



CITY OF REDLANDS

THE HOLY NAME of JESUS CATHOLIC CHURCH/SCHOOL PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

June 2022

Prepared By:

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- Appendix A - Land Evaluation and Site Assessment
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- Appendix C - General Biological Resources Report and Habitat Assessment
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- Appendix E - Phase 1 Environmental Site Assessment
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- Appendix G - Traffic Impact Analysis

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1.0 INTRODUCTION & PURPOSE OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

1.1 Purpose and Scope of the Initial Study

In accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] Section 21000 et seq.) and its Guidelines (California Code of Regulations [CCR], Title 14, Section 15000 et seq.), this Initial Study has been prepared to evaluate the potential environmental effects associated with the construction and operation of the Holy Name of Jesus Catholic Church Project (proposed Project or Project). Pursuant to Section 15367 of the State CEQA Guidelines, the City of Redlands (City) is the lead agency for the Project. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project.

As set forth in the State CEQA Guidelines Section 15070, an Initial Study leading to a Mitigated Negative Declaration (IS/MND) can be prepared when the Initial Study has identified potentially significant environmental impacts but revisions have been made to a project, prior to public review of the Initial Study, that would avoid or mitigate the impacts to a level considered less than significant, and there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

1.2 Summary of Findings

Section 3.0 of this document contains the Environmental Checklist Form that was prepared for the proposed Project pursuant to CEQA requirements. The Environmental Checklist Form indicates that the proposed Project would not result in significant impacts with the implementation of mitigation measures, as identified where applicable throughout this document.

1.3 Initial Study Public Review Process

The Initial Study and a Notice of Intent (NOI) to adopt an MND will be distributed to responsible and trustee agencies, other affected agencies, and other parties for a 30-day public review period. Written comments regarding this MND should be addressed to:

Sean Reilly, Senior Planner
City of Redlands
Development Services Department, Planning Division
35 Cajon St., Ste. 20/P.O. Box 3005
Redlands, CA 92373
909.798.7555 ext. 2
sreilly@cityofredlands.org

After the 30-day review period, comments raised during the public review period will be considered and addressed prior to adoption of the MND by the City.

1.4 Report Organization

This document has been organized into the following sections:

Section 1.0 – Introduction & Purpose of the Initial Study/Mitigated Negative Declaration. This section provides an introduction and overview describing the conclusions of the Initial Study.

Section 2.0 – Description of Proposed Project. This section identifies key project characteristics and includes a list of anticipated discretionary actions.

Section 3.0 – Initial Study Checklist. The Environmental Checklist Form provides an overview of the potential impacts that may or may not result from Project implementation.

Section 4.0 – Environmental Analysis. This section contains an analysis of environmental impacts identified in the Environmental Checklist Form.

Section 5.0 – References. The section identifies resources used to prepare the Initial Study.

2.0 DESCRIPTION OF PROPOSED PROJECT

2.1 Location, Setting, and Existing Conditions of Proposed Project

PROJECT LOCATION

The Project site is located on the northwest corner of Dearborn Street and E. Lugonia Avenue, in the City of Redlands, California. It is generally located in the northeast portion of the City, approximately 1.5 miles north of Interstate 10 (I-10) and approximately 2.5 miles east of State Route 210 (SR-210); refer to **Exhibit 1, Regional Location**. Local access to the site is provided via E. San Bernardino Avenue to the north, Dearborn Street to the east, and E. Lugonia Avenue to the south; refer to **Exhibit 2, Project Vicinity**.

PROJECT SETTING, LAND USE, AND ZONING DESIGNATION

The Project site is a fenced 18.67-acre rectangular shaped site composed of two parcels. (Assessor's Parcel Numbers [APNs]: 0168-161-02-0000, -03-0000). Aerial imagery shows that the site is currently used for agricultural purposes, but it is zoned Residential Estate (R-E) and has a Very Low Density Residential General Plan Designation; refer to **Exhibit 3, Existing Land Use and Zoning Designation** and **Table 1, Surrounding Land Uses and Zoning Designations**. **Table 1** identifies the land uses and zoning designations congruent with the City of Redland's General Plan.

Table 1: Existing Land Uses and Zoning Designations

Location	Existing General Plan Land Use Designation	Existing Zoning Designation	Existing Use	Proposed Use
Project Site	Very Low Density Residential	Residential Estate (R-E)	Agricultural Field	Church/School
North	Very Low Density Residential	Residential Estate (R-E)	Single family Residential and agricultural areas	N/A
South	Low Density Residential	Single Family Residential District (R-1)	Single Family Residential	N/A
East	Low Density Residential and Agriculture	Residential Estate (R-E)	Single Family Residential and Tree Planting Areas	N/A
West	Very Low Density Residential	Residential Estate (R-E)	Single Family Residential	N/A

Source: City of Redlands. 2020. *Zoning Map*. Available at <https://corelands.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=7577aed247714a8ba8810c5f7357f7b2>, accessed April 9, 2020.

Based on the site's General Plan land use and Zoning designation, and according to the Municipal Code Chapter 18.192: Conditional Use Permits, specific uses such as educational institutions, public or private and religious places of worship may be permitted in any zone subject to the approval of a Conditional Use Permit when such is determined to be essential or desirable for the public health, safety, and welfare. The Project is subject to a Conditional Use Permit (CUP) to build a religious place of worship and a private educational institution, in the R-E Zone as specified in Section 18.192.020(B).

EXISTING CONDITIONS

The Project site is undeveloped, but it is currently used as an agricultural field. The site does not contain any trees or other vegetation other than what is being harvested. No public access is permitted; the site is fenced all around and it is surrounded by residential and agricultural areas. The northern half of the Project site is within Redlands Municipal Airport Influence Area (AIA) Zone D as shown in the Redlands Municipal Airport Land Use Compatibility Plan.¹ The southern half of the site is not within the Redlands Municipal Airport AIA.²

2.2 Proposed Project Characteristics

The proposed Project would involve 4 phases of construction of 8 habitable buildings and a maintenance building, totaling approximately 102,547 square feet (SF). Buildings of the Catholic Church would include a Parish Hall with a 371-seating capacity, a Sanctuary with seating capacity for 1,454, and twenty-seven classrooms with capacity for 530 students. The Project would involve the consolidation of the two parcels into one parcel. The proposed Project site would include 520 parking stalls that would be dispersed throughout the south and east portions of the site. Other amenities would include indoor and outdoor security lighting, a soccer/track and field facility with lighting, outdoor speakers, a playground, an outdoor pavilion with seating, onsite and perimeter ornamental landscaping and fencing, outdoor basketball courts, sports courts, an underground water quality chamber located under the soccer/track and field facility, a stormwater basin, and frontage improvements. The soccer/track and field facility would be located on the northern portion the Project site, just south of the stormwater basin. The three full-size outdoor basketball courts would be provided just southwest of the soccer/track and field facility. The outdoor pavilion would be located just west of the proposed Sanctuary and Parish Hall buildings. Additionally, the Project is anticipated to be constructed in four phases with the church being initially operational in year 2023 and fully operational by year 2031 with the school; refer to **Exhibit 4, Site Plan**, and **Table 2, Proposed Project Structures and Other Components**.

OPERATIONS

School Facility

The operations would consist of the following:

- Approximately five staff would serve the approximately 45 Preschool students.
- Approximately 24 staff would serve 1st through 8th grade students.
- Classes will be held Monday through Friday beginning at 7:00 am and ending 3:15. After school care will be until 5:30 pm.

¹ City of Redlands. 2003. *Redlands Municipal Airport Land Use Combability Plan*. Available at https://www.cityofredlands.org/sites/main/files/file-attachments/airport_land_use_compability_plan_0.pdf?1559398570, accessed July 26, 2020.

² City of Redlands. 2020. *Redlands Municipal Airport (REI) Zones*. Available at <https://corelandmaps.maps.arcgis.com/apps/webappviewer/index.html?id=09d607c90ab544dea3fa28d8b459c37f>, accessed April 9, 2020.

- All students would be permitted on campus starting at 7:15 AM for breakfast.

Church Facility

- Masses will be held Monday through Friday at 8:00 am until 10:00 am. Attendance would be typically around 60 people.
- Occasionally there will be additional services held during the week such as funerals and prayer services. Attendance is normally under 100 people for these types of services.
- Sunday Masses will be held at 7:00 am, 9:00 am, 11:30 am, 1:30 pm and 5:00 pm. Each mass will last approximately 1 hour. There is a 60 – 70 people capacity per mass.
- Saturday Mass will be held at 5:00 pm and occasionally there will be Weddings and Quinceañeras, scheduled beginning at 10:00 am and 1:00pm, lasting approximately 1 hour. Usually there are under 100 people in attendance for these services.
- There are several days during the year that services inside the church may go later than 10:00 pm such as Holy Saturday, Midnight mass, and the Feast of Our Lady of Guadalupe. These services would be held indoors and typically at a capacity of 60-70%.
- No other events will be taking place on the school campus or Hall on Sundays when mass is being celebrated in the church.

Hall/office building Operations

- Offices will be open Monday through Friday from 8:00 am to 5:00 pm. The office will be staffed with 10 to 15 members on site.
- The hall will be used mostly on weekends and always when Mass is not going on in the church. It will be used during weeknights for mostly small group meetings between 30 to 50 people.
 - Weekend and evening uses include receptions, fund raisers, religious education classes and meetings by groups no larger than 100 people.

Outdoor events

- Occasionally, there will be special outside events such as Fiestas, Carnivals, outdoor masses, and sporting events. Most of these will take place on the weekend and will end before 10:00 PM.

BUILDINGS CHARACTERISTICS AND PHASING

The proposed Project includes new permanent religious and school buildings composed of an administration/preschool building, Sanctuary building, Parish Hall building, five classroom buildings for preschool through 8th grade, and a maintenance building.

All buildings are anticipated to have a maximum building height of less than 35 feet except for the Sanctuary Building No.1. The Sanctuary Building No. 1 would include additional architectural elements that exceed the heights typically allowed in the zone but are permitted

pursuant to exceptions listed in the with Municipal Code (18.152.030) for churches and other architectural elements; refer to **Exhibit 5a-5g, Elevations**. Classroom and building design features would include high-efficiency wall assemblies and windows to reduce heating and cooling loads; Energy Star appliances; high-efficiency heating and cooling systems; high efficiency domestic hot water systems; and high-efficiency light-emitting diode (LED) lighting in educational units, common areas, and landscape design; refer to **Table 2, Proposed Project Structures and Other Components**, **Exhibit 6, Phasing Plan**, and Additionally, refer to **Table 3, Proposed Project Detailed Summary**.

Table 2: Proposed Project Structures and Other Components

Project Element	Purpose/Grade	Stories	Building Area (SF)
Phase 1			
Parish Hall Building No. 2	Religious	1	33,925
Eastern Parking Area	340 Vehicle Spaces	-	-
Stormwater Basin	Water Recharge	-	-
Pavilion	Outdoor Gatherings	-	-
Lugonia Avenue	Road widening and median	-	-
Phase 2			
Admin/Preschool – Building 3	Admin/Preschool	1	9,922
Classroom – Building 4A	School	1	6,834
Classroom – Building 5A	School	1	7,425
Maintenance Building	Storage	1	840
Playground Area	Outdoor Gatherings/Play	-	-
Basketball Courts	Outdoor Gatherings/Play	-	-
Student Gathering Area	Outdoor Gathering Space	-	-
Phase 3			
Sanctuary Building No. 1	religious	1	26,282
track and Play Field	sporting Activities	-	-
Southern Parking Area	180 Vehicle Spaces	-	-
Meditation Garden	Outdoor Gathering Space	-	-
Phase 4			
Classroom – Building 4B	School	1	6,834
Classroom – Building 5B	School	1	7,425
Classroom – Building 6	School	1	3,060
Total Building Square Feet			102,547 (SF)
Other			
Canopy/Covered Walkways	-	-	17,170
Grand Total Building Square Feet			119,717 (SF)

Table 3: Proposed Project Detailed Summary

Project Element	Proposed Project
Existing General Plan Designation	Very Low Density Residential
Existing Zoning Designation	Residential Estate (R-E)
Existing Use	Agricultural Field
Proposed Use	Church/School
Number of Staff/Employees	Approximately 29 Staff Members
Site Area	18.67 gross acres (847,751 SF)
Building Area (SF)/FAR	102,547sf/ 12.1 %
Canopy/Covered Walkways	17,170 SF (2.11 %)
Pervious Area (SF)	386,470 sf (47.53 %)
Impervious Area (SF)	306,974 sf (37.75 %)
Parking Landscape Area (SF)	18,886 sf (9.3%)
Turf Area (SF)	100,477 sf (44.2%)
Total Landscaped Area:	330,056sf (40.6%)
Total Pervious Area	359,644 sf (44.2 %)
Total Impervious Area	346,501 sf (42.6 %)
Hours of Operation	Monday – Friday 7:00 am to 3:15 pm. After school care will run until 5:30 pm. Weekend events to conclude before 10:00 PM.
Religious Buildings Seating Capacity: Sanctuary – Building 1 Parish Hall – Building 2	1,454 seats 371 seats
Buildings Setbacks (from Property Line): Front: 25 Feet Min Rear: 25 Feet Min Side: 10 Feet Min Building Height: 35 feet Max Allowed Exceptions for Steeples and Churches per Section 18.152.030	25 feet 25 feet 10 feet 35 feet High Proposed (main building) Architectural elements up to 66 feet tall
Parking Spaces: Standard Stalls (9'x19') Disabled Person Stall Disabled Van Stall Total	507 spaces 10 spaces 3 spaces 520 spaces
Construction and Operational Schedule: Construction: Intermittent Operational (Church): Fully Operational (with School):	Phased Construction starting in late 2022 Year 2022 Year 2031
Grading Quantities: Cut: Fill: Net:	20,743 Cubic Yards (CY) 20,743 CY 0 CY

SITE ACCESS

Main Project site access would be on Lugonia Avenue via two 26-foot-wide side-by-side driveways (entrance/exit only) separated by a median, but together totaling 52 feet wide, a second 52' foot wide driveway on Dearborn Street, and third 28' foot wide driveway also on Dearborn Street. All access points would be gated.

- Driveway 1 is a right-turn in / right-turn out restricted totaling 52-foot-wide divided driveway and the main ingress and egress point to the Project site. Driveway 1 is located on Lugonia Avenue approximately 230 feet west of Dearborn Street. The Project will construct a solid raised median with landscaping in the existing two-way left turn lane on Lugonia Avenue adjacent to the Project site, which will restrict left turns into the Project site.
- Driveway 2 is a 52-foot-wide driveway on Dearborn street, located approximately 715 feet north of Lugonia Avenue, and approximately 460 feet south of Pennsylvania Avenue.
- Driveway 3 is a 28-foot-wide access driveway, located on the northwest portion of the Project site on Dearborn Street.
- Pennsylvania Avenue will not be fully constructed for vehicle access across the northern boundary of the Project. The Project will be required to dedicate right-of-way and construct portions of Pennsylvania Avenue, which will include curb, gutter, sidewalk, and landscaping improvements only to allow pedestrian connectivity across the northern portion of the project.
- No Project access will be constructed on Pennsylvania Avenue.

LANDSCAPING AMENITIES

The proposed Project would also comply with the City's Water Efficient Landscaping Requirements (Chapter 15.54 of the Redlands Municipal Code). The plant species are non-invasive per the California Invasive Plant Council. The proposed trees, shrubs and accents, and ornamental grasses will be placed within and around the perimeter of the proposed Project Site. As noted on **Table 3**, approximately 330,056 square feet (40.6%) of the site would be landscaped; refer to **Exhibit 7**, *Conceptual Landscape Plan*.

OPEN SPACE/RECREATION

The proposed Project would provide the following outdoor recreational amenities:

- A soccer/track and field facility.
- Three full-size outdoor basketball courts and sports courts.
- A playground.
- Outdoor pavilion.

- Grassed areas throughout the Project site and between buildings.

EXTERIOR LIGHTING

The Project would include onsite safety/security lighting, as well as sport field lighting.

PERIMETER FENCING AND EXTERIOR WALLS

Perimeter fencing will be provided along all sides of the Project site and placed in accordance with Municipal Code Chapter 18.168: Landscaping, Fences, Walls, and Signs. Walls and fences exceeding 6' feet in height in the front yard setback areas will require approval of a Minor Exception Permit (Detailed in 18.168)

CONSTRUCTION ACTIVITIES

The Project site is currently used for agricultural related activities and is relatively leveled. As noted in **Table 3**, the site is balanced and will require minimal grading. For safety reasons, temporary barricades would be used to limit access to the site during Project construction.

Construction activities may include the following:

- Erect barricades for safety and security prior to construction activities
- Maintain safe access for construction workers throughout construction
- Site grading (during grading, soils are anticipated to be balanced on-site)
- Site pavement
- Chain Link Fencing

PERMITS AND APPROVALS

Conditional Use Permit (CUP): To build a church facility within the R-E (Residential Estate) District per Section 18.192.

Merger/Lot Line Adjustment (LLA): To consolidate the two existing parcels into one which would be ultimately approved by the Planning Commission.

Minor Exception Permit: To allow for minor deviations in the requirements for wall and fence height or to allow walls and fences exceeding 6' tall.

The City of Redlands is the Lead Agency as set forth in CEQA Section 21067 and is responsible for reviewing and approving the Mitigated Negative Declaration. Additional permits may be required upon review of construction documents. Other permits required for the Project may include but are not limited to the following: issuance of encroachment permits for driveways, sidewalks, and utilities; security and parking area lighting; demolition permits; building permits; grading permits; tenant improvement permits; and permits for new utility connections.

