (b)(4) stipulates that Lead Agencies have the discretion to formulate a methodology that would appropriately analyze a project's VMT. Section 15064.3(c) states that the provisions of the section shall apply statewide beginning on July 1, 2020. In addition, Section 15064(a) states that only VMT analysis shall be used to measure transportation impacts, and a project's effect on automobile delay (previously referred to as Level of Service or LOS analysis) is no longer relevant and shall not constitute a significant environmental impact under CEQA.

The City of Redlands has prepared Draft VMT analysis guidelines, which were accepted by the Planning Commission on June 23, 2020; therefore, these draft guidelines were consulted to determine whether a VMT analysis would be required for the Project. The City of Redlands Draft VMT guidelines state projects that generate less than 3,000 metric tons (MT) of CO_2 equivalent per year (CO_2e/year) are exempt from preparing a VMT analysis. According to the City's guidelines, Multifamily residential (mid-rise) projects less than 299 dwelling units would generate less than 3,000 MT CO_2e/year (EPD, 2020). The Project proposes 147 dwelling units, and therefore is presumed to have a less than significant impact on VMT.

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. Vehicular access to the Project site would be provided via ingress and egress driveways connecting to North University Street. Vehicular traffic to and from the Project site would utilize the existing network of regional and local roadways that currently serve the Project area. The proposed Project would not introduce any new roadways or introduce a land use that would conflict with existing urban land uses in the surrounding area. The proposed Project includes internal driveways that would provide resident access to residential units. Design of the proposed Project, including the internal private roadway, ingress, egress, and other streetscape changes would be subject to the City's development standards. For example, the design of the project streets would be reviewed to ensure fire engine accessibility and turn around area is provided to the fire code standards. As a result, impacts related to vehicular circulation design features would be less than significant.

d) Result in inadequate emergency access?

Less than Significant Impact.

Construction
The proposed construction activities, including equipment and supply staging and storage, would occur within the project site, and would not restrict access of emergency vehicles to the Project site or adjacent areas. The installation of driveways and connections to existing infrastructure systems that would be implemented during construction of the proposed project could require the temporary closure of one side or portions of Occidental Drive for a short period of time (i.e., hours or a few days). However, the construction activities would be required to ensure emergency access in accordance with Section 503 of the California Fire Code (Title 24, California Code of Regulations, Part 9), which would be ensured through the City's permitting process. Thus, implementation of the Project through the City's permitting process would ensure existing regulations are adhered to and would reduce potential construction related emergency access impacts to a less than significant level.

Operation
As described previously, the proposed Project area would be accessed from two locations on North University Street. The construction permitting process would provide adequate and safe circulation to, from, and through the Project area, and would provide routes for emergency responders to access different portions of the Project area. Roadways in the vicinity (including University St., Lugonia Ave., and Occidental Dr.) would normally remain open and accessible to all vehicle traffic including emergency responders, except for possibly interim or partial closures

for construction activities for a few hours or days with a city permit. Because the Project is required to comply with all applicable City codes, as verified by the City potential impacts related to inadequate emergency access would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant 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)?	☐	☐	☒	☐
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?	☐	☐	☒	☐

The project is required to comply with AB 52 and SB 18 regarding tribal consultation. Chapter 532, Statutes of 2014 (i.e., AB 52), requires that Lead Agencies evaluate a project's potential to impact "tribal cultural resources." Such resources include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register or included in a local register of historical resources (PRC Section 21074). AB 52 also gives Lead Agencies the discretion to determine, supported by substantial evidence, whether a resource falling outside the definition stated above nonetheless qualifies as a "tribal cultural resource."

SB 18 requires cities and counties acting as Lead Agency to contact and consult with California Native American tribes before adopting or amending a General Plan. The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments at the earliest possible point in the planning process and to enable tribes to manage "cultural places." Cultural places are defined as a Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9), or a Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the California Register, including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site (PRC Section 5097.993).

In compliance with these requirements, on September 18, 2018, the City sent letters to the following Native American tribes that may have knowledge regarding tribal cultural resources in the Project vicinity.

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Mission Indians
- Cabazon Band of Mission Indians
- Cahuilla Band of Indians
- Los Coyotes Band of Mission Indians
- Morongo Band of Mission Indians
- Pauma Band of Luiseno Indians - Pauma & Yuima Reservation
- Ramona Band of Cahuilla Mission Indians
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Santa Rosa Band of Mission Indians
- Serrano Nation of Mission Indians
- Soboba Band of Luiseno Indians
- Torres-Martinez Desert Cahuilla Indians

In addition, on March 28, 2018, VCS Environmental requested a Sacred Lands File (SLF) search and Native American contacts list from the NAHC on behalf of the Project Applicant. The NAHC provided both on March 29, 2018. The SLF letter indicates that Native American sites have been located within "several of the quadrangles" that were provided that may be impacted by the Project. The NAHC requested to immediately contact the San Manuel Band of Mission Indians (SMBMI) for more information about these sites, as well as to contact all of those individuals on the contacts list. It was determined that portions of the Sacred Landscape (Zanja, Asistencia, village of Guachama, and other landscape features are within approximately one-half mile of the Project site. The tribe requested that the cultural study include (1) a thorough land use history denoting all ground disturbance; (2) a description of the proposed level of vertical and horizontal ground disturbance; and (3) results of the Phase I study.

The Morongo Band of Mission Indians, Soboba Band of Luiseño Indians, and San Manuel Band of Mission Indians requested consultation regarding the proposed Project. The Soboba Band of Luiseño Indians considers the area sensitive for cultural resources as several sites are located nearby. Although no information for site specific tribal cultural resources was provided (and there are no known tribal cultural resources on or adjacent to the project site), the consulting tribes requested inclusion of mitigation due to the potential of the Project to unearth previously undocumented tribal cultural resources during construction.

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)?

Less Than Significant Impact. As discussed in Section 4.5 of this IS/MND, Response 4.5(a), the records search revealed that four cultural resources have been recorded within one-half mile of the Project site. However, none are located on the Project site. In addition, the historic Mill Creek Zanja is located less than one mile to the south of the Project. However, the Zanja will not be affected by the Project. Additionally, the Soboba Band of Luiseño Indians considers the area sensitive for cultural resources as several sites are located nearby. Therefore, the tribe requests

that in addition to MM CUL-1: Inadvertent Discoveries, a tribal monitor be retained to monitor any ground disturbing activities for the Project. Mitigation Measures TCR-1 through TCR-4 have been included to require a Monitoring and Treatment Plan and Native American monitoring of excavation and grading activities to avoid potential impacts to tribal cultural resources that may be unearthed by project construction activities. Therefore, the proposed Project would not cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines or PRC Section 5020.1(k).

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of 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. As discussed above, to avoid potential adverse effects to tribal cultural resources, Mitigation Measures CUL-1 and TCR-1 through TCR-4 have been included to provide for Native American monitoring of excavation and grading activities to avoid potential impacts to tribal cultural resources that may be unearthed by project construction activities. No information has been provided to the Lead Agency indicating any likelihood of uncovering tribal cultural resources on the project site, there are no known tribal cultural resources on or adjacent to the project site, and no potentially significant impacts are anticipated. The following mitigation measures are included in the event of any inadvertent discoveries during construction activities.

Additionally, as described previously California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the Project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Therefore, with implementation of Mitigation Measures TCR-1 through TCR-4, and MM CUL-1, impacts to TCRs would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

MM TCR-1: Any and all cultural documents created as a part of the project (Monitoring and Treatment Plans, isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency and disseminated to consulting tribe(s) for review. The Monitoring and Treatment Plan shall incorporate:

a) Project grading and development scheduling.

b) A rotating monitoring schedule 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 including 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: If significant cultural resources are discovered and avoidance cannot be ensured, the Native American Tribal Monitor(s) shall follow the stipulations of the Monitoring and Treatment Plan.

MM TCR-3: Designated Native American Monitor(s) from the consulting tribe(s), who wish to partake in rotating monitoring, shall be present during all ground disturbing proceedings, on a 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 of Redlands Development Services Department prior to issuance of a grading permit.

MM TCR-4: 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 60-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 onsite 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 land owner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, archaeological artifacts, and non-human remains discovered as part of the required mitigation for impacts to cultural resources. The land owner(s) 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 process for on-site reburial of the discovered items with the Participating Tribes. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and recordation have been completed.

b. A curation agreement with an appropriate qualified repository within San Bernardino County that meets federal standards per 36 CFR Part 79 and therefore would be professionally curated and made available to other archaeologists/researchers for further study. The collections and associated records shall be transferred, including title, to an appropriate curation facility.

c. In the event that 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 materials, they shall be curated at the San Bernardino County Museum by default, located at 2024 Orange Tree Lane in Redlands California.