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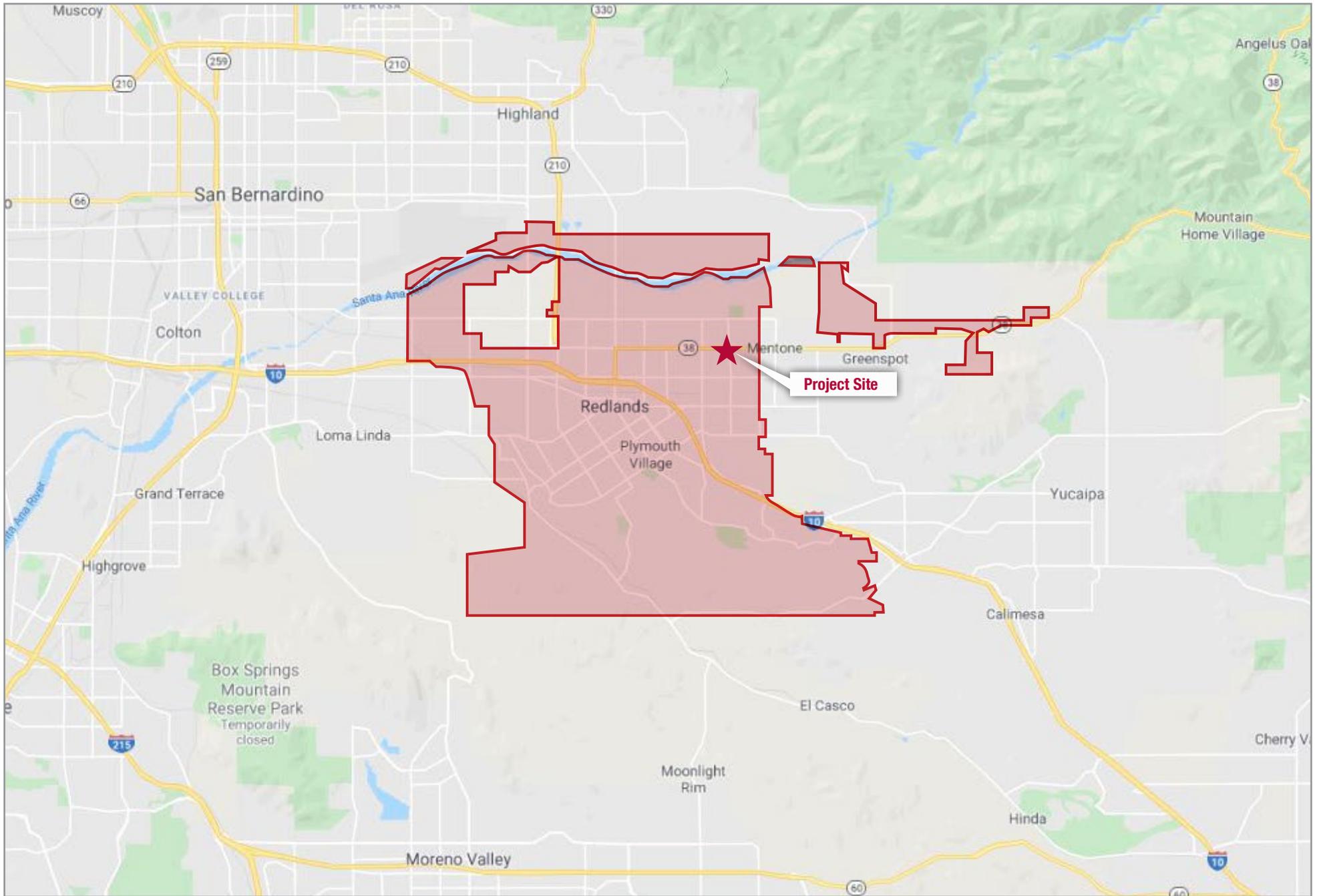


EXHIBIT 1: Regional Location
The Holy Name of Jesus Catholic Church/School Project
Initial Study/Mitigated Negative Declaration
City of Redlands



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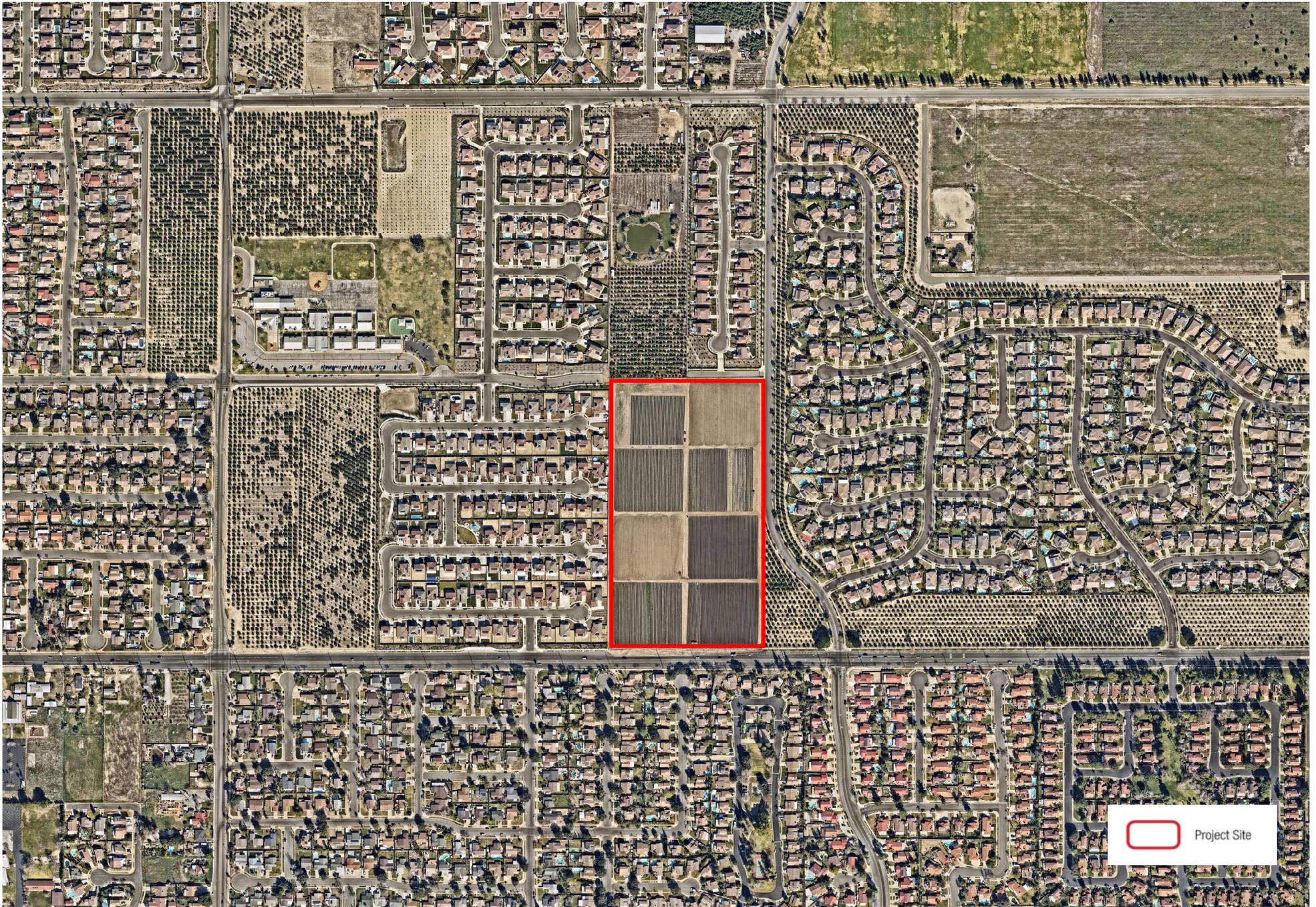
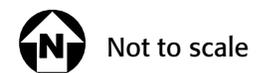


EXHIBIT 2: Project Vicinity
The Holy Name of Jesus Catholic Church/School Project
Initial Study/Mitigated Negative Declaration
City of Redlands



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EXHIBIT 3: Existing Land Use and Zoning Designation
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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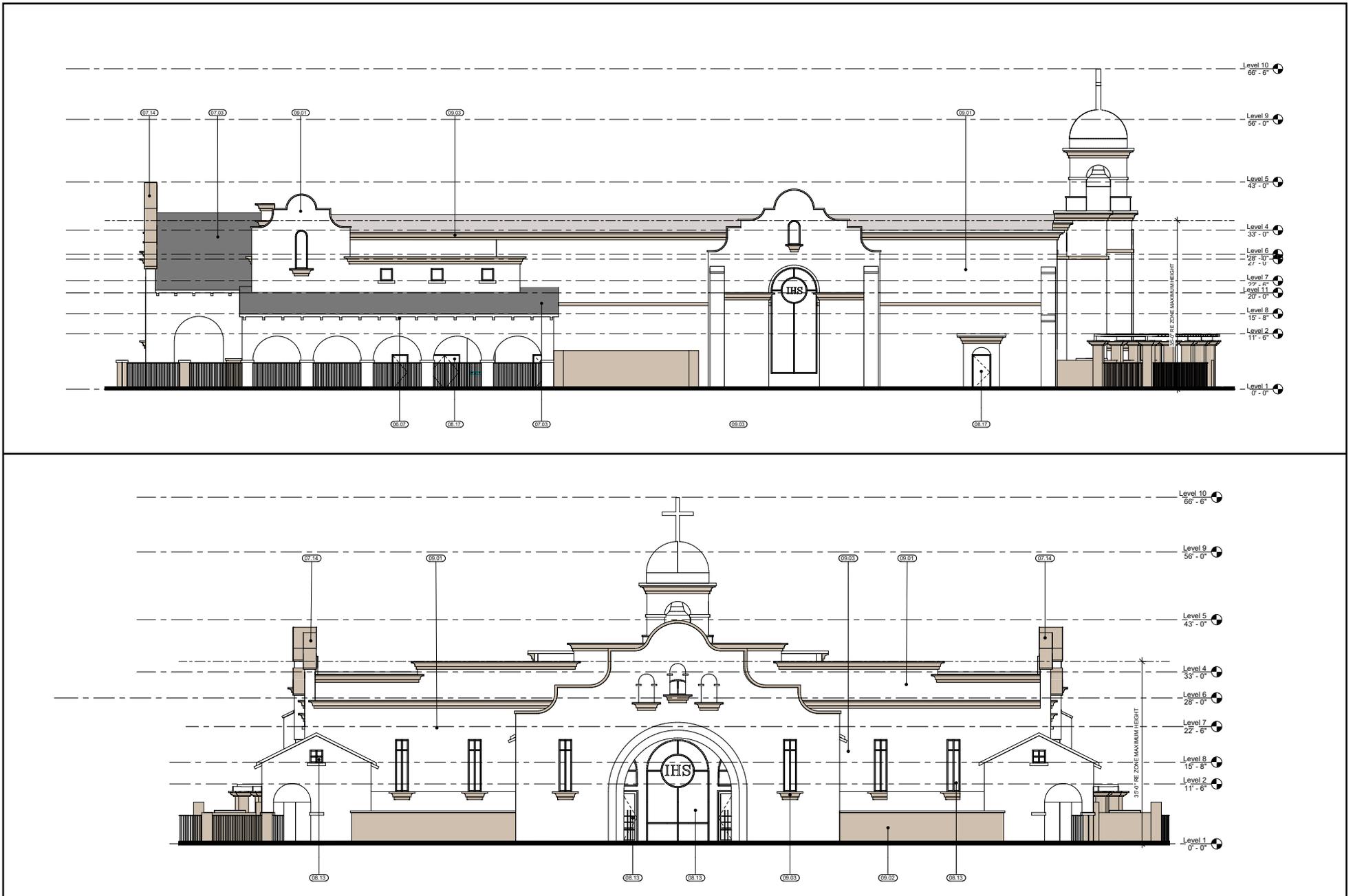


EXHIBIT 5a: Elevations (Sanctuary Building 1)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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EXHIBIT 5b: Elevations (Parish Hall Building 2)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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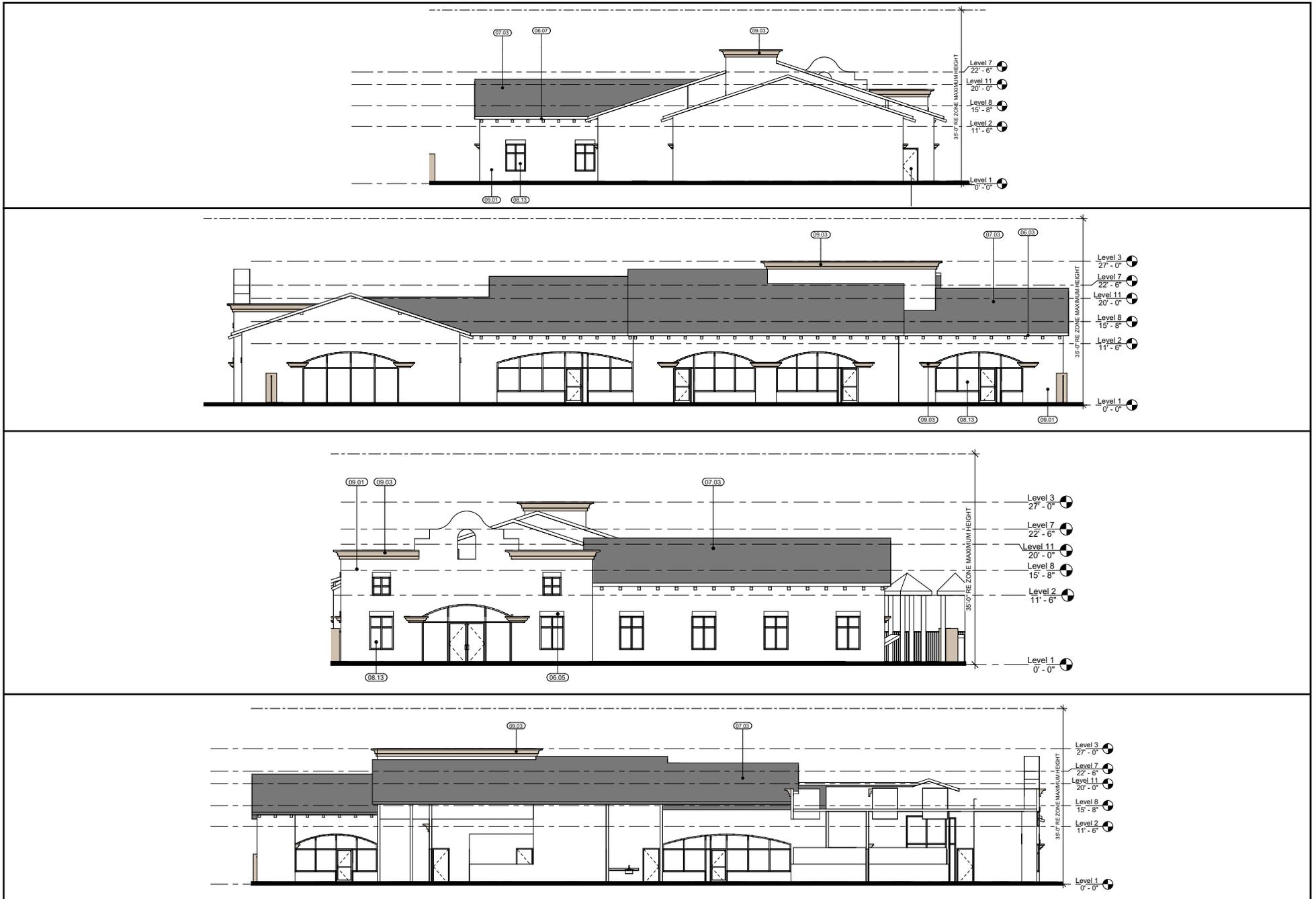


EXHIBIT 5c: Elevations (Administration/Preschool Building 3)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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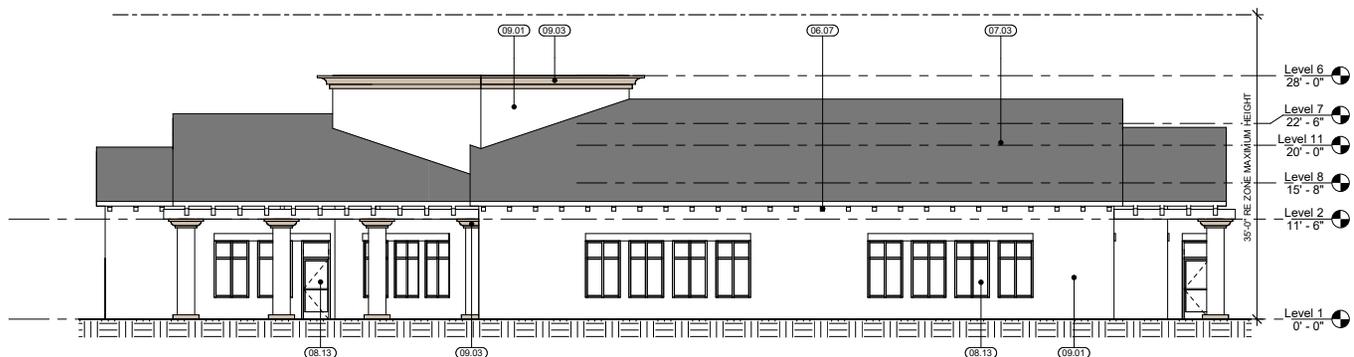
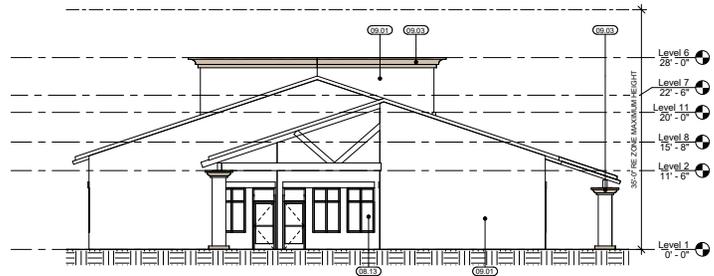
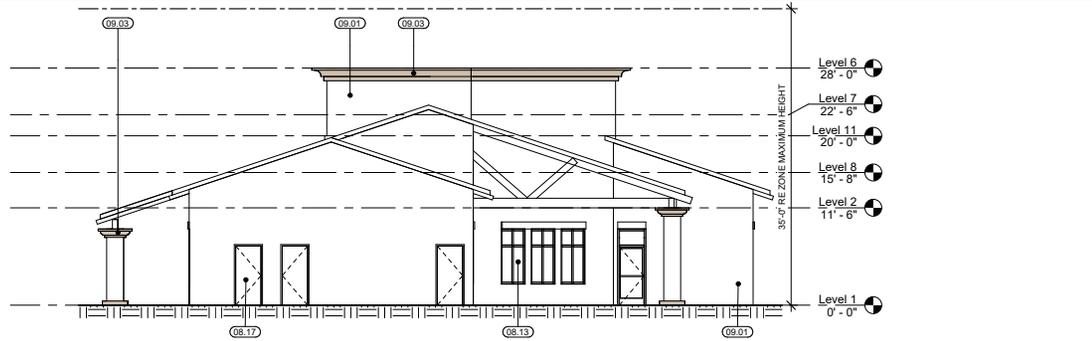