	Potentially Significant Impact	Less Than Significant 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 or wastewater treatment facilities or expansion of existing facilities, the construction 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?	☐	☐	☒	☐

a) Require or result in the relocation or construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact.

Water Infrastructure

The Municipal Utilities and Engineering Department (MUED) maintains the water system in the City of Redlands. The proposed Project would redevelop the Project site, which is currently served by MUED's water infrastructure, and would install new water infrastructure on the Project site that would connect to existing water infrastructure within Occidental Drive and North University Street. The new onsite water system would convey water supplies to the proposed residences and landscaping through plumbing/landscaping fixtures that are compliant with the CalGreen Plumbing Code for efficient use of water.

The proposed Project would continue to receive water supplies through the existing water lines located within the Occidental Drive and North University Street rights-of-way that have the capacity to provide the increased water supplies needed to serve the proposed Project, and no

expansions of the water pipelines that convey water to the Project site would be required. Installation of the new water distribution lines would only serve the proposed Project and would not provide new water supplies to any off-site areas.

The construction activities related to the onsite water infrastructure that would be needed to serve the proposed Project is included as part of the Project and would not result in any physical environmental effects beyond those identified throughout this MND. For example, construction emissions for excavation and installation of the water infrastructure is included in Sections 3, *Air Quality* and 8, *Greenhouse Gas Emissions*. Therefore, the proposed Project would not result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, and impacts would be less than significant.

Wastewater Treatment

The Project site is currently served by the existing sewer lines within Occidental Drive and North University Street. The Project includes installation of onsite sewer lines that would connect to the existing sewer lines within Occidental Drive and North University Street.

Wastewater demand associated with the proposed Project would be typical of residential wastewater usage in the City of Redlands. As shown in Table UT-1, *Proposed Project Estimated Wastewater Generation*, the proposed Project would generate a demand for approximately 19,160 gallons per day (gpd).

According to the City's General Plan EIR, the City of Redlands has projected average wastewater flows of 6.75 mgd at buildout of the proposed General Plan. This projection was based on current flow per customer, scaled to the projected number of customers at buildout. As the projected flow is within the 9.5-mgd secondary treatment capacity and 7.2-mgd tertiary treatment capacity, no new or expanded treatment facilities would be needed to serve the population at buildout. In addition, all new residential development that connects to the system is required to pay its applicable fair-share Development Impact Fee(s).

Table UT-1: Proposed Project Estimated Wastewater Generation

Residential Units	Size	Water Demand Rate (gpd/unit)	Total Water Demand (gpd)
Studio	22 du	80 gpd/du	1,760
One Bedroom	65 du	120 gpd/du	7,800
Two Bedroom	60 du	160 gpd/du	9,600
Total Project Water Generation: 19,160 gpd			

[5]City of Los Angeles, CEQA Thresholds Guide, 2006, Exhibit M.2-12

The construction activities related to installation of the onsite sewer infrastructure that would serve the proposed Project, is included as part of the proposed Project and would not result in any physical environmental effects beyond those identified throughout this MND. For example, construction emissions for excavation and installation of the sewer infrastructure is included in Section 3, *Air Quality* and 8, *Greenhouse Gas Emissions*, and noise volumes from these activities are evaluated in Section 13, *Noise*. As the proposed Project includes facilities to serve the proposed

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development, it would not result in the need for construction of other new wastewater facilities or expansions, the construction of which could cause significant environmental effects. Therefore, impacts would be less than significant.

Stormwater Drainage

The proposed Project would increase the overall impervious surface area on the Project site compared to existing condition. As discussed in Section 4.10 of this IS/MND, the proposed Project would increase the impervious surface area on the Project site compared to existing condition, however, with implementation of BMPs, the proposed Project would install drainage features that would handle and treat all potential stormwater runoff from the Project site. Furthermore, the proposed Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities beyond the on-site improvements included as part of the proposed Project. All new residential development that connects to the system is required to pay its applicable fair-share Development Impact Fee(s). Therefore, impacts to stormwater drainage facilities 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. Water service would be provided to the proposed project site by the City of Redlands MUED. 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. According to the UWMP, the City has four sources of water to provide to its service area: purchased imported water from the State Water Project; groundwater from the Bunker Hill Subbasin and the Yucaipa Subbasin; surface water from the Mill Creek and Santa Ana River watersheds; and recycled water (UWMP 2015).

The Water Supply Reliability Assessment within 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 (UWMP 2015). Therefore, water demand from the proposed Project would be within the City's current and projected water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. All new residential development that connects to the system is required to pay its applicable fair-share Development Impact Fee(s). Thus, impacts related to 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. According to the General Plan Livable Community Element, most wastewater generated by sewered development within the Planning Area is treated at the Redlands Wastewater Treatment Facility. The Redlands Wastewater Treatment Facility treats approximately 6 million gallons per day (mgd) with a capacity of 9.5 mgd. As discussed above, the proposed Project would generate approximately 19,160 gpd. All new residential development that connects to the system is required to pay its applicable fair-share Development Impact Fee(s). 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. The quality of sewage discharged from indoor plumbing fixtures would be similar to the quality of

other residential dwelling units in the vicinity that currently discharge to the City's sewer system. The Project would not result in any of the wastewater treatment plants discussed above exceeding wastewater treatment requirements. Therefore, impacts related to wastewater generation are 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. The City of Redlands Quality of Life Department provides a wide range of services to the City, including waste collection. Solid waste from Redlands is primarily disposed of at the California Street Landfill and the San Timoteo Sanitary Landfill operated by the County, both within the city limits. These have more than adequate capacity to meet the City's needs for the foreseeable future. Solid waste collected from the Project site would be anticipated to be hauled to the California Street Landfill, which is located at 2151 Nevada Street and encompasses 115 acres. Its design capacity is 11.4 million cubic yards, and its maximum permitted capacity is 10 million cubic yards. It has a maximum permitted throughput of 829 tons per day. It has a remaining capacity of 6,800,000 cubic yards (CalRecycle 2019). Additionally, the San Timoteo Sanitary Landfill is located on San Timoteo Canyon Road and is 366 acres in size. It has a permitted capacity of 20,400,000 cubic yards and a maximum permitted daily throughput of 2,000 tons. As of CalRecycle's 2019 estimate, the remaining capacity was 12,360,396 cubic yards (CalRecycle 2019).

Construction

Construction of the proposed Project would require demolition of the foundations of existing single family residences and associated structures on the southeastern portion of the site, as well as the removal of the existing road and cul-de-sac on the central portion of the site. The majority of waste generated during demolition and construction activities would be building materials (e.g., concrete, dirt, and waste generated by construction workers). Nonhazardous waste from Project construction activities would be recycled to the extent feasible. As stated in the City's Municipal Code Section 13.66.040, *Construction and Demolition Recycling Requirements*, no demolition permit or building permit shall be issued for any development activity subject to this chapter unless the construction and demolition recycling plan has been approved by the municipal utilities director. Thus, the proposed Project would be required to meet the City's waste diversion requirements as they pertain to Project construction. Furthermore, construction waste is anticipated to be minimal compared to waste generated throughout the lifetime of the Project during operation.

Operation

As described previously in Section 4.14 of this IS/MND, the proposed Project includes the construction of a 147-unit multi-family development that would result in an increase of approximately 390 residents on the Project site. Under existing conditions, the residential uses on the Project site would generate a total of approximately 0.03 ton of solid waste per day (11.87 tons per year). It is anticipated that the proposed Project would generate a total of approximately 0.22 ton of solid waste per day (79.72 tons per year) during Project operation, which would represent a net increase in solid waste generation. As the Frank Bowerman Sanitary Landfill has the capacity to process an additional 6,800,000 cubic yards of solid waste, the solid waste generated by the project would be within the capacity of the landfill. Thus, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs and the project would not impair the attainment of solid waste reduction goals. Impacts related to landfill capacity would be less than significant.

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

Less Than Significant Impact. The proposed Project would result in new development that would generate an increased amount of solid waste. All solid waste-generating activities within the City is subject to the requirements set forth in Section 5.408.1 of the 2016 California Green Building Standards Code that requires demolition and construction activities to recycle or reuse a minimum of 65 percent of the nonhazardous construction and demolition waste, and AB 341 that requires diversion of a minimum of 75 percent of operational solid waste.