EXHIBIT 5d: Elevations (Classroom Building 4)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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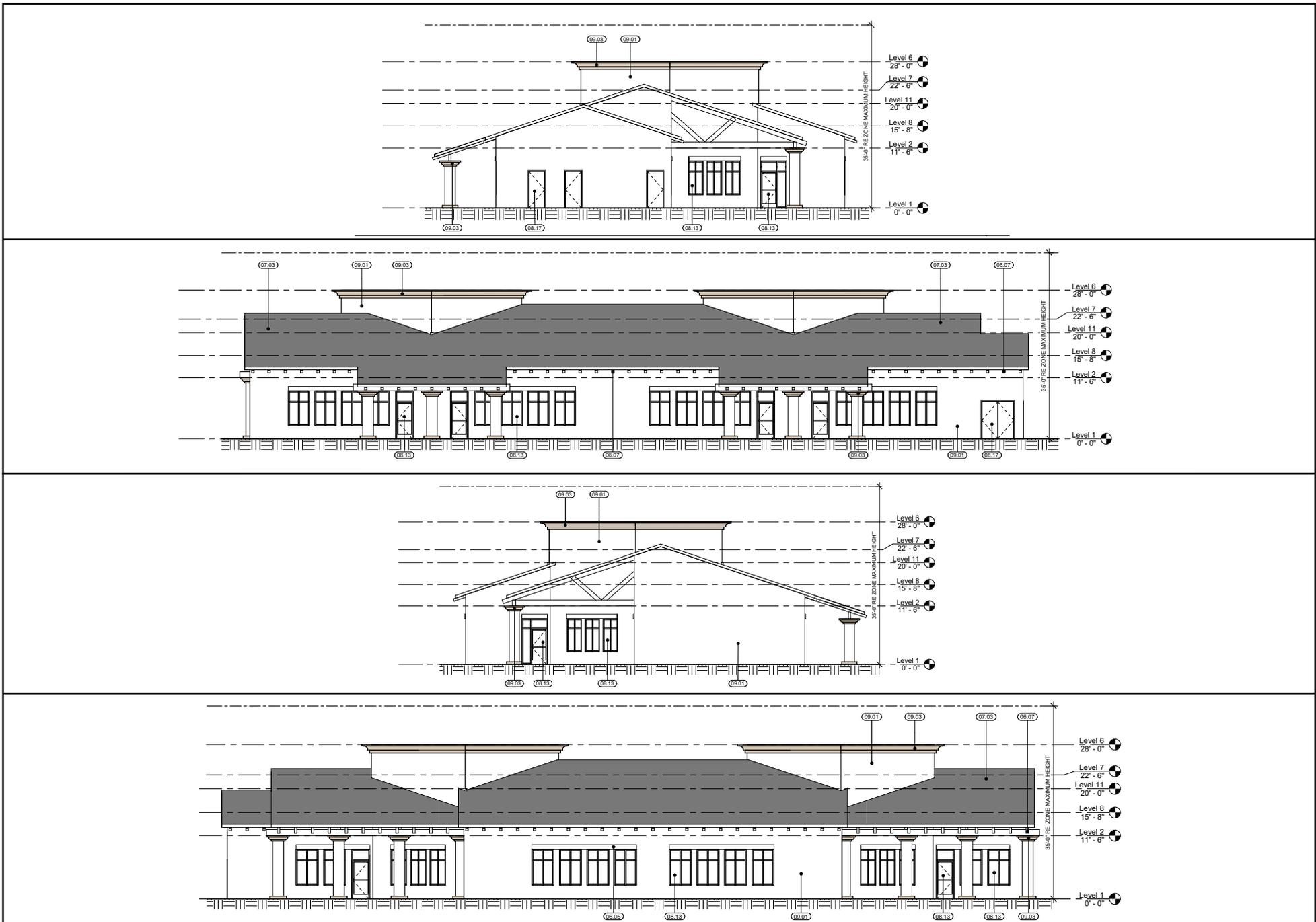


EXHIBIT 5e: Elevations (Classroom Building 5)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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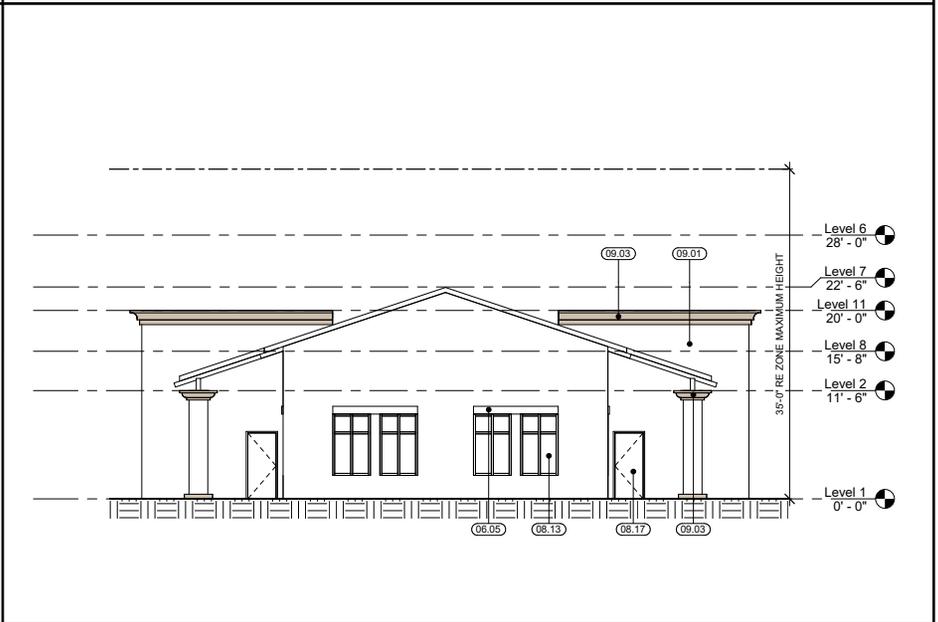
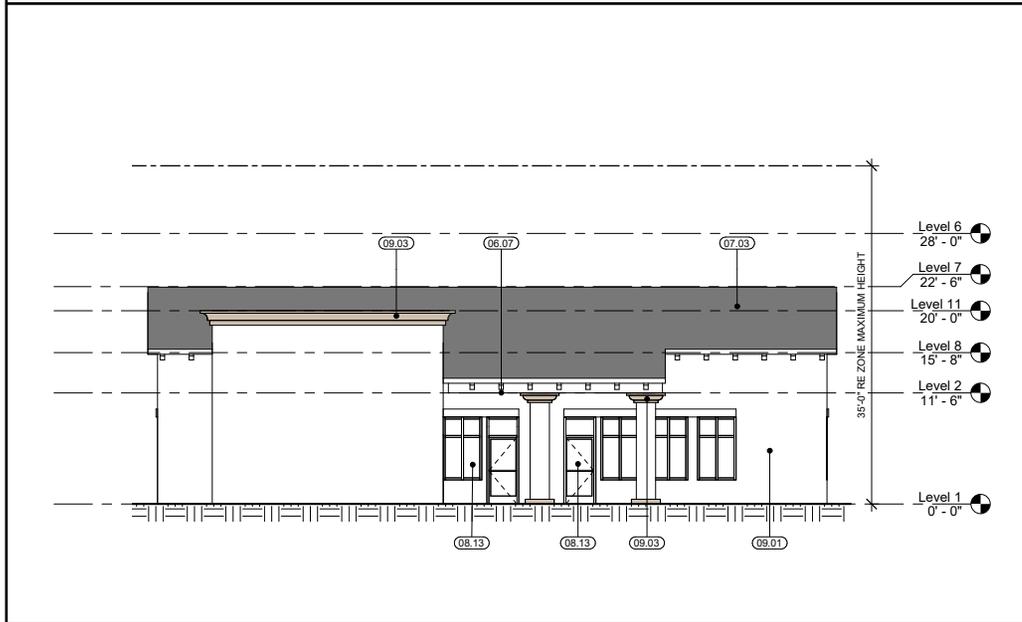
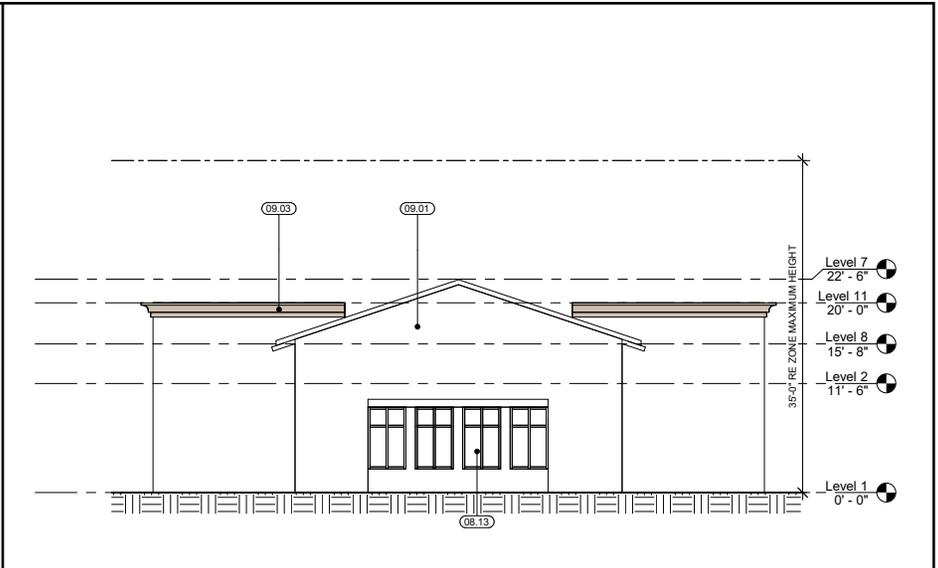


EXHIBIT 5f: Elevations (Classroom Building 6)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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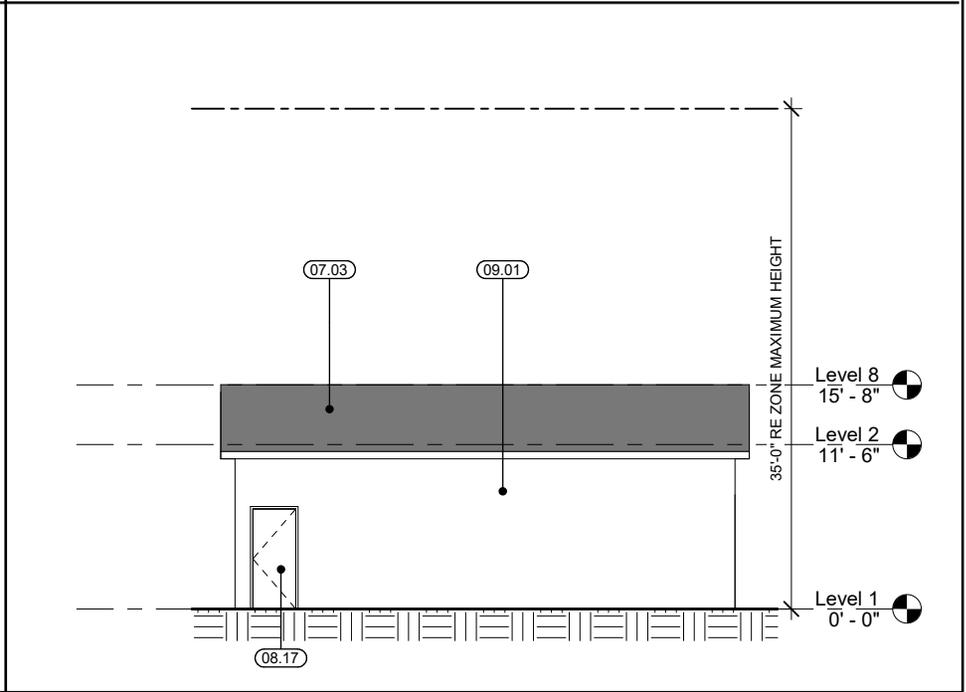
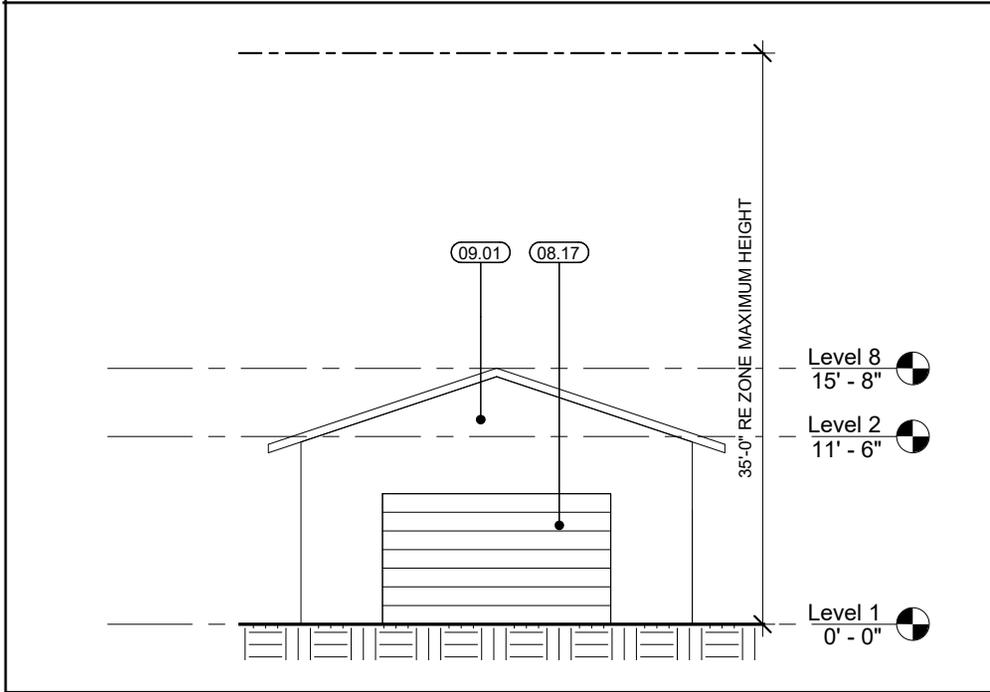
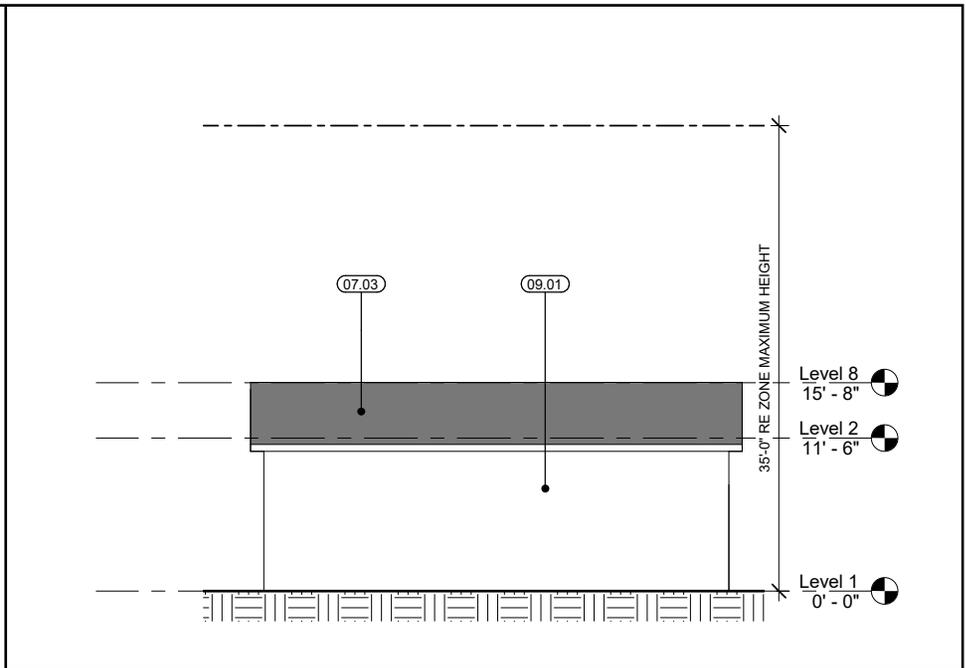
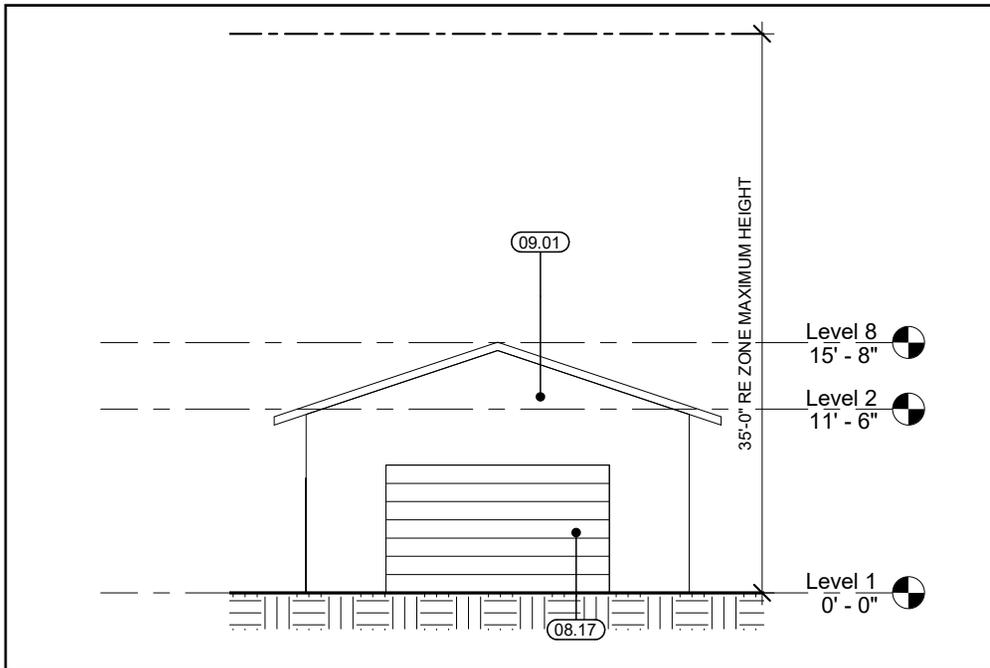


EXHIBIT 5g: Elevations (Maintenance Building 7)
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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3.0 INITIAL STUDY CHECKLIST

1. Project title:

The Holy Name of Jesus Catholic Church/School Project

2. Lead agency name and address:

City of Redlands
Development Services Department, Planning Division
35 Cajon Street
Redlands, CA 93273

3. Contact person and phone number:

Sean Reilly, Senior Planner
909.798.7555 ext. 2

4. Project location:

The Project site is located on the northwest corner of Dearborn Street and E. Lugonia Avenue, in the City of Redlands, California.