In addition, as stated in Response 4.19(d) above, the proposed Project would be required comply with the City's Municipal Code Section 13.66.040, *Construction and Demolition Recycling Requirements*, which requires that no demolition permit or building permit shall be issued for any development activity subject to this chapter unless the construction and demolition recycling plan has been approved by the municipal utilities director. In addition, the proposed Project would be required to comply with all federal, State, and local regulations related to solid waste. Furthermore, the proposed Project would comply with all standards related to solid waste diversion, reduction, and recycling during Project construction and operation. Therefore, the proposed Project is anticipated to result in less than significant impacts related to potential conflicts with federal, State, and local management and reduction statutes and regulations pertaining to solid waste.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRES. 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?	☐	☐	☐	☒

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

Less than Significant Impact. According to the CAL FIRE Fire Hazard Severity Zone map, the Project site is not within an area identified as a Fire Hazard Area that may contain substantial fire risk or a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2019). The proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. As stated in Section 4.1 of this IS/MND, the proposed Project would not physically interfere with an adopted emergency response plan or emergency evacuation plan. The City's General Plan Safety Element (Section 7.4) discusses Emergency Management, which outlines goals and policies aimed at emergency preparedness to protect the health, safety and welfare of the general public during and after natural, man-made (technological), or attack-related emergencies. Additionally, the proposed Project does not include any characteristics (e.g., permanent road closures or long-term blocking of road access) that would substantially impair or otherwise conflict with an emergency response plan or emergency evacuation plan. Therefore, impacts related to emergency response and evacuation plans associated with construction of the proposed Project would be less than significant.

The proposed Project does not include any changes to public or private roadways that would physically impair or otherwise conflict with an emergency response plan or emergency evacuation

plan. Further, the proposed Project would not obstruct or alter any transportation routes that could be used as evacuation routes during emergency events. In addition, during the operational phase of the proposed Project, on-site access would be required to comply with standards established by the City and Redlands Fire Department. The size and location of fire suppression facilities (e.g., hydrants) and fire access routes would be required to conform to City and Fire Department's standards. The proposed Project would provide adequate emergency access to the site via driveways from North University Street; the driveways would connect to an internal access way that would ensure access for emergency vehicles within the interior of the site. Further, access to and from the Project site for emergency vehicles would be reviewed and approved by the Redlands Fire Department and the City as part of the Project approval process to ensure the proposed Project is compliant with all applicable codes and ordinances for emergency vehicle access. Because the Project is required to comply with all applicable City codes, as verified by the City, any potential impacts related to an emergency response or evacuation (if any) would be less than significant.

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. The proposed Project involves the redevelopment of a 147-unit multi-family residential development. As discussed in Section 4.14 of this IS/MND, the Project is anticipated to result in a population increase of approximately 390 residents. As stated previously, the Project site is not located within a VHFHSZ. Additionally, the Project site and surrounding area are currently developed, and therefore, lack the combustible materials and vegetation necessary for the uncontrolled spread of a wildfire.

The Project site is relatively flat and there are limited elevation changes in the Project vicinity. The Project proposes a multi-family residential development on a relatively in an area characterized by existing residential and educational uses. As such, the Project itself would not exacerbate wildfire risks as compared to existing conditions because it is representative of existing development in the area and is replacing existing residential uses. Thus, no impact related to other factors that would expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire would occur from the Project.

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 does not require the installation or maintenance of associated infrastructure (including roads, fuel breaks, emergency water sources, power lines, or other utilities) that would exacerbate fire risk or that would result in impacts to the environment. Although the Project includes new driveways within the residential development, the Project does not include any changes to public or private roadways that would exacerbate fire risk or that would result in impacts to the environment. Although utility improvements, including domestic water, recycled water, sanitary sewer, and storm drain lines proposed as part of the Project would be extended throughout the Project site, these utility improvements would be underground and would not exacerbate fire risk. Project design and implementation of utility improvements would be reviewed and approved by the City part of the Project approval process to ensure the proposed Project is compliant with all applicable design standards and regulations. Therefore,

the proposed Project would not include infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities), that would exacerbate fire risk or that would result in 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?

Less than Significant Impact. According to the City of Redlands General Plan, Figure 7-3, Flood Hazards, the Project site not within a Floodway, 100-year floodplain, or 500-year floodplain. Additionally, in its existing condition, the Project site is relatively flat with no slopes present on the site.

As established in Section 4.10 of this IS/MND, during Project construction soil would be compacted and drainage patterns would be temporarily altered due to grading, and there would be an increased potential for flooding compared to existing conditions. However, as stated in PPP WQ-1, construction BMPs would be identified and implemented as part of the proposed Project. Implementation of construction BMPs would control and direct surface runoff to prevent flooding, and as such, Project construction would not expose people or structures to significant risks related to downslope and downstream flooding. Therefore, impacts would be less than significant.

During operation, the proposed Project would not substantially alter the existing on-site drainage Patterns. Compliance with the proposed operational BMPs would ensure on-site storm drain facilities would be sized to accommodate stormwater runoff from the Project site so that on-site flooding would not occur. Operation of the Project would not expose people or structures to significant risks, including downslope or downstream flooding. Therefore, impacts would be less than significant.

As established in Section 4.7 of this IS/MND, there are no landslide zones close to or within the boundaries of the Project site. The Project site is relatively flat; therefore, the risk of slope failure represents a limited level of concern on the Project site. Further, implementation of PPP GEO-1 requires compliance with the CBC, which would include the incorporation of: 1) seismic safety features to minimize the potential for significant effects as a result of earthquakes; 2) proper building footings and foundations; and 3) construction of the building structures so that it would withstand the effects of strong ground shaking. These features would reduce potential impacts related to landslides to a less than significant level. Therefore, with implementation of PPP GEO-1, the Project would not expose people or structures to significant risks, including downslope or downstream landslides, and impacts (if any) would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

21. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐

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 Impact with Mitigation Incorporated. Based on the discussion in Section 4.4, *Biological Resources*, of this IS/MND, the proposed Project is anticipated to result in less than significant impacts related to habitat, wildlife species, and/or plant and animal communities. The proposed Project would not eliminate a plant or animal community, nor would it substantially reduce the number or restrict the range of a rare or endangered plant or animal. However, MM BIO-1 has been included to comply with the provisions of the MBTA.

As described in Section 4.5, *Cultural Resources*, the Project site does not contain any buildings or structures that meet any of the California Register of Historical Resources (California Register) criteria or qualify as "historical resources" as defined by CEQA. Therefore, the proposed Project would not cause a substantial adverse change in the significance of a historical resource. In addition, as described previously, the Project site has been previously disturbed from various past uses that involve grading and installation of utility infrastructure. As a result, the potential for archaeological resources exists on site are low. However, Mitigation Measure CUL-1 has been included to require archaeological monitoring of ground disturbing activities to ensure that inadvertent discovery of resources during ground-disturbing activities are less than significant.

Implementation of Mitigation Measure CUL-1 would reduce potential impacts to important examples of California prehistory to a less than significant level.

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 with Mitigation Incorporated. The proposed Project involves construction of a 147-unit multi-family residential development on the Project site. The site is currently developed with single-family residential uses and is surrounded by a variety of residential and educational uses. The Project site is bounded by East Lugonia Avenue and Palm Village apartments to the north; North University Street to the east; residential uses to the south; and Occidental Drive to the west.

As presented in this IS/MND, potential Project-related impacts are either less than significant or would be less than significant with mitigation incorporated. Based on the analysis contained in this IS/MND, Project-related impacts would be reduced to less than significant levels with the incorporation of mitigation measures. Given that the potential Project-related impacts would be mitigated to a less than significant level, implementation of the proposed Project would not result in impacts that are cumulatively considerable when evaluated with the impacts of other current projects, or the effects of probable future projects. Therefore, the proposed Project's contribution to any significant cumulative impacts would be less than cumulatively considerable. As discussed in Sections 4.1 through 4.20 of this IS/MND, mitigation would be required and incorporated as necessary. Therefore, impacts would be less than significant with mitigation incorporated.