5. Project applicant's/sponsor's name and address:

Diocese of San Bernardino
1201 East Highland Avenue
San Bernardino, CA 92404

6. General plan designation:

Very Low Density Residential

7. Zoning designation:

Residential Estate District (R-E)

8. Other public agencies whose approval is required:

None

9. Project summary:

The Project site is a fenced 18.67-acre rectangular shaped site composed of two parcels. (Assessor's Parcel Numbers [APNs]: 0168-161-02-0000, -03-0000). Aerial imagery shows that the site is currently used for agricultural purposes, is zoned Residential Estate (R-E), and has a Very Low Density Residential General Plan Designation. The proposed Project would involve the construction of 8 buildings including a maintenance building, for a total of approximately 102,547square feet (SF) of church/school buildings. The Project would involve the consolidation of the two parcels into one parcel via merger/LLA. The proposed Project site would include 520 parking stalls that would be provided along the south and east portions of the site. Other amenities would include indoor and outdoor security lighting, a soccer/track and field facility with lighting, outdoor speakers, a playground, an

outdoor pavilion with seating, onsite and perimeter ornamental landscaping and fencing, outdoor basketball courts, sports courts, an underground water quality chamber located under the soccer/track and field facility, a stormwater basin, and frontage improvements. The soccer/track and field facility would be provided on the northern portion the Project site, just south of the stormwater basin. The three full-size outdoor basketball courts would be provided just southwest of the soccer/track and field facility. The outdoor pavilion would be located just west of the proposed Sanctuary and Parish Hall. Additionally, the Project is anticipated to be constructed in 4 phases.

10. Have California Native American tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to PRC Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

NOTE: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's (NAHC) Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.

The City of Redlands contacted tribes that previously requested that the City provide them with notice of City projects. Initial Consultation with the San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, Morongo Band of Missions Indians, Gabrieleno Band of Mission Indians – Kizh nation, and the Torres Martinez Desert Cahuilla Indians occurred on March 30, 2020. The San Manuel Band of Mission Indians, Soboba Band of Luiseno Indians, Morongo Band of Mission Indians, and the Gabrieleno Band of Mission Indians – Kizh Nation responded and requested further consultation. Consultation took place and the tribes agreed that the inclusion of Tribal Cultural Mitigation Measures (MMs) TCR-1 through TCR-4 would reduce impacts to less than significant. Consultation formally concluded on February 11, 2021. For detailed information on the MMs, please refer to Section 18, Tribal Cultural Resources.

3.1 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” as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Air Quality | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agricultural and Forestry Resources | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use/Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION:

On the basis of this initial evaluation (check one):

- 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.

CERTIFICATION:



Signature

June 7, 2022

Date

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4.0 ENVIRONMENTAL ANALYSIS

AESTHETICS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
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?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

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

Less Than Significant Impact. Scenic vistas in the City consist of the scenic corridors and views to and from the open spaces, canyonlands, hillsides, groves, and the San Bernardino Mountains. Scenic views are also found in the urbanized part of the City, including along scenic and historic drives. The Project proposes the development of nine buildings inclusive of a maintenance building. Building heights would be within the allowed 35’ feet maximum building height for the zone with the exception of the Sanctuary Building. The majority of the Sanctuary Building is proposed to be constructed at or below the maximum height limit for the zone. However, a steeple and cross will extend beyond the maximum height for the zone up to 66’ tall. There are exceptions in the Code to allow for architectural such as steeples and churches (18.152.030) to exceed the typical maximum building height for the zone. Refer to **Table 2** for a breakdown of the proposed building’s uses and **Exhibit 5a-5g, Elevations**.

Lugonia Avenue and Dearborn Street are not listed as scenic highways, drives, or historic streets within the City of Redlands General Plan. As such, the potential to impact a scenic vista is limited. Additionally, the only major views from and around the Project site includes view of the San Bernardino Mountains to the north. Considering that the building heights of the proposed structures are all within the maximum 35’ feet in height, with the exception of the Sanctuary

Building, the existing two-story single-family residential dwelling units to the north, south, east, and west would not be affected to continue to view the San Bernardino Mountains.

Additionally, as shown in **Table 3**, the proposed structures would have a minimum 25' foot front and rear setback, and a 10' foot side setback. Therefore, the proposed Project would not obstruct view of scenic vistas from public rights-of-ways and no scenic highways, or historic streets would be affected. Therefore, the change in views of the Project site from the surrounding area would not cause a significant impact on a scenic vista. Therefore, a less than significant impact will occur, and no mitigation is necessary.

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

Less than Significant Impact. The proposed Project site is located on E. Lugonia Avenue (State Route 38). According to the General Plan EIR, State Route 38 is located in and outside of the City of Redlands city limits. State Route 38 is included on the Caltrans list of eligible scenic highways.³ State Route 38 features views of forested mountainsides and distant views of the desert. However, this portion of State Route 38 is not visible from the Project site, nor has Caltrans formally designated it as a State Scenic Highway. The portion of State Route 38 where the Project site is located in an urban area generally zoned for residential dwelling units; refer to **Table 1**, to review the Project site and surrounding land uses.

Additionally, according to Caltrans, a portion of Interstate 10 (between Interstate 210 and Orange Street) located approximately 2.0 miles southwest of the Project site, is considered an Eligible State Scenic Highway, but it is not officially designated. There are also no historically significant buildings, trees, and/or rock outcroppings on the site that could be affected by the proposed development. Therefore, no adverse impacts on scenic resources, including resources within a State scenic highway, would result from the proposed Project's implementation. Less than significant impacts would occur, and no mitigation is required.

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. Refer to Response 1(a), above. The visual characteristics of the Project site would change from a farm field to a private Catholic church/private school development. The Project would be located in an urbanized area and the Project would be consistent with the zoning through the approval of a CUP to allow for the development of a church within the R-E zone. Because the Project's vicinity is urbanized, and the general area is rapidly developing in the same manner, the proposed Project is not anticipated to damage the scenic quality. Therefore, the change in visual character due to the proposed Project would not

³ Caltrans. 2020. *California Scenic Highways*. Available at <https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a>, accessed April 14, 2020.

significantly impact the site or the surrounding area. Therefore, a less than significant impact will occur, and no mitigation is necessary.

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. Generally, poorly designed lighting can affect the nighttime vision of drivers due to glare and can also affect neighbors during the nighttime hours. Existing sources of light and glare include street lighting and lights from residential uses in the vicinity. The Project would include the implementation of onsite safety and security lighting. However, although the Project would increase lighting within the site, the Project would comply with City standards for exterior lighting for new developments, as established by the City's General Plan Action 2-A.35, would reduce this impact to a less than significant level.

New lighting would also be reviewed by the City to ensure conformance with the 2019 California Building Code, Title 24 (California Code of Regulations), as well as the 2019 California Green Building Standard Code (Part 11 of Title 24, California Code of Regulations) such that only the minimum amount of lighting is used, and no light spillage occurs.

Moreover, the sports field lighting would be an additional source of nighttime lighting that may be visible to existing off-site residences and future onsite residences. The *City of Redlands Architectural Guidelines* (December 2009), as adopted by the City, requires nonresidential sites, to meet standards that reduce light pollution, ensure public safety, and avoid over lighting which the Project would comply with. Finally, the Project applicant would be required to prepare a lighting plan for approval by the City, prior to receiving a building permit. Therefore, adverse effects associated with light trespass and/or glare would be less than significant, and no mitigation is necessary.

Cumulative Impacts

The potential aesthetic impacts related to views, aesthetics, and light and glare are site-specific. As discussed above, Project-related impacts would be less than significant. Additionally, the type and intensity of development associated with the proposed Project site would be consistent with the area. The proposed Project plus cumulative developments would not change the appearance of the site and surrounding area. All future development projects would be conditioned to follow applicable local planning and design guidelines. Therefore, aesthetic impacts are not expected to be cumulatively considerable, and no adverse impacts would occur.

AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. 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?			X	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
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))?			X	
d) Result in the loss of forest land or conversion of forest land to non-forest use?			X	
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?			X	

Lilburn Corporation prepared a Land Evaluation and Site Assessment (LESA) for the Project dated April 2022; refer to Appendix A, Land Evaluation and Site Assessment.

Methodology

The LESA was prepared in accordance with the California Department of Conservation Office of Land Conservation (1997). LESA is a term used to define an approach for rating the relative quality of land resources based upon specific measurable features. The LESA system is a point-based approach composed of six factors. Two Land Evaluation factors are based upon soil resource quality. Four Site Assessment factors rate the value of the land for agricultural purposes based on the size of the site, water resource availability, surrounding agricultural lands and surrounding protected resource lands. Each factor is separately rated on a 100-point scale and then weighted relative to one another and combined, resulting in a single numeric score with a maximum attainable score of 100 points. It is this project score that becomes the

basis for a determination of a project's potential significance, based upon a range of established scoring thresholds.

- 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?*

Less than Significant Impact. The California Department of Conservation (DOC) delineates the Project site as Prime Farmland and Farmland of Statewide Importance.⁴ The designated farmland on-site is considered to be an important state and local agricultural resource. Of the site's total 18.67 acres, approximately 12.35 acres are designated as Farmland of Statewide Importance, approximately 6.32 acres are designated as Prime Farmland, approximately 0.21 acres are listed as Grazing Land, and 0.03 acre is considered Unique Farmland; refer to **Exhibit 8, Project Site Farmland Designations**. Development of the Project site would transition to a church with classrooms. This transition would therefore result in the conversion of Farmland of Statewide Importance and Prime Farmland to a nonagricultural use. Due to the existing land's classifications, a LESA was prepared to evaluate the potential for significant or adverse impacts associated with the loss of agricultural land. As such, the LESA analysis and conclusion has been utilized to respond to this threshold.

Land Evaluation

The Land Evaluation (LE) portion of the LESA Model focuses on two main components that are separately rated:

1. Land Capability Classification Rating: The Land Capability Classification (LCC) indicates the suitability of soils for most kinds of crops. Soils are rated from Class I to Class VIII. Soils having the fewest limitations receive the highest rating.
2. Storie Index Rating: The Storie Index provides a numeric rating (based upon a 100-point scale) of the relative degree of suitability or value of a given soil for intensive agriculture use. This rating is based upon soil characteristics only.

According to the United States Department of Agriculture (USDA) survey, Tujunga loamy sand (TuB) (0-5% slopes) is one of the main soil types occurring on approximately 12.56 acres of the Project site. This soil is a Capability Class III-e-4 soil with a Storie Index rating of 45.22. According to the Natural Resources Conservation Service (NRCS), Class III soils have severe limitations which minimizes the selection of plants, requires special conservation practices, or both. The subclass "e" designates that the main limitation is risk of erosion; thus, good management practices are needed to keep erosion to a minimum. Capability units in California are given Arabic numbers that suggest the chief kind of limitations responsible for placement of the soils in the capability class and subclass. In this case, subclass 4 marks a limitation caused by coarse soil texture or excessive gravel.

⁴ DOC. 2020. *California Important Farmland Finder*. Available at <https://maps.conservation.ca.gov/dlrp/ciff/>, accessed on April 14, 2020.

Another soil type on-site is the Hanford coarse sandy loam (HaC) that occurs on approximately 6.85 acres of the Project site. The soil is a Capability Class II-e-1 soil with a Storie Index rating of 86. According to the NRCS, Class II soils have moderate limitations that reduce the choice of plants, and require special conservation practices, or both. The subclass "e" designates that the main limitation is risk of erosion; thus, good management practices are needed to keep erosion to a minimum. The chief limitation is marked as subclass 1, which denotes a potential erosion hazard.

The remaining soil type on-site is the Tujunga gravelly loamy sand (TvC) on approximately 0.03 acres of the site. The soil is a Capability Class IVs-4 soil with a Storie Index rating of 34. According to the NRCS, Class IV soils have severe limitation that make them generally unsuited to cultivation and restrict their use largely to pasture or range, woodland or wildlife habitat. Subclass "s" notes that limitation is mainly due to shallow, droughty, or stony potential. The Arabic number 4 suggests that the chief limitation is caused by coarse soil texture or excessive gravel.

The LESA Model assigns ratings to each land capability class and multiplies that number by the proportion of the project area that contains each soil class to find the Land Capability Classification score. A Storie Index score is calculated by multiplying the proportion of the Project within each soil type by the soil type's Storie Index rating. **Table 4, Land Capability Classification (LCC) and Storie Index Score**, provides a summary of the Land Evaluation (LE) scores. In this case, Class IIe-1 soils have a LCC Rating of 90, Class IIIe-4 soils have an LCC rating of 70 and Class IVs-4 have a LCC rating of 40. Since the Project site is composed of three different capability classes and three different corresponding Storie Indexes, the sum of these provides a total score that reflects the portion and occurrence of the soil map units on the Project site.

Table 4: Land Capability Classification (LCC) and Storie Index Score

A	B	C	D	E	F	G	H
Soil Map Unit	Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Score
TuB	12.56	0.646	III-e4	70	45.22	70	45.22
HaC	6.85	0.352	IIe-1	90	31.68	86	30.27
TvC	0.03	0.002	IVs-4	40	0.08	34	0.068
Totals	19.44	1.0		LCC Total Score	76.98	Storie Index Total Score	75.56

Source: Lilburn Corporation. April 2022. *Land Evaluation and Site Assessment, Table 1.*

Site Assessment

The California LESA Model includes the following four Site Assessment (SA) factors that are separately rated:

- Project Size Rating
- Water Resources Availability Rating

- Surrounding Agricultural Land Rating
- Surrounding Protected Resource Land Rating

A. Project Size Rating

The Project size rating recognizes the role that farm size plays in the viability of commercial agricultural operations. In general, larger farming operations provide greater flexibility in farm management and marketing decisions. Further, they tend to have a greater economic impact through direct employment and upon supporting industries that include farm equipment operators, fertilizer/pesticide vendors and food processors.

To define agricultural productivity, the size of the farming operation is considered as well as the proportion of different quality lands comprising the total acreage. Lands with higher quality soils facilitate greater management and cropping flexibility and have the potential to provide higher economic return per acre unit than land with lower quality soils. Thus, rather than rely upon a single acreage figure in the Project Size rating, the Project is divided into three acreage groupings based upon possible LCC ratings. Under the Project Size rating, relatively fewer acres of high-quality soils are required to achieve a maximum Project Size score. Alternatively, a maximum score on lesser quality soils could also achieve a maximum Project Size score which was determined to be 10 for the Project; refer to **Table 5, Final LESA Score Sheet Summary**.

B. Water Resources Availability Rating

The Water Resource Availability Rating is based upon the availability of water sources that supply the Project site and then determining whether restrictions in supply are likely to take place in years characterized as periods of drought and non-drought.

The Project site is currently served by a well water; additionally, a municipal water supply is provided by the City with distribution mains in Lugonia Avenue and Dearborn Street. As referenced, without water for irrigation purposes, the soils would not achieve the Class II, III and IV ratings. For the purposes of this discussion, it is assumed an uninterrupted supply of water is available for irrigation. Thus, the site was given the highest Water Resource Availability Rating (i.e., 100) due to the consistent water availability delivery. The Project site has no known physical or economic restrictions that could alter water supply during either drought or non-drought years. **Table 5** summarizes the Water Resources Availability score.

C. Surrounding Agricultural Land Rating

The Surrounding Agricultural Land Rating is designed to provide a measurement of the level of agricultural land use within the Zone of Influence (ZOI) of the Project site. The “Zone of Influence” is defined as land within one-quarter mile from the project site boundary. Parcels that are intersected by the 0.25-mile buffer are included in their entirety. Based upon the percentage of agricultural land in the ZOI, the project site is assigned a Surrounding Agricultural Land score. The LESA Model rates the potential significance of the conversion of an agricultural parcel that has a large proportion of surrounding land in agricultural production more highly than one that has a relatively small percentage of surrounding land in agricultural production.

Land to the east is composed of a residential tract with minimal buffering agriculture as part of the development. Property to the south of the Project site is entirely residential. Land to the west is graded and permitted for a residential development, and land to the north includes both residential and agricultural uses. Per the LESA Instruction Manual, because less than 40 percent of the surrounding land is used for agricultural production, the Surrounding Agricultural Land Score for the proposed Project is zero, as shown in **Table 5**.

D. Surrounding Protected Resource Land Rating

The Surrounding Protected Resource Land Rating is an extension of the Surrounding Agricultural Land Rating and is scored in a similar manner. Protected resource lands are those lands with long-term use restrictions that are compatible with or supportive of agricultural uses of land. Included among them are the following:

- Williamson Act contracted land.
- Publicly owned lands maintained as park, forest, or watershed resources; and
- Lands with agricultural, wildlife habitat, open space, or other natural resource easements that restrict the conversion of such land to urban or industrial uses.

Approximately ten acres of land in protected land resources (i.e., under Williamson Act Contracts) are located within 0.25 miles of the Project site. This area comprises approximately 3.7 percent of the total acreage in the ZOI (277 acres). According to the LESA Instruction Guide, since less than 40 percent of the surrounding land is protected, the Surrounding Protected Resource Land Rating score is zero.

Table 5: Final LESA Score Sheet Summary

	Factor Rating (0-100 Points)	Factor Weighting (Total = 1.0)	Weighted Factor Rating
Land Evaluation (LE)			
1. Land Capability Classification (LCC Rating)	76.98	0.25	19.24
2. Storie Index Rating	75.56	0.25	18.89
		LE Sub-Score	38.13
Site Assessment (SA)			
1. Project Site Rating	10	0.15	1.5
2. Water Resource Availability Rating	100	0.15	15
3. Surrounding Agricultural Land Rating	0	0.15	0
4. Surrounding Protected Resource Lands Rating	0	0.005	0
		SA Sub-score	16.50
		TOTAL	54.63
Source: Lilburn Corporation. April 2022. <i>Land Evaluation and Site Assessment, Table 5.</i>			

The LESA Model is weighted so that one-half of the total score is derived from the LE and one-half from the SA. As shown in **Table 5**, the LE sub-score is 38.13, while the SA sub-score is 16.5. The final LESA score is 54.63. As discussed in Section IV of the LESA Instruction Manual, a final LESA score between 40 and 59 is considered significant only if both the LE and SA sub-scores are each greater than or equal to 20 points. In this case, the LE sub-score is greater than 20 points (38.13); however, the SA sub-score is less than 20 (16.5). Thus, based on the LESA Model findings. Therefore, the Project would have a less than significant impact on agricultural resources, and no mitigation is required.

- 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?*

Less than Significant Impact (b-d). According to the California Department of Conservation, the Project sites is not part of a Williamson Act contract. In addition, the Project is consistent with the City's land use designation and zoning district which are Very Low Density Residential (VLDR) and Residential Estate (R-E), respectively, and the Project would not require a zone change or General Plan amendment; refer to **Exhibit 3**. the proposed Project would be consistent with the site's zoning with the approval of a CUP. Lastly, no forestry resources exist on or adjacent to the Project Site. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less than Significant Impact. Refer to Section 2, Response (a). As noted above, the Project would convert farmland to non-agricultural land. However, because the City of Redlands has

zoned this site for residential use, consistent with the general development of the area and because the LESA Model concluded that a less than significant impact to agricultural land would occur. Therefore, a less than significant impact on agricultural land would occur, and no mitigation is necessary.

Cumulative Impacts

Based on the LESA Model, significant impacts to agricultural resources were determined to be less than significant because the site does not contain the necessary aspects typically associated to high quality/productivity land resources based on the specific LESA measurable features. Additionally, due to the existing soil types (refer to Exhibit 8), the Project site offers soils that are prone to erosion, require a lot of care and maintenance, and overall do not allow for planting a wide variety of crops. Furthermore, as shown in **Table 5**, the Project scored an overall 54 points out of the potential 100 points and scored relatively low for the Site Assessment.

According to the City's General Plan 2035 EIR, loss of agricultural land as a result of the implementation of General Plan 2035, including the conversion of Prime Farmland to non-agricultural use, is expected to occur over the next 20 years. This includes the development of the Project site as shown in the site's land use designation and zoning district which are Very Low Density Residential (VLDR) and Residential Estate (R-E), respectively; also refer to **Exhibit 3, Existing Land Use and Zoning Designation**.

Prime and Unique Farmland, as well as Farmland of Statewide Importance, is scattered throughout the city, mostly on the periphery where development is less intense. Most Prime Farmland and Farmland of Statewide Importance located is located in Crafton and is used for citrus production. Crafton is located approximately 2.0 miles southeast of the Project site. Unique and Prime Farmland is also clustered in the San Timoteo Canyon along San Timoteo Canyon Road. San Timoteo is located approximately 4.0 miles south of the Project site. North of the city, near the Santa Ana River Wash, are areas of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance which is where the Project site is generally located.⁵

As noted in the General Plan 2035 and the General Plan Draft Environmental Impact Report (EIR) 2017, it is expected that Prime Farmland, Farmland of Statewide Importance, and Unique Farmland would be converted to urban uses within the City. Despite significant impacts anticipated on farmland, the General Plan 2035 was designed to provide for the expected growth in Redlands over the next 20 years. The conversion of farmland as a result of the implementation of the General Plan 2035 was determined to be *essential* for the City's projected growth expected to occur under the General Plan 2035.

This will be a common scenario in the coming years as the City develops and more agricultures uses are transition to urban uses. Land use policies, such as the urban growth boundary and 5-acre lot minimums for the Rural Living land use designation, aim to preserve agricultural land in the City as a whole by promoting infill development in urbanized portions of the City and

⁵ DEIR. July 21, 2021. Chapter 3.2: Agricultural Resources, page 3.2-11.

allowing for larger and more sustainable concentrations or agricultural uses outside of City limits. The Project site is located in an urbanized portion of the City where the natural development of the area is greatly urbanized and built-up; as shown in **Table 1**, the surrounding uses to the north, south, east and west are single-family residential and some agricultural areas; also refer to **Exhibit 2**.

The Project is consistent with the City's land use designation and zoning district which are Very Low Density Residential (VLDR) and Residential Estate (R-E), respectively; also refer to **Exhibit 3**. The Project would not require a zone change or General Plan amendment.

Moreover, each individual project in the City is subject to analyzing its specific potential impact(s) to agricultural resources within the City. As such, new projects would be subject to adequately mitigate project specific impacts to agricultural resources, if deemed necessary. As such, cumulative impacts to agricultural resources would be less than significant.



EXHIBIT 8: Project Site Farmland Designations
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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AIR QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district</p> <p>4. be relied upon to make the following determinations. Would the project:</p>				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
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?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people)?				X

ECORP Consulting, Inc., prepared an Air Quality and Greenhouse Gas Assessment technical study for the Project dated May 2020; refer to Appendix B, Air Quality and Greenhouse Gas Assessment.

Air Pollutants of Concern

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O₃), coarse particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in **Table 6, Criteria Air Pollutants – Summary of Common Sources and Effects**.

Table 6: Criteria Air Pollutants- Summary of Common Sources and Effects

Pollutant	Major Man-Made Sources	Human Health and Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely, a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO ₂	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.

Pollutant	Major Man-Made Sources	Human Health and Welfare Effects
O ₃	Formed by a chemical reaction between reactive organic gases (ROG) and nitrogen oxides (NO _x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM ₁₀ & PM _{2.5}	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO ₂	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Ambient Air Quality

O₃, PM₁₀, and PM_{2.5} are the pollutants most potentially affecting the Project region. Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. The California Air Resources Board (CARB) maintains more than 60 monitoring stations throughout California. The Redlands-Dearborn air quality monitoring station (500 N. Dearborn St., Redlands, CA), located approximately 0.9 mile south of the Project site, is the closest station to the site. The Redlands-Dearborn monitoring station monitors ambient concentrations of O₃ and PM₁₀. The nearest air quality monitoring station that monitors ambient concentrations of PM_{2.5} is the San Bernardino-4th Street monitoring station (24302 4th St., San Bernardino, CA), 19 miles northwest of the Project site. Ambient emission concentrations will vary due to localized variations in emission sources and climate

and should be considered “generally” representative of ambient concentrations in the Project area. **Table 7, Summary of Ambient Air Quality**, summarizes the published data concerning O₃, PM_{2.5}, PM₁₀ since 2016 from the Redlands-Dearborn and San Bernardino-4th street monitoring stations for each year that the monitoring data is provided. As previously described, O₃, PM_{2.5}, and PM₁₀ are the pollutants most potently affecting the Project region.

Table 7: Summary of Ambient Air Quality

Pollutant Standards	2016	2017	2018
O₃			
Max 1-hour concentration (ppm)	0.145	0.156	0.136
Max 8-hour concentration (ppm) (state/federal)	0.120/0.119	0.135/0.135	0.115/0.114
Number of days above 1-hour standard (state/federal)	55/3	79/9	53.4
Number of days above 8-hour standard (state/federal)	100/97	115/114	98/94
PM₁₀			
Max 24-hour concertation (state/federal)	72.8/72.0	77.0/77.0	70.1/74.2
Number of days above 24-hour standard (state/federal)	0	11.3/0	1.5/0
PM_{2.5}			
Max 24-hour concertation (state/federal)	53.5/53.5	38.2/38.2	30.1/30.1
Number of days above 24-hour standard (state/federal)	3.0	3.3	0

The U.S. Environmental Protection Agency (USEPA) and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O₃, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O₃, PM₁₀, PM_{2.5} is based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the South Coast Air Basin (SoCAB) is included in **Table 8, Attainment Status of Criteria Pollutants in the South Coast Air Basin**.

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃, PM₁₀, and PM_{2.5} (CARB 2018).

Table 8: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State Designation	Federal Designation
O ₃	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Unclassified/Attainment

Regulations and Significance Criteria

Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the U.S. Supreme Court found that carbon dioxide (CO₂) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO₂.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criterion air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. **Table 6** lists the federal attainment status of the SoCAB for the criteria pollutants.

State

California Clean Air Act

The California CAA (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial

equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The 2016 Air Quality Management Plan (2016 AQMP) is the SIP for the SoCAB. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin that are under South Coast Air Quality Management District's (SCAQMD) jurisdiction. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local level. These agencies (USEPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS.

Local

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for San Bernardino County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project site. The agency's primary responsibility is ensuring that the federal and state ambient air quality standards are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants,

responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction. The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the proposed Project:

- Rule 201 & Rule 203 (Permit to Construct & Permit to Operate) – Rule 201 requires a “Permit to Construct” prior to the installation of any equipment “the use of which may cause the issuance of air contaminants . . .” and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- Rule 402 (Nuisance) – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material that 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. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of animals.
- Rule 403 (Fugitive Dust) – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques are summarized below.
 - a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - b) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - c) All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- Rule 1113 (Architectural Coatings) – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

- Rule 1401 (New Source Review of Toxic Air Contaminants) – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

South Coast Air Quality Management District Thresholds

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would:

- Conflict with or obstruct implementation of any applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in **Table 9, SCAQMD Regional Significance Thresholds – Pounds per Day**.

Table 9: SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas (ROG)	75	55
Carbon Monoxide (CO)	550	550
Nitrogen Oxide (NO ₂)	100	55
Sulfur Oxide (SO ₂)	150	150
Coarse Particulate Matter (PM ₁₀)	150	150
Fine Particulate Matter (PM _{2.5})	55	55

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. Redlands is located within SCAQMD SRA 35 (East San Bernardino Valley). **Table 10, Local Significance Thresholds (Construction / Operations)**, shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 35 with sensitive receptors located within 25 meters of the Project site.

Table 10: Local Significance Thresholds (Construction / Operations)

Project Size	Pollutant (pounds per day)			
	NO _x Construction/ Operations	CO Construction/ Operations	PM ₁₀ Construction/ Operations	PM _{2.5} Construction/ Operations
1 Acre	118/118	775/775	4/1	4/1
2 Acre	170/170	1,174/1,174	7/2	5/2
3 Acre	270/270	2,075/2,075	14/4	9/3

Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Methodology

Air quality impacts were assessed in accordance with methodologies recommended by CARB and the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were primarily calculated using CalEEMod model defaults for San Bernardino County. Construction of the proposed Project is anticipated to occur in three phases occurring over the course of ten years. Based on predictions from the Applicant, the Parish Hall is to be completed in 2022, the Sanctuary is to be completed in 2028, and the school is to be completed in 2031. For the

purposes of modeling the proposed Project emissions conservatively, a total Project buildout year of 2023 was utilized, as opposed to the year 2031. This is conservative as the CalEEMod modeling software accounts for greater energy-efficiency in future years associated with land use projects. It is likely that the Parish Hall will be completed and become operational in 2023. However, by employing a 2023 buildout year in the emissions model, CalEEMod will generate results utilizing construction and operation equipment and vehicles meeting current standards rather than more efficient standards anticipated for the future year, 2031. As such, the result is more conservative and gives adequate representation to earlier construction and operational years.

Operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates from Ganddini Group, Inc. (2020). Due to the nature of the proposed Project as a church and a school, the County average vehicle fleet-mix default generated by CalEEMod was adjusted to reflect a maximum of two percent heavy-duty trucks visiting the site.

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

Less Than Significant Impact.

Conflict with the 2016 Air Quality Management Plan

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans). The Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As shown in **Tables 9, 12, and 11** the proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operations. Therefore, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As shown in **Tables 9 and 11**, the Proposed Project would be below the SCAQMD regional thresholds for construction and operations. Since the Project would result in less-than-significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Redlands. Specifically, SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's 2016 RTP/SCS provides socioeconomic forecast projections of regional

population growth. The City's General Plan is referenced by SCAG in order to assist forecasting future growth in Redlands.

The proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the General Plan as Very Low Density Residential. According to the City's General Plan, land use classifications contained in the General Plan are intentionally broad enough to avoid duplicating the City's zoning regulations. The City's Zoning Ordinance and the Zoning Map further delineate and prescribe specific uses of the land and associated development regulations. More than one zoning district may be consistent with a single General Plan land use category. For instance, the Very Low-Density Residential designation allows for several different zoning districts including the A-2 – Estate Agricultural District, R-R – Rural Residential District, R-A – Residential Estate District, R-E – Residential Estate District, R-S – Residential Suburban District, R-S – Suburban Residential District, and the R-1 – Single-Family Residential District. The Project site is zoned R-E - Residential Estate District. The Redlands Zoning Code (Title 18 of the City Municipal Code) states that churches as well as public and private educational institutions are allowed in the R-E District, subject to a conditional use permit issued by the City. As such, the Project is proposing land uses consistent with the Zoning District applied to the site, and the Zoning District is in turn consistent with that allowed under the General Plan designation. Thus, the proposed Project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan and RCPG. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the proposed Project would be consistent with the projections.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge, from any source whatsoever, in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. As such, the proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP. Therefore, a less than significant impact would occur, and no mitigation is required.

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.

Construction Emissions

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive particulate matter emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust-control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust. The following SCAQMD Rule 403 requirements were applied as mitigation measures in CalEEMod: apply soil stabilizers to unpaved roadways, replace groundcover on disturbed areas, water exposed soil surfaces three times per day, clean paved roadways, and reduce vehicle speeds on unpaved roads to 15 miles per hour (mph).

Construction-generated emissions associated with the proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix B for more information regarding the construction assumptions, including construction equipment

and duration, used in this analysis. Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in **Table 9**. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

As shown in **Table 11**, *Construction-Related Emissions (Regional Significance Analysis)*, emissions generated during Project construction would not exceed the SCAQMD's regional thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Table 11: Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)
2020	9.76	46.46	53.01	0.14	20.31	11.87
2021	9.24	41.51	51.11	0.13	7.091	2.91
<i>SCAQMD Threshold</i>	75	100	550	150	150	55
Exceed SCAQMD Threshold?	No	No	No	No	No	No
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.						
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; watering exposed surfaces three times daily; watering all haul roads twice daily; applying soil stabilizers on unpaved roads; replacing groundcover on disturbed area; and limiting speeds on unpaved roads to 15 mph. Reduction percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Building construction, paving, and painting assumed to occur simultaneously.						

Operational Emissions

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM₁₀, PM_{2.5}, CO, and SO₂ as well as ozone precursors such as ROG and NO_x. Project-generated increases in emissions would be predominantly associated with motor vehicle use.

Long-term operational emissions attributable to the Project are identified in **Table 12**, *Equipment-Specific Grading Rates*, and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 12: Equipment-Specific Grading Rates

Construction Phase	Equipment Type	Acres Graded/Distributed per 8-Hour Day	Equipment Quantity	Operating Hours per Day	Acres Graded per Day
Site Preparation	Rubber Tired Dozers	0.5	3	8	1.5
	Tractors/Loaders/Backhoes	0.5	4	8	2.0
	Total				3.5
Grading	Excavators	0.0	2	8	0.0

Construction Phase	Equipment Type	Acres Graded/Distributed per 8-Hour Day	Equipment Quantity	Operating Hours per Day	Acres Graded per Day	
	Rubber Tire Dozer	0.5	1	8	0.5	
	Graders	0.5	1	8	0.5	
	Scrapers	1.0	2	8	2.0	
	Tractors/Loaders/backhoes	0.5	2	8	1.0	
	Total				4.0	
	Maximum Total Acres Graded per Day					4.0

As shown in **Table 13**, *Operational-Related Emissions (Regional Significance Analysis)*, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

Table 13: Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Summer Emissions						
Area	2.61	0.00	0.08	0.00	0.00	0.00
Energy	0.05	0.41	0.35	0.00	0.03	0.03
Mobile	3.33	11.30	39.12	0.17	19.11	5.16
Total	5.99	11.71	39.55	0.17	19.14	5.19
SCAQMD Regional Significance Threshold?	55	55	550	150	150	55
Exceed SCAQMD Threshold	No	No	No	No	No	No
Winter Emissions						
Area	2.61	0.00	0.08	0.00	0.00	0.00
Energy	0.05	0.41	0.35	0.00	0.03	0.03
Mobile	2.82	11.37	33.64	0.15	19.11	5.17
Total	5.47	11.78	34.07	0.16	19.14	5.19
SCAQMD Regional Significance Threshold?	55	55	550	150	150	55
Exceed SCAQMD Threshold	No	No	No	No	No	No
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.						
Vehicle fleet mix upon operation is anticipated to contain a maximum of two percent heavy-duty trucks.						

As identified in **Table 6**, the SoCAB is listed as a nonattainment area for federal O₃ and PM_{2.5} standards and is also a nonattainment area for the state standards for O₃, PM₁₀, and PM_{2.5}. O₃ is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. Particulate matter can adversely affect the human respiratory system. As shown in **Table 11**, the proposed Project would result in increased emissions of the O₃ precursor pollutants ROG and NO_x, PM₁₀, and PM_{2.5}, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the

SCAQMD is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects. Therefore, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

The cumulative setting for air quality includes Redlands and the SoCAB. The SoCAB is designated as a nonattainment area for state standards of O₃, PM₁₀, and PM_{2.5}. The region is also designated as a nonattainment area for federal standards of O₃ and PM_{2.5} (CARB 2018). Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the air basin.

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the federal CAA and CCAA. As discussed earlier, the proposed Project would be consistent with the 2016 AQMP, which is intended to bring the SoCAB into attainment for all criteria pollutants. In addition, the SCAQMD recommends that any given project's potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project will not exceed the applicable SCAQMD regional thresholds for construction or operational-source emissions.

c) *Expose sensitive receptors to substantial pollutant concentrations?*

Less Than Significant Impact.

Localized Construction Significance Analysis

The nearest sensitive receptors to the Project site are the residences directly contiguous to the western boundary of the Project site. In order to identify impacts to sensitive receptors, the SCAQMD recommends addressing LSTs for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD

provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance). The LST methodology assists lead agencies in analyzing localized impacts associated with Project-specific level proposed projects.

For this Project, the appropriate SRA for the localized significance thresholds is the East San Bernardino Valley source receptor area (SRA 35) as this source receptor area includes the Project site. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The proposed Project would disturb ±18.6 acres during construction. As previously described, the SCAQMD has produced look-up tables for projects that disturb ≤ five acres daily. The SCAQMD has also issued guidance on applying the CalEEMod emissions software to LSTs for projects greater than five acres. Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 12, *Equipment-Specific Grading Rates***, is used to determine the maximum daily disturbed-acreage for comparison to LSTs.