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

Less than Significant with Mitigation Incorporated. Based on the Project Description and the preceding responses in Sections 4.1 through 4.20 of this IS/MND, implementation of the proposed Project would not cause substantial adverse effects to human beings because all potentially significant impacts of the proposed Project would be mitigated to a less than significant level. Therefore, since all potentially significant impacts of the proposed Project are expected to be mitigated to a less than significant level, implementation of the proposed Project would not cause substantial adverse effects on human beings.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

5 DOCUMENT PREPARERS AND CONTRIBUTORS

Lead Agency:
City of Redlands, Development Services Department
35 Cajon Street, Suite 20
Redlands, CA 92373

CEQA Document Preparer:
EPD Solutions, Inc.
Konnie Dobreva, JD
Lauren Lockwood

6 REFERENCES

California Scenic Highway Mapping System (Caltrans 2017) http: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways (accessed September 30, 2019).

California Department of Conservation (CDC 2017). California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/ (accessed January 24, 2020).

CalRecycle Jurisdiction Disposal By Facility (CalRecycle 2019). https://www2.calrecycle.ca.gov/swfacilities/Directory/ (accessed September 30, 2019).

California Department of Forestry and Fire Protection (CAL FIRE 2019). Fire Hazard Severity Zone Map. https://forestwatch.maps.arcgis.com/apps/Styler/index.html?appid=5e96315793d445419b6c96f89ce5d153 (accessed September 30, 2019).

California Department of Toxic Substances Control (DTSC 2019). EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Sacramento&tour=True (accessed September 30, 2019).

California Department of Finance (CDF 2019). E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2019 with 2010 Census Benchmark. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/ (accessed September 30, 2019).

Casa Loma Residential Focused Air Quality and Greenhouse Gas Emissions Memo, City of Redlands, California (Urban Crossroads 2019). Appendix A.

Casa Loma Residential Noise Impact Analysis, City of Redlands, California (Urban Crossroads 2020). Appendix H.

City of Los Angeles (2006). L.A. CEQA Thresholds Guide. Website: https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/A07.pdf (accessed October 3, 2019).

City of Redlands General Plan (2017). https://www.cityofredlands.org/sites/main/files/file-attachments/gp2035.pdf?1554321255

City of Redlands General Plan Update and Climate Action Plan EIR (2017). https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_deir_compiled_lo_071917_0.pdf?1554321669

City of Redlands Municipal Code. https://www.sterlingcodifiers.com/codebook/index.php?book_id=550

DRC Engineering, Inc. (DRC 2018a). Conceptual Hydrology Study for Casa Loma Apartments, SEC East Lugonia Avenue & Occidental Drive, Redlands, CA 92374. Appendix F.

DRC Engineering, Inc. (DRC 2018b). Preliminary Water Quality Management Plan for Casa Loma Apartments. Appendix G.
Federal Emergency Management Agency (FEMA 2019). Flood Insurance Rate Map (FIRM) Map No. 06071C8708H. https://msc.fema.gov/portal/home (accessed September 30, 2019).

Linscott, Law, & Greenspan Engineers (LLG 2019). Traffic Impact Analysis Report, Casa Loma Residential, Redlands, California. Appendix K.

Moore Twining Associates, Inc. (MTA 2018a). Geotechnical Engineering Investigation for The Residence at Casa Loma. Appendix D.

Moore Twining Associates, Inc. (MTA 2018b). Phase I Environmental Site Assessment, 1010 East Lugonia Avenue, 1205-1219 University Street, Redlands, California. Appendix G.

The Planning Associates (TPA 2019). CEQA Level Biological Assessment for the Residences at Casa Loma Development Site Redlands, San Bernardino Co., CA. Appendix B.

United States Fish and Wildlife Service (USFWS 2019). National Wetlands Inventory. https://www.fws.gov/wetlands/data/mapper.html (accessed September 30, 2019).

Urban Crossroads, LLC (Urban Crossroads 2019). Casa Loma Residential Focused Air Quality and Greenhouse Gas Emissions Memo, City of Redlands, California (Urban Crossroads 2019). Appendix A.

Urban Crossroads, LLC (Urban Crossroads 2020). Casa Loma Residential Noise Impact Analysis, City of Redlands. Appendix H.

VCS Environmental (VCS 2019). Cultural Resources Assessment for the Residence at Casa Loma Project, Redlands, CA. Appendix C.

Water Systems Consulting, Inc. (UWMP 2015). 2015 San Bernardino Valley Urban Water Management Plan. http://www.sbvmwd.com/home/showdocument?id=4196 (accessed October 3, 2019).

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