As shown in **Table 10**, Project implementation could potentially disturb up to 3.5 acres daily during the site preparation phase of construction, and 4.0 acres daily during the grading phase of construction. Thus, the LST threshold value for a 3.5-acre construction site were sourced from the LST lookup tables for site preparation and the LST threshold value for a 4.0-acre construction site were sourced from the LST lookup tables for Project grading activities.

The nearest sensitive receptors to the Project site are the residences directly contiguous to the western boundary of the Project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Notwithstanding, the SCAQMD Methodology explicitly states: It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

The SCAQMD's methodology clearly states that "off-site mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered. **Table 14, *Construction-Related Emissions (Localized Significance Analysis)***, presents the results of localized emissions during the grading phase of construction, which is construction activity that disturbs the most acreage daily. The LSTs reflect a maximum disturbance of 3.5 acres daily during site preparation and four acres daily during grading activities at 70 meters for the proposed Project.

Table 14: Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Site Preparation	40.50	21.15	2.04	3.29
<i>SCAQMD Localized Significance Threshold (3.5 acres of disturbance)</i>	220.00	1,624.50	10.50	7.00
Site Grading	46.40	30.88	1.99	1.83
<i>SCAQMD Localized Significance Threshold (4.0 acres of disturbance)</i>	236.67	1,774.67	11.67	7.67
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs.
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; watering exposed surfaces three times daily; watering all haul roads twice daily; applying soil stabilizers on unpaved roads; replacing groundcover on disturbed area; and limiting speeds on unpaved roads to 15 mph. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.
Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.
Building construction, paving, and painting assumed to occur simultaneously.

Table 13 shows that the emissions of these pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The proposed Project does not include such uses. Therefore, in the case of the proposed Project, the operational phase LST protocol does not need to be applied.

Carbon Monoxide Hotspots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high-traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service (LOS) during the peak commute hours. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and

implementation of control technology on industrial facilities, CO concentrations in the Project vicinity have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The analysis prepared for CO attainment in the SCAQMD 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County can be used to demonstrate the potential for CO exceedances. The SCAQMD CO hot-spot analysis was conducted for four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. The Los Angeles County Metropolitan Transportation Authority evaluated the LOS in the vicinity of the Wilshire Boulevard/Veteran Avenue intersection and found it to be LOS E at peak morning traffic and LOS F at peak afternoon traffic (LOS E and F are the two least efficient traffic LOS ratings). Even with the inefficient LOS and volume of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992).

According to the estimated traffic trip generation rates from Ganddini Group, Inc. (2020), the Project is anticipated to generate 2,818 daily trips on average. Because the proposed Project would not result in 100,000 vehicles per day at any intersection, there is no likelihood of the Project traffic exceeding CO values.

Construction-Related DPM

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary TAC of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Accordingly, DPM is the focus of this discussion.

Based on the emission modeling conducted the maximum construction-related annual emissions of PM_{2.5} exhaust, considered a surrogate for DPM, would be 1.88 pounds per day (see Appendix B) during construction activity. PM_{2.5} is considered a surrogate for DPM because more than 90 percent of DPM is less than one microgram in diameter and therefore is a subset of PM under 2.5 microns in diameter (i.e., PM_{2.5}). Most PM_{2.5} derives from combustion, such as use of gasoline and diesel fuels by motor vehicles. Furthermore, even during the most intense month of construction, emissions of DPM would be generated from different locations on the Project site, rather than a single location, because different types of construction

activities (e.g., site preparation, paving, building construction) would not occur at the same place at the same time.

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-, 30-, or nine-year exposure period; further, such assessments should be limited to the period/duration of construction activities associated with the proposed Project. Construction of the proposed Project is anticipated to occur intermittently in three phases over the course of 10 years; however, would not occur continuously over this time period.

Therefore, considering the relatively low mass of DPM emissions that would be generated during even the most intense season of construction, the fact that construction would not last as long as the minimum duration of exposure from which to calculate health risk, and the relatively short duration that construction activities would occur at a single location on the 18.6-acre property, allowing for dispersion of air pollutants, construction-related TAC emissions would not expose sensitive receptors to substantial concentrations of air toxics.

Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: Further-Reduced Health Risk. As shown in **Table 12** the localized emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO₂, CO, PM₁₀, and PM_{2.5} demonstrates that the Project would likely not adversely impact the neighboring residential receptors.

Operational Health Risk Assessment

Operation of the proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project. Nor would the Project attract mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the Project would not be a source of TACs and there would be no impact as a result of the Project during operations. Therefore, a less than significant impact would occur, and no mitigation is required.

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

No Impact. Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory, and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass. Therefore, no impact would occur, and no mitigation is required.

BIOLOGICAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?				X
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?				X
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?				X
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?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
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?				X

This section is based on the General Biological Resources Report and Habitat Assessment, prepared by Jericho Systems, in May 2020; refer to Appendix C, General Biological Report and Habitat Assessment.

- 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?*

No Impact. The Project sites is heavily disturbed and are currently utilized for active agricultural cultivation. According to the Habitat Assessment (Appendix C), no sensitive habitats occur onsite. No U.S. Fish and Wildlife Service (USFWS) designated critical habitat (wildlife or vegetation) occurs onsite, nor within the vicinity of the Project site. The only wildlife observed during the survey was a Northern mockingbird (*Mimus polyglottos*). No other wildlife including amphibians, reptiles, birds, or mammals were found onsite. Additionally, the site does not support habitat for the following State and federally listed species: Santa Ana River woollystar (*Eriastrum densifolium var santorum*), Slender-horned spinyflower (*Dodecahema leptoceras*), Southwestern willow flycatcher (*Empidonax traillii extimus*), and the Least Bell's vireo (*Vireo bellii pusillus*). Similarly, the Project site does not support habitat for the following State and federally listed species: San Bernardino kangaroo rat, Coastal California gnatcatcher, and the Burrowing owl. Therefore, no biological resources exist onsite. The site does not contain habitat designated as candidate, sensitive, and/or special status species. Therefore, no impact would occur, and no mitigation is required.

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?*

No Impact. No naturally occurring nor man made water features occur onsite. No riparian habitat or other sensitive natural community previously identified in local or regional plan, policies, regulation or by the California Department of Fish and Game or USFWS occurs onsite. Therefore, no impact would occur, and no mitigation is required.

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. The jurisdictional delineation analysis results show that the Project site does not host any state or federally protected wetlands, marsh, vernal pool, etc. No naturally occurring nor man made water features occur onsite. Therefore, no impact would occur, and no mitigation is required.

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?*

No Impact. As previously noted, the Project site is utilized as an active agricultural field. There are no trees nor water features onsite. As such, the Project site would not substantially interfere with the movement of any native resident or migratory fish or wildlife species. Additionally, the Project site would not interfere with migratory wildlife corridors. Therefore, no impact would occur, and no mitigation is required.

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

No Impact. As discussed above, the Project site does not include any trees or other protected biological resources. Therefore, no impact would occur, and no mitigation is required.

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 City of Redlands has adopted the hillside conservation plan which protects hillside areas. The Project site is not within or in the vicinity of a hillside. Additionally, the Project site does not contain a conservation overlay nor would the proposed Project conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no mitigation is required.

CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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 § 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?			X	

A Cultural Resources Assessment has been prepared by BCR Consulting, LLC. June 17, 2020. The report is available in Appendix D to this IS/MND. The report and research were completed pursuant to CEQA, the PRC Chapter 2.6, §21083.2, and CCR Title 14, Chapter 3, Article 5, §15064.5. The pedestrian cultural resources survey was intended to locate and document previously recorded or new cultural resources, including archaeological sites, features, isolates, and historic-period buildings, that exceed 45 years in age within defined Project boundaries.

Methodology

Records Search. Due to COVID 19, access to the SCCIC is restricted. Therefore, records search results are presented here from a recent study completed adjacent to the west of the Project site and provided by the City (Smith and Garrison 2018:1.0-11). This section will be updated as soon as the SCCIC is able to provide results. The SCCIC has not estimated a schedule. The cited records search included a review of all recorded historic and prehistoric cultural resources, as well as a review of known cultural resources, and survey and excavation reports generated from projects completed within one mile of the Project site. In addition, a review was conducted of the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), and documents and inventories from the California Office of Historic Preservation including the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

The records search results from the South-Central Coastal Information Center (SCCIC) are presented in this report. This report records search results from an adjacent cultural resource assessment provided by the City (see Smith and Garrison 2018). This research has revealed that 29 cultural resource studies have taken place resulting in the recording of 34 cultural resources (one prehistoric and 33 historic-period resources) within one mile of the Project site. One of the previous studies assessed a portion of the Project site for cultural resources resulting in a system of irrigation flumes (designated P-36-11770/CA-SBR-11770) identified partially within

the project site boundaries. The records search is summarized as follows in **Table 15, Cultural Resources and Studies Within One Mile of the Project Site**:

Field Survey. An archaeological pedestrian field survey of the project site was conducted on April 24, 2020. The survey was conducted by walking parallel transects spaced approximately 15 meters apart across 100 percent of the project site, where accessible. Soil exposures, including natural and artificial clearings were carefully inspected for evidence of cultural resources.

Table 15: Cultural Resources and Studies Within One Mile of the Project Site

USGS 7.5 Min Quadrangle	Cultural Resources Within One Mile of the Project Site
<p><i>Redlands, California</i> (1988)</p>	<p>P-36-12842: Historic single-family property P-36-13894: Historic single-family property P-36-16762: Historic University of Redlands Admin. Bldg. P-36-20377: Historic single-family property P-36-28901: Historic Redlands Lawn Bowling Club SBR-2312: Prehistoric artifact scatter SBR-8546H: Historic Redlands/Bear Valley Canal segment SBR-10793H: Wabash Citrus Grove SBR-10929H: Historic rock and mortar-lined ditch segment SBR-11377H: Historic trash scatter SBR-11504H: Historic farm complex/orange grove SBR-11760H: Historic irrigation feature SBR-11761H: Historic irrigation feature SBR-11762H: Historic irrigation ditch, weir, and refuse dump SBR-11763H: Historic foundation/structure, irrigation feature SBR-11764H: Historic irrigation ditch, reservoir, refuse dump SBR-11765H: Historic irrigation feature SBR-11766H: Historic residential/citrus farming site SBR-11767H: Historic irrigation feature SBR-11768H: Historic irrigation ditch, weir, and refuse dump SBR-11769H: Historic irrigation ditch, weir, and refuse dump SBR-11770H: Historic irrigation feature* SBR-11771H: Historic irrigation feature SBR-11772H: Historic foundation, scatter, irrigation feature SBR-11773H: Historic irrigation feature SBR-11807H: Historic foundation, scatter, irrigation feature SBR-12227H: Historic citrus ranch complex SBR-12645H: Historic trash scatter SBR-12922H: Historic trash scatter SBR-15198H: Historic asphalt-paved road (Chrysolite Ave) SBR-15199H: Historic asphalt-paved road (Jasper Ave) SBR-15200H: Historic asphalt-paved road (Opal Way) SBR-15201H: Historic asphalt-paved road (Opal Ave) SBR-15267H: Historic paved road (North Wabash Ave)</p>
<p>Source: BCR Consulting, LLC. December 2019. Cultural Resources Assessment. Appendix D. *Partially within the Project site boundaries.</p>	

Additional Research. The land was originally patented as part of a 1,212-acre property to the State of California under the authority of the State Grant-Agri College (Bureau of Land

Management 2020). Previous research performed for the Project site indicates that groves were planted there between 1918 and 1923 (White and White 2005:8). Historic aerials show that the Project was covered by orange groves until 2005, and by 2012 the orange groves were gone (United States Department of Agriculture 1938, 2005, 2012). Research has also indicated that north/south-oriented irrigation flumes comprising CA-SBR-11770 were installed in about 1918 and remained at least partially in place until 2005 (White and White 2005:9). The flumes were likely fed by the Sunny Side ditch which was in place by 1888 (no longer in place; see Figure 2) along Lugonia. The flumes were identified and evaluated in 1999 and 2005 as CA-SBR-11770 (see White and White 2005 and Alexandrowicz and Alexandrowicz 1999 [cited in White and White 2005]). The flumes were recommended not significant and are no longer present within the subject property.

Field Survey. During the field survey, BCR Consulting staff carefully inspected the Project site, and identified a small historic-period masonry irrigation box/weir, measuring 10 by 6.5 by 2 feet with approximately one-foot-thick walls. An iron pipe extends south from the base of the southern projection. This resource is deteriorating and in poor condition. It is no longer connected to any larger irrigation features, although similar features have been locally utilized to distribute water from cement and cobblestone-lined ditches into irrigation flumes (see Smith and Garrison 2018:v). As indicated above, it probably accessed water from the Sunny Side ditch (no longer in place) to feed a system of five masonry flumes oriented north/south within and adjacent to the Project area. The flumes were identified and evaluated in 1999 and 2005 as CA-SBR-11770 (see White and White 2005 and Alexandrowicz and Alexandrowicz 1999 [cited in White and White 2005]). The flumes were recommended not significant and are no longer present within the subject property. Although the masonry irrigation box/weir was not mentioned in the available documents (*ibid.*), it is considered a component of CA-SBR-11770.

Significant Evaluations. CEQA calls for the evaluation and recordation of historic and archaeological resources. The criteria for determining the significance of impacts to cultural resources are based on §15064.5 of the *CEQA Guidelines* and Guidelines for the Nomination of Properties to the CRHR. Properties eligible for listing in the CRHR and subject to review under CEQA are those meeting the criteria for listing in the CRHR, or designation under a local ordinance.

Significance Criteria

California Register of Historical Resources. The CRHR criteria are based on NRHP criteria. For a property to be eligible for inclusion on the CRHR, one or more of the following criteria must be met:

1. It is associated with the events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the U.S.
2. It is associated with the lives of persons important to local, California, or U.S. history.
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, represents the work of a master, possesses high artistic values; and/or

4. It 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 to meeting one or more of the above criteria, the CRHR requires that sufficient time has passed since a resource's period of significance to "obtain a scholarly perspective on the events or individuals associated with the resources." (CCR 4852 [d][2]). The CRHR also requires that a resource possess integrity. This is defined as the ability for the resource to convey its significance through seven aspects: location, setting, design, materials, workmanship, feeling, and association.

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

Less than Significant Impact with Mitigation. As previously discussed, Project site is used for agricultural purposes. The site revealed that 29 cultural resource studies have taken place resulting in the recording of 34 cultural resources (one prehistoric and 33 historic-period resources) within one mile of the Project site. One of the previous studies assessed a portion of the Project site for cultural resources resulting in a system of irrigation flumes (designated P-36-11770/ CA-SBR-11770); refer to **Table 9, Cultural Resources and Studies Within One Mile of the Project Site.**

The Project site revealed that the masonry irrigation box/weir was constructed within the general context of agricultural (specifically citrus) development of Redlands, however it is not significantly associated with important events related to the founding of the industry or with development of the region. It is therefore not eligible for the California Register under Criterion 1. Criterion 2: Research has not linked the subject property with individuals who have been notable in local, state, or national history. Criterion 3: The structure is a small and deteriorating portion of a larger irrigation system that formerly comprised several irrigation flumes. The flumes have been removed and the irrigation box/weir is a common design. Therefore, the property does not embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual or possess high artistic values. Criterion 4: This resource has not and is not likely to yield information important in prehistory or history. The remaining portion of CA-SBR-11770 is therefore recommended **not eligible** under any of the four criteria for listing on the California Register, and as such is not recommended a historical resource under CEQA. It is not locally eligible under Chapter 2.62, Article II of the Redlands Municipal Code.

Although the current study has not indicated sensitivity for cultural resources (historical or archaeological) within the Project boundaries, ground-disturbing activities have the potential to reveal buried deposits not observed on the surface during previous surveys. For this reason, Mitigation Measures CUL-1 through CUL-2 are applicable.

Mitigation Measure:

MM CUL-1 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease,

the City shall be notified, and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input to the City with regards to significance and treatment.

MM CUL-2 If significant pre-contact and/or post-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI and the City for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

With implementation of Mitigation Measures CUL-1 through CUL-2, impacts to historical and archaeological resources would be less than significant.

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

Less than Significant Impact. The closest cemetery from the Project sites is Hillside Memorial Park located approximately 3.5 miles southwest. According to the Western Science Center (WSC), there are also no known human remains within the Project Sites. State law related to the discovery of human remains, specifically California Health and Safety Codes 7050.S-7055, provides instruction if any human remains are discovered during construction. Therefore, because there is a significant distance from the nearest cemetery and there aren't any known human remains on the Project site, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

The proposed Project would result in no impacts to historical, known archaeological or paleontological resources or known human remains. The chance of cumulative impacts occurring as a result of the Project's implementation or of other projects in the area is less than likely since each project is to be under compliance of federal, state, and local laws and regulations in place to protect and/or preserve cultural, archaeological, and paleontological resources. Therefore, the potential incremental effects of the proposed Project would not be cumulatively considerable.

ENERGY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Building Energy Conservation Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977 and are updated every three years (Title 24, Part 6, of the CCR). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the California Energy Commission (CEC) adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. On May 9, 2018, the CEC adopted the 2019 Building Energy Efficiency Standards, which took effect on January 1, 2020.

The 2019 Standards improve upon the 2016 Standards. Under the 2019 Title 24 standards, residential buildings are expected to be about seven percent more energy-efficient and nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades.

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.

Electricity

Southern California Edison (SCE) provides electricity to the Project area. Currently, the existing site does not use any electricity because the site is used as an agricultural field. Therefore, Project implementation would result in a permanent increase in electricity over existing conditions. The increased demand is expected to be adequately served by the existing SCE electrical facilities. The increase in electricity demand from the Project would represent an insignificant percent increase compared to overall demand in SCE’s service area. Therefore, projected electrical demand would not significantly impact SCE’s level of service.

It should also be noted that the Project design and materials would comply with the 2019 Building Energy Efficiency Standards. Prior to issuance of a building permit, the City of Redlands

Building and Safety Department would review and verify that the Project plans demonstrate compliance with the current version of the Building and Energy Efficiency Standards. The Project would also be required to adhere to the provisions of CALGreen, which establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

Some design features include high-efficiency wall assemblies and windows to reduce heating and cooling loads; Energy Star appliances; high-efficiency heating and cooling systems; high efficiency domestic hot water systems; and high-efficiency light-emitting diode (LED) lighting in educational units, common areas, and landscape design. Project development would not interfere with achievement of the 60 percent Renewable Portfolio Standard set forth in SB 100 for 2030 or the 100 percent standard for 2045. These goals apply to SCE and other electricity retailers. As electricity retailers reach these goals, emissions from end-user electricity use would decrease from current emission estimates.

Natural Gas

Southern California Gas Company (SoCalGas) provides natural gas service to the Project area. The increased demand is expected to be adequately served by the existing SoCalGas facilities.

Fuel

During construction, transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Most construction equipment during demolition and grading would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered equipment. Impacts related to transportation energy use during construction would be temporary and would not require expanded energy supplies or the construction of new infrastructure; impacts would not be significant.

During operations, energy consumption would be associated with visitor and employee vehicle trips; delivery and supply trucks; and trips by maintenance and repair crews. The Project is a private school and church development Project near the I-10 and SR-210, reducing the need to drive long distances to a major highway, and adjacent to existing residential development. Consequently, the proposed Project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities. Additionally, fuel consumption associated with vehicle trips generated by the proposed Project would not be considered inefficient, wasteful, or unnecessary.

The proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, a less than significant impact would occur, and no mitigation is required.

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

No impact. Project design and operation of the church and classrooms would comply with State Building Energy Efficiency Standards, appliance efficiency regulations, and green building standards. Project development would not cause inefficient, wasteful, and unnecessary energy consumption, and no adverse impact would occur. Therefore, no impact would occur, and no mitigation is required.

Cumulative Impacts

Construction and operations associated with the proposed Project would not result in the wasteful use of energy because the Project would adhere to all regulations relating to idling and fuel efficiency. The use of energy would not be substantial in comparison to statewide and countywide electricity, natural gas, gasoline, and diesel demands. New capacity or supplies of energy resources would not be required. The Project will replace a site currently used for agricultural purposes with a private school and church.

The Project and new development projects located within the Project area would also be required to comply with all the same applicable federal, State, and local measures aimed at reducing fossil fuel consumption and the conservation of energy. Potential land use impacts are site-specific and require evaluation on a case-by-case basis. As noted above, the Project would not result in significant impacts to state or local plans for renewable energy or energy efficiency. Project and cumulative energy resources impacts are also addressed in the Initial Study Air Quality and Greenhouse Gas sections, as it relates to energy conservation. Thus, the Project is not anticipated to result in a cumulatively considerable impact to energy resources.

GEOLOGY AND SOILS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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?			X	
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?			X	
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

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?

Less Than Significant Impact. According to the City of Redland's General Plan 2035, Figure 7-5: Faults, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone.⁶ The nearest Alquist-Priolo Fault Zones are located approximately 4.0 miles southeast and approximately 2.5 miles northeast from the Project site. Therefore, the possibility of significant fault rupture on the Project site is considered to be low.

The Project site is located in an area which is subject to strong ground motions due to earthquakes. Numerous faults capable of producing significant ground motions are located near the subject site. Due to economic considerations, it is not generally considered reasonable to design a structure that is not susceptible to earthquake damage. Therefore, significant damage to structures may be unavoidable during large earthquakes.

The City of Redlands is bounded to the northeast by the San Andreas Fault Zone, and to the southwest by the San Jacinto Fault Zone. The closest fault zone to the Project site is the Crafton Hills Fault Zone, located approximately 2.5 miles southeast of the Project site. The Crafton Hills Fault Zone is a system of normal dip-slip faults.

Construction of the buildings would be required to conform to the seismic design parameters of the 2019 California Building Code. The California Building Code provides procedures for earthquake-resistant structural design that include considerations for on-site soil conditions, occupancy, and the configuration of the structure including the structural system and height. The proposed development would be designed in accordance with the requirements of the current edition of the California Building Code. Therefore, a less than significant impact would occur, and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and grain size characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking.

The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean grain size in the range of 0.075 to 0.2 mm. Non-sensitive clayey (cohesive) soils which possess a plasticity index of at least 18 are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table.

⁶ Redlands. 2017. *City of Redlands General Plan 2035, Figure 7-5: Faults*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 14, 2020.

According to the General Plan, Figure 7-6: Liquefaction, the Project sites is not located within a High or Medium liquefaction susceptibility zone and would not be susceptible to seismic-related ground failure.⁷ Since both seismic-related ground failure and generalized liquefaction would not be likely to occur. Therefore, a less than significant impact would occur, and no mitigation is required.

iv) And Landslides?

No Impact. Landslides can occur if areas of steep slopes consisting of unstable soils are disturbed by ground shaking and/or heavy rainfall. The Project site and the surrounding parcels and roadways are relatively flat. There are no visual indications of active landslides in or around the Project site. Additionally, as shown in the City's Hazard Mitigation Plan, Figure 20, Landslide Incidence and Susceptibility in the Vicinity of the City of Redlands, no portion of the City is located in an area with high or moderate landslide potential.⁸ Therefore, no impact would occur, and no mitigation is required.

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

Less Than Significant Impact. The Project site is relatively flat due to the current site's use. However, some grading will be required. Grading and earthwork activities during construction would expose soils to potential short-term erosion by wind and water. During construction, the proposed Project would be required to comply with the erosion and siltation control measures. This would include measures such as sandbagging to reduce site runoff or hold topsoil in place prior to final grading and construction. Additionally, the proposed Project is required to comply with the National Pollutant Discharge Elimination System (NPDES) permitting process. Construction impacts would be minimized through compliance with the Construction General Permit. The NPDES permit requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion-control and sediment-control Best Management Practices (BMPs) that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap sediment once it has been mobilized. These requirements would ensure that a less than significant impact would occur, and no mitigation is required.

c, d) 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? And 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. Refer to response a-iv), above for a discussion of landslide potential. Subsidence occurs when a large portion of land is displaced vertically, usually due to

⁷ Redlands. 2017. *General Plan 2035, Figure 7-6: Liquefaction*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 14, 2020.

⁸ Redlands. 2015. *Hazard Mitigation Plan, Figure 20: Landslide Incidence and Susceptibility in the Vicinity of the City of Redlands*. Available at https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_final_hmp_april_2015.pdf?1552928023, accessed on April 14, 2020.

the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. As shown as part of the Department of Conservation mapping tools, the project area is not within a liquefaction zone.⁹ Therefore, a less than significant impact would occur, and no mitigation is required.

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. No septic tanks would be used as part of the proposed Project. The Project would connect to the existing sanitary sewer system for wastewater disposal. Therefore, no impact would occur, and no mitigation is required.

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

Less than Significant Impact. Archaeological and paleontological resources are protected under CEQA as cultural resources. Paleontological resources, including fossils, have also been found in the Redlands area, and there is potential for archaeological and paleontological finds to occur in remaining, unexcavated open space areas within and adjacent to the City. The General Plan identifies principles to help preserve paleontological resources such as principle 2-P.16, which encourages work with local paleontologists to identify significant non-renewable paleontological resources, and 2-P.17 which seeks to protect archaeological and paleontological resources for their aesthetic, scientific, educational, and cultural values.¹⁰

Although the Project site has been fully graded due to the constant agricultural use, the City of Redlands imposes actions (standard measures (SM)) to help mitigate any potential impacts to archaeological and paleontological resources, as follows:

Standard Measures:

Archaeological and Paleontological Resources¹¹

SM-1 Action 2-A.75: Require, as a standard condition of approval, that project applicants provide an assessment as to whether grading for the proposed project would impact underlying soil units or geologic formations that have a moderate to high potential to yield fossiliferous materials, prior to issuance of a grading permit. If the potential for fossil discovery is moderate to high, require applicants to provide a paleontological monitor during rough grading of the project.

SM-2 Action 2-A.76: Establish a procedure for the management of paleontological materials found on-site during a development, including the following provisions:

⁹ DOC. 2020. *Data Viewer, Seismic Hazards Program: Liquefaction Zones*. Available at <https://maps.conservation.ca.gov/cgs/DataViewer/>, accessed April 14, 2020.

¹⁰ Redlands. 2017. *General Plan, Cultural Resource Conservation*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 14, 2020.

¹¹ Redlands. 2017. *General Plan, Cultural Resource Conservation, page 2-13*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 14, 2020.

- If materials are found on-site during grading, require that work be halted until a qualified professional evaluates the find to determine if it represents a significant paleontological resource.
- If the resource is determined to be significant, the paleontologist shall supervise removal of the material and determine the most appropriate archival storage of the material.
- Appropriate materials shall be prepared, catalogued, and archived at the applicant's expense and shall be retained within San Bernardino County if feasible.

With adherence to the standard measures, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

The potential cumulative impact related to geology and soils is typically site-specific. The previous analysis determined that a less than significant impact related to geological resources will occur due to Project implementation. Moreover, existing State and local laws and regulations are in place to protect people and property from substantial adverse geological and soil effects including fault rupture, strong seismic ground shaking, liquefaction, and landslides. Existing laws and regulations also protect people and property from adverse effects related to soil erosion. Implementation featuring the recently mentioned Project Analysis would render potentially adverse geological and soil effects less than significant without mitigation implemented.

GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Kimley-Horn and Associates prepared an Air Quality and Greenhouse Gas Assessment dated May 2020; refer to Appendix B.

Background

Certain gases in the earth’s atmosphere, classified as Greenhouse Gases (GHG), play a critical role in determining the earth’s surface temperature. Solar radiation enters the earth’s atmosphere from space. A portion of the radiation is absorbed by the earth’s surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead “trapped,” resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO₂, methane (CH₄), and nitrous oxide (N₂O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth’s climate, known as global climate change or global warming. It is “extremely likely” that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂ (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weigh each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO₂ emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO₂ emissions remains stored in the atmosphere (IPCC 2013).

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; suffice it to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO₂e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in-state and out-of-state sources (15 percent) (CARB 2019b). Emissions of CO₂ are by-products of fossil fuel combustion. CH₄, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N₂O is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution (CO₂ dissolving into the water), respectively, two of the most common processes for removing carbon dioxide from the atmosphere.

Regulations and Significance Criteria

State

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this executive order remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the EO does not specify any plan or implementation measures to achieve its goal", the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050."

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25-percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO₂e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the state implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan

Update was adopted on December 14, 2017. The Scoping Plan Update addresses the 2030 target established by Senate Bill (SB) 32 as discussed below and establishes a proposed framework of action for California to meet a 40-percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of CH₄ emissions from agricultural and other wastes.

Executive Order B-30-15

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewable sources by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewable sources by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Brown, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewal Portfolio Standards.

Local

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the Draft AQMD Staff CEQA GHG Significance Thresholds. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including an interim screening level numeric “bright-line” threshold of 3,000 metric tons of CO₂e annually and an efficiency-based threshold of 4.8 metric tons of CO₂e per service population (defined as the people that work, study, live, patronize and/or congregate on the Project site) per year in 2020 and 3.0 metric tons of CO₂e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable only to boilers and process heaters, forestry, and manure management projects.

Southern California Association of Governments

On April 7, 2016, the SCAG Regional Council adopted the 2016 RTP/SCS. The 2016 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions.

City of Redlands Climate Action Plan

The Redlands Climate Action Plan (CAP) is designed to reinforce the City’s commitment to reducing GHG emissions and demonstrate how the City will comply with State of California’s GHG emission reduction standards. As a Qualified GHG Reduction Strategy, the CAP enables streamlined environmental review of future development projects, in accordance with CEQA. The CAP has been prepared concurrently with the updated Redlands General Plan, reflecting the City’s most current land use and transportation strategy, and GHG implications of various General Plan’s goals and policies. The General Plan includes strategies such as transit-oriented and mixed-use development, integrated transportation and land use planning, promotion of

bicycle and pedestrian movements, and parking and transportation demand management. It also includes goals and policies to promote energy efficiency, waste reduction, and resource conservation and recycling. These strategies, goals, and policies will result in GHG reduction compared to baseline trends. As a document adopted by the City of Redlands City Council, the CAP applies to the municipal limits of the City of Redlands.

Redlands Community Sustainability Plan

The Redlands Community Sustainability Plan was adopted in March 2011. This document is meant to guide the City of Redlands to become increasingly more sustainable. The plan identifies actions to increase sustainability through energy efficiency and conservation, water use, waste reduction, use of renewable energy, efficient transportation, and more. Goals and policies applicable to the Project include the following:

Goal LU3: *Encourage non-motorized transportation.*

Policy LU3.2: In accordance with the General Plan, develop a city-wide comprehensive Non-Motorized Transportation Plan. Among its elements, the plan should consider bike lanes with “sharrows” for appropriate locations.

Policy LU3.3: Complete Santa Ana River Trail including connections to Redlands Citrus Valley High School, Mentone Senior Center/Library, and employment areas in northeast Redlands.

South Coast Air Quality Management District Thresholds

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

On September 28, 2010, the SCAQMD recommended an interim screening level numeric, bright-line threshold of 3,000 metric tons of CO₂e annually and an efficiency-based threshold of 4.8 metric tons of CO₂e per service population (Project employees + patrons + residents) per year in 2020 and 3.0 metric tons of CO₂e per service population per year in 2035. These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. The working group was formed to assist the SCAQMD’s efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General’s Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The numeric bright-line and efficiency-based thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by

substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

For the purposes of this evaluation, the proposed Project will first be compared to the SCAQMD interim screening level numeric bright-line threshold of 3,000 metric tons of CO₂e annually. If it is determined that the proposed Project is estimated to exceed this screening threshold, it will then be compared to the SCAQMD-recommended efficiency-based threshold of 3.0 metric tons of CO₂e per service population per year in 2035, as the Project will be constructed after the year 2020.

The Project is also evaluated for compliance with the City CAP, which establishes an overall GHG target for the Project region consistent with long-term (beyond 2020) GHG reduction goals. Successful implementation of City CAP will enable the City to meet the standards outlined in California's 2017 Scoping Plan (Redlands 2017b). As previously described, the CAP has been prepared concurrently with the updated Redlands General Plan, reflecting the City's most current land use and transportation strategy, and GHG implications of various General Plan's goals and policies. Thus, according to the CAP, implementation of projects consistent with the General Plan would not require additional GHG analysis in accordance with CEQA (Redlands 2017b) and would be considered less than significant.

Methodology

GHG-related impacts were assessed in accordance with methodologies recommended by the SCAQMD and the City of Redlands. Where GHG emission quantification was required, emissions were modeled using the CalEEMod, version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were primarily calculated using CalEEMod model defaults for San Bernardino County. As previously described, construction of the proposed Project is anticipated to begin in the year 2020 and occur in three phases occurring over the course of ten years. The Project Applicant predicts the Parish Hall will be completed in 2022, the Sanctuary will be completed in 2028, and the school will be completed in 2031. For the purposes of modeling the proposed Project emissions conservatively, a buildout year of 2023 was utilized, as opposed to the year 2031. This is conservative as the CalEEMod modeling software accounts for greater energy-efficiency in future years associated with land use projects. It is likely that the Parish Hall will be completed and become operational in 2023. However, by employing a 2023 buildout year in the emissions model, CalEEMod will generate results utilizing construction and operation equipment and vehicles meeting current standards rather than more efficient standards anticipated for the future year, 2031. As such, the result is more conservative and gives adequate representation to earlier construction and operational years.

Operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates from Ganddini Group, Inc. (2020). Due to the nature of the proposed Project, a church and a school, the county average vehicle fleet mix generated by

CalEEMod was edited to reflect a maximum of two percent heavy-duty trucks visiting the site during operation.

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

Less Than Significant Impact.

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). **Table 16, Construction-Related Greenhouse Gas Emissions**, illustrates the specific construction-generated GHG emissions that would result from construction of the Project.

Table 16: Construction-Related Greenhouse Gas Emissions

Emissions Source	CO ₂ e (Metric Tons/year)
2020 Construction	1,169
2021 Construction	701
Total	1,870
Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs. Notes: Construction worker and vendor trip generation rate identified by Ganddini Group, Inc., 2020	

As shown in **Table 14**, Project construction would result in the generation of approximately 1,870 metric tons of CO₂e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. The amortized construction emissions are added to the annual average operational emissions.

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project as a whole (Project site buildout) are identified in **Table 17, Operational-Related Greenhouse Gas Emissions**, and compared to SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO₂e annually.

Table 17: Operational-Related Greenhouse Gas Emissions

Emissions Source	MTCO ₂ e per Year
Construction Amortized Over 30 Years	62
Area Source	0
Energy	339
Mobile	1,875
Solid Waste	236
Water	26

Emissions Source	MTCO ₂ e per Year
Total	2,538
<i>SCAQMD Threshold</i>	<i>3,000</i>
Exceeds Threshold?	No
Source: Source: CalEEMod version 2016.3.2. Refer to Appendix B for Model Data Outputs Vehicle fleet mix upon operation is anticipated to contain a maximum of 2 percent heavy-duty trucks. The most recent (2017) CO ₂ intensity factor for Southern California Edison was utilized- 549 lb./MWH (Edison International 2017)	

As shown in **Table 17**, operational-generated emissions would not exceed the SCAQMD's interim screening level numeric bright-line threshold of 3,000 metric tons of CO₂e annually. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less Than Significant Impact.

Redlands Climate Action Plan

The Redlands CAP (2017b) is a strategic planning document that identifies sources of GHG emissions within the City's boundaries, presents current and future emissions estimates, identifies a GHG reduction target for future years, and presents strategic programs, policies, and projects to reduce emissions from the energy, transportation, land use, water use, and waste sectors. The GHG-reduction strategies in the CAP build on inventory results and key opportunities prioritized by City staff and members of the public. The CAP strategies consist of strategies that identify the steps the City will take to support reductions in GHG emissions. The City will achieve these reductions in GHG emissions through a mix of voluntary programs and new strategic standards. All standards presented in the CAP respond to the needs of development, avoiding unnecessary regulation, streamlining new development, and achieving more efficient use of resources.

The City CAP identifies the fact that successful implementation of City CAP will enable the City to meet the standards outlined in California's 2017 Scoping Plan (Redlands 2017b). The CAP has been prepared concurrently with the updated Redlands General Plan, reflecting the City's most current land use and transportation strategy, and GHG implications of various General Plan's goals and policies. Thus, according to the CAP, implementation of projects consistent with the General Plan would not require additional GHG analysis in accordance with CEQA (Redlands 2017b) and would be considered less than significant.

The proposed Project is consistent with the land use designation and development density presented in the General Plan. As previously stated, the Project site is designated by the General Plan as Very Low Density Residential. According to the City of Redlands General Plan (Redlands 2017a), land use classifications contained in the General Plan are intentionally broad enough to avoid duplicating the City's zoning regulations. The City of Redlands Zoning Ordinance and the Zoning Map further delineate and prescribe specific uses of the land and

associated development regulations. More than one zoning district may be consistent with a single General Plan land use category. For instance, the Very Low-Density Residential designation allows for several different zoning districts including the A-2 – Estate Agricultural District, R-R – Rural Residential District, R-A – Residential Estate District, R-E – Residential Estate District, R-S – Residential Suburban District, R-S – Suburban Residential District, and the R-1 – Single-Family Residential District. The Project site is zoned R-E – Residential Estate District. The Redlands Zoning Code (Title 18 of the City Municipal Code) states that churches are allowed in the R-E District, subject to a conditional use permit issued by the City. Further, schools are also allowed in the R-E District, subject to review and approval by the City Planning Commission. As such, the Project is proposing land uses consistent with the Zoning District applied to the site, and the Zoning District is in turn consistent with that allowed under the General Plan designation. Thus, the proposed Project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan. Since the Project is consistent with the City General Plan, it is consistent with the City CAP. Therefore, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

Climate change is a global problem. And GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have much longer atmospheric lifetimes of one year to several thousand years that allow them to be dispersed around the globe.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the proposed Project as well as other cumulative-related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As previously discussed, the proposed Project would not conflict with the City CAP. As a result, the Project would not conflict with any GHG reduction plans. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
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?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
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?				X
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?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			X	

EFI Global prepared a Phase I Environmental Site Assessment (ESA), dated December 3, 2019; refer to 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. Hazardous materials are used in manufacturing, agriculture, service industries (e.g., gas stations, dry cleaners), health care, and even in households. Many

of these chemicals can be harmful to the health of those exposed, and to the environment. There are several types of hazardous materials releases:

- Fixed-Site Releases - releases involving the production and manufacturing, handling, and storage of a hazardous product at a single facility as well as any releases that may occur at a designated hazardous waste disposal site.
- Transportation-Related Releases - Includes releases that occur while the hazardous material is in transit from one facility to another or en-route to be disposed of at a designated hazardous waste disposal site (e.g., on highways, railways, airports, or in pipelines).
- Intentional Releases - includes criminal acts and acts of terrorism in which a hazardous material is used to intentionally cause injuries and/or fatalities, damage the environment and/or property, or advance a political or social agenda. According to the U.S. Department of Transportation (USDOT), most hazardous materials release events between 1982 and 1991 occurred during transport; 81.4% of hazardous materials releases occur on highways, 14.7% on railways, with other events accounting for 3.9% of releases.

The proposed Project would involve construction activities that could result in the transport, use, and disposal of hazardous materials such as gasoline fuels, asphalt, lubricants, toxic solvents, pesticides, and herbicides. The transport, use, storage, and disposal of these materials would comply with existing regulations established by several agencies, including the Department of Toxic Substances Control, the USEPA, the USDOT, and the Occupational Safety and Health Administration. The proposed Project would operate as a church and private school where Project maintenance may require the use of cleaners, solvents, paints, and other custodial products that are potentially hazardous. Cleaning materials would be used onsite for local cleaning and would be clearly labeled and stored in compliance with state and federal requirements. With exercise of normal safety practices, the Project would not create substantial hazards to the public or the environment.

The proposed Project is required to comply with all applicable local, state, and federal regulations during Project construction and operation. The City of Redlands Fire Department Hazardous Materials Response Team (RFDHMRT) consists of five active members, with three members trained to the "Specialist" Level, and three members trained to the "Technician" Level. All trained personnel are also members of the San Bernardino County Inter-Agency Hazardous Materials Response Team, and respond countywide, through a countywide mutual aid agreement. Personnel maintain their skills by attending monthly training sessions. Redlands is covered by the Local Emergency Planning Committee (LEPC) for California Region VI (CA105), located in Hemet. The City is a member of a Countywide Hazardous Materials Response Team. As a part of this, all City of RFD field employees are trained in Hazardous Materials First Responder Certifications. The Countywide team would provide a response if the level of hazard were above the certified level of City Staff. From there, the County Hazardous Materials

Response Team would provide for the evacuation, mitigation, and facilitation of cleanup efforts in the event of an accidental release of hazardous materials. Compliance with federal, state, and local laws and regulations would result in a less than significant impact would occur, and no mitigation is 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 with Mitigation. The Phase I ESA was performed in general accordance with the scope and limitations of the American Society for Testing and Materials (ASTM) Phase I ESA Standard E1527-13 (equivalent to the USEPA's All Appropriate Inquiry [AAI] Standard). Based upon the site reconnaissance, historical review, regulatory records review, and other information in the report, there was no evidence of historical recognized environmental conditions (HREC), controlled recognized environmental conditions (CREC), or de minimis conditions. However, due to the historical and continued use of the site for agricultural production, the Phase I assessment concluded that the site is considered to be a recognized environmental condition (REC).

As a requirement of the SWPPP and NPDES, construction projects maintain supplies onsite for containing and cleaning small spills of hazardous materials and have a defined process for addressing spills. Construction would also use equipment that would bring hazardous materials to the Project site, including diesel, gasoline, paints, solvents, cement, and asphalt. However, construction activities would be conducted in accordance with the SWPPP as part of the NPDES permit. The primary objective of the SWPPP is to identify, construct, implement, and maintain best management practices (BMP) to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site. BMPs for hazardous materials include, but are not limited to, off-site refueling, placement of generators on impervious surfaces, establishing clean out areas for cement, etc. While the risk of exposure to hazardous materials cannot be eliminated, adherence to existing regulations would ensure compliance with safety standards related to the use and storage of hazardous materials and with the safety procedures mandated by applicable federal, state, and local laws and regulations. Compliance with these regulations would ensure that risks resulting from the routine transportation, use, storage, or disposal of hazardous materials or hazardous wastes associated with the proposed Project and the potential for accident or upset minimized. As previously stated, because the site's historical and existing use which categorizes it as a REC, Mitigation Measure HAZ-1 shall be implemented.

Mitigation Measure:

MM HAZ-1: The Project applicant shall prepare a Phase II site investigation for the Project which shall evaluate the potential environmental impacts identified during the Phase I Environmental Site Assessment. The Phase II site investigation shall be conducted and evaluated by a licensed professional prior to issuance of a grading permit for construction and earthwork activities. If soil and/or groundwater

contamination is identified above the applicable Regional Water Board's ESLs, the findings of the Phase II investigation shall be submitted to the local and state regulatory agency for determination of potential remediation requirements. Remediation shall be performed in accordance with the regulatory agency requirements for the protection of public health and the environment. Remediation for identified contamination could include, but is not be limited to, source removal. The findings of the Phase II site investigation shall be used for development of a project-specific Construction Risk Management Plan (CRMP). The CRMP shall delineate specific soil and groundwater management and disposal procedures, construction worker health and safety requirements, and contingency measures in case unknown contamination is encountered during construction.

Therefore, with implementation of Mitigation Measure HAZ-1, a less than significant impact would occur.

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

Less than Significant Impact. The nearest schools to the Project site are Judson & Brown Elementary School located at 1401 E. Pennsylvania Ave, approximately 0.15-mile northwest and Crafton Elementary School located at 311 Wabash Avenue, approximately 1.0-mile south. Because the proposed Project would introduce a private school, the developed will be subject to the oversight of the California Environmental Protection Agency (EPA), Department of Toxic Substances Control (DTSC), as required by State law. Therefore, with EPA's and DTSC's oversight, a less than significant impact would occur, and no mitigation is required.

- 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. The Project site is not included on the list of hazardous waste sites (Cortese List) compiled by the DTSC pursuant to Government Code §65962.5.¹² Nor is the Project site listed on any other regulatory databases. There are no properties within 100-feet of the Project site where a release is considered likely, or a known release has occurred. Therefore, no impact would occur, and no mitigation is required.

- 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*

¹² DTSC. 2020. *Hazardous Waste and Substances Site List*. Available at https://www.envirostor.dtsc.ca.gov/public/search.asp?PAGE=6&CMD=search&ocieerp=&business_name=&main_street_number=&main_street_name=&city=&zip=&county=&branch=&status=ACT%2CBKLG%2CCOM&site_type=CSITES%2COPEN%2CFUDS%2CCLOSE&cleanup_type=&npl=&funding=&reporttype=CORTESE&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST&federal_superfund=&state_response=&voluntary_cleanup=&school_cleanup=&operating=&post_closure=&non_operating=&corrective_action=&tiered_permit=&evaluation=&spec_prog=&national_priority_list=&senate=&congress=&assembly=&critical_pol=&business_type=&case_type=&display_results=&school_district=&pub=&hwmp=False&permitted=&pc_permitted=&inspections=&complaints=&censustrack=&cesdecile=&ORDERBY=county&next=Next+50, accessed April 14, 2020.

result in a safety hazard or excessive noise for people residing or working in the project area?

Less than Significant Impact. Approximately 2/3 of the northern portion of the Project site is located within an airport land use plan, specifically within Area D (Other Airport Environ) of the Airport Compatibility Zones.¹³ Land immediately to the north, east and west are also within Area D. According to the Hazards Mitigation Plan and Figure 3.12-1: Existing Noise Contours and Figure 3.12-6: Future Noise Contours with Proposed Project in *the Draft Environmental Impact Report for the Redlands General Plan Update*, the Project site is located within a 65 CNEL Contour noise level which would be consistent with acceptable noise levels. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less Than Significant. The proposed Project would not impair or physically interfere with an adopted emergency response or evacuation plan. The proposed Project is subject to City Fire and Police Department review and approval prior to the issuance of building permits. The proposed Project is required to be designed, constructed, and maintained in accordance with applicable standards associated with vehicular access, which would provide for adequate emergency access and evacuation, if necessary.

Construction activities may have the potential to temporarily restrict vehicular traffic. Adherence to emergency access measures is required by the City. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less than Significant Impact. According to the General Plan Figure 7-4: Fire Hazards, the Project site is located in a moderate threat fire level area. No portion of the site is within an Extreme, Very High, or High threat area. Therefore, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

The incremental effects of the proposed Project and the adjacent uses are anticipated to be less than significant with the adherence of Federal, State, and Local laws and regulations. Hazardous materials use will be minimal and consistent with typical solvents used for cleaning and other upkeeping activities. Therefore, the proposed Project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable probable future projects. The Project would not result in cumulatively considerable impacts to or from hazards or hazardous materials with implementation of Mitigation Measure HAZ-1.

¹³ Redlands. 2015. *Hazard Mitigation Plan, Figure 7-7: Airport Hazards*. Available at https://www.cityofredlands.org/sites/main/files/file-attachments/redlands_final_hmp_april_2015.pdf?1552928023, accessed on April 14, 2020.

HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?			X	
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:			X	
i) Result in substantial erosion or siltation on- or off-site?			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
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?			X	
iv) Impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

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

Less Than Significant Impact.

Construction

As part of Section 402 of the Clean Water Act, the USEPA has established regulations under the NPDES program to control direct stormwater discharges. The NPDES program regulates industrial pollutant discharges, which include construction activities. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements.

Redlands Municipal Code Section 13.54.180, Best Management Practices (BMPs), requires that any new construction activity shall use BMPs to prevent the discharge of pollutants to the maximum extent practicable. Any new industrial or commercial or other development activity, or development, must use BMPs or other steps to prevent discharge of pollutants to the Municipal Separate Storm Sewer System (MS4). For other premises exposed to stormwater, the responsible person must use BMPs, if they exist, or other steps to reduce the discharge of pollutants to the maximum extent practicable, including the removal and lawful disposal of any solid waste or any other substance which, if it were to be discharged to the MS4, would be a pollutant, including fuels, waste fuels, chemicals, chemical wastes, and animal wastes, from all parts of the premises exposed to stormwater. Examples of suitable BMPs may be found in the California Stormwater Quality Association (CASQA) "Stormwater Best Management Practice Handbook" and the city of Redlands' "Storm Water Guidance Handbook." Other BMPs may be utilized with the prior written approval of the City engineer.

Requirements for waste discharges potentially affecting stormwater from construction sites of one acre or more are set forth in the SWRCB's Construction General Permit, Order No. 2012-0006-DWQ, issued in 2012. The site is larger than one acre and would be subject to requirements of the Construction General Permit. Projects obtain coverage under the Construction General Permit by filing a Notice of Intent with the SWRCB prior to grading activities and preparing and implementing a SWPPP during construction. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the project site, and to contain hazardous materials. BMPs categories include, but are not limited to, erosion control and wind erosion control, sediment control, and tracking control. Implementation and monitoring required under the SWPPP would control and reduce short-term intermittent impacts from soil erosion, siltation, and sedimentation related to water quality from construction activities to less than significant levels.

Operation

The development of the Project site would result in an increase of impervious surface totaling to approximately 43 percent (346,501 SF) of the site which would increase stormwater runoff, however, this runoff would be captured via a stormwater basin and an underground water quality management plan chamber located at the northernmost part of the site and conveyed to the storm drain system. The Project would be required to implement a Water Quality Management Plan (WQMP), pursuant to the requirements of the City's NPDES permit. The WQMP is a post-construction management program that ensures the on-going protection of

the watershed basin by requiring structural and programmatic controls. The WQMP identifies structural controls (including a contained, onsite wastewater treatment plant) and programmatic controls to minimize, prevent, and/or otherwise appropriately treat storm water runoff flows before they are discharged from the site. Mandatory compliance with the WQMP would ensure that the Project does not violate any water quality standards or waste discharge requirements during long-term operation. Because the proposed Project has designed a water quality management plan chamber and stormwater basin to catch and treat runoff water, the water quality impacts associated with long-term operation of the Project would be less than significant and no mitigation measures would be required.

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 Redlands Planning Area domestic water sources consist of both surface (about 50 percent of total supply) and groundwater (about 50 percent of total supply). The City is entitled to surface water from both Mill Creek and the Santa Ana River. Mill Creek water is treated at the Henry Tate Water Treatment Plant, located northeast of the city. Water then flows by gravity from the Tate Treatment Plant to the City's distribution system. Santa Ana River water is treated at the Horace Hinckley Surface Water Treatment Plant, located northeast of the City.¹⁴

The City of Redlands uses 18 wells that pump directly into the system or into reservoirs. All of these wells are adequately separated from sewerage facilities and are free from serious flooding hazard. Although the City's domestic water wells constitute about 50 percent of the water supply, some of the wells require treatment. Because of contamination, the City has wells that are not used for domestic purposes and are instead used for irrigation. It is anticipated that the contaminant levels will not decrease for many years due to the slow movement of water through the basin. However, non-treated nitrate-contaminated water not suitable for human consumption can be used for irrigation (non-potable system). The source of this contamination is typically due to agricultural nitrates and would require costly treatment if the wells were to be used for domestic purposes.

The proposed Project would be served with potable water by the City of Redlands Municipal Utilities Department. The Department is party to the Upper Santa Ana River Watershed integrated Regional Water Management Plan, which indicates the Integrated Regional Water Management Region is highly dependent on local water supplies. In particular, precipitation stored as groundwater provides approximately 67 percent of supplies during average years and over 70 percent of supplies during drought years.¹⁵ According to the plan, the City has sufficient water supplies to meet current and future development consistent with the General Plan through the year 2035.

¹⁴ Redlands. 2017. *General Plan 2035, Section 4.7, Public Facilities*.

¹⁵ SBVWCD. 2015. *Upper Santa Ana River Watershed Integrated Regional Water Management Plan, page ES-2*. Available at <https://www.sbvwd.org/docman-projects/upper-santa-ana-integrated-regional-water-management-plan/3802-usarw-irwmp-2015-ch1-9-final/file.html>, April 15, 2020.

As previously discussed, the existing agricultural use is anticipated to require more water than the proposed Project, which is consistent with the general development assumptions in the General Plan. Thus, the Project's demand for domestic water service would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Additionally, although the Project would result in additional impervious surfaces, the Project would construct an underground water quality management plan chamber and a stormwater basin which would capture low flow storm water runoff from the site and recharge underground aquifers and would provide approximately 47 percent of pervious areas. Accordingly, the proposed Project would not significantly impact local groundwater recharge. Therefore, a less than significant impact would occur, and no mitigation is required.

- 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?*

Less Than Significant Impact. Please refer to Section 7, Geology and Soils, Response (b) for further discussion of erosion. Surface water drainage would be controlled by building regulations, with the water directed toward existing streets, storm drains, and catch basins. The proposed drainage for the site would not channel runoff on exposed soils, would not direct flows over unvegetated soils, and would not otherwise increase the erosion or siltation potential of the site or any downstream areas. As discussed above, the proposed Project is subject to NPDES requirements and the countywide MS4 permit. Additionally, the Project Applicant is required to submit a SWPPP to reduce erosion and sedimentation of downstream watercourses during Project construction. Furthermore, the Project Applicant is required to prepare and submit a detailed erosion control plan for City approval prior to obtaining a grading permit. Implementation of this plan would address any erosion issues associated with proposed grading and site preparation. Although future development would create new impervious surfaces on the property (approximately 43 percent of the site), development associated with the proposed Project would result in opportunities for landscaped areas to be utilized for stormwater retention. The proposed Project would provide approximately 44 percent of pervious surface. Additionally, the proposed Project is providing an underground water quality management plan chamber under the soccer field, as well as a stormwater basin that would capture runoff water. Therefore, a less than significant impact would occur, and no mitigation is required.

- 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?*

Less Than Significant Impact. On-site stormwater runoff associated with the Project would be engineered to be conveyed through the stormwater basin and an underground water quality management plan chamber storm drain. Additionally, with required adherence to an SWPPP and WQMP as discussed above under Response a), the proposed Project would not be a substantial source of polluted runoff. Therefore, less than significant impact would occur, and no mitigation is required.

iv) Impede or redirect flood flows?

Less Than Significant Impact. The Project site is designated by the Federal Emergency Management Agency (FEMA) as being within Zone X, indicating minimal risk of flooding (Per Flood Insurance Rate Map No. 06071C8709J (Panel 8709 of 9400). Moreover, the Project site is not within a 100- or 500-year flood zone or floodway.¹⁶ The total existing impervious surface area is anticipated at approximately 7.2 acres, or 43 percent of the total Project site. Although the proposed Project would increase impervious surfaces, the Project site is not located within an area of flood risk, and the proposed basin would reduce impacts from on- or off-site flooding. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less than Significant Impact. The site does not include any streams or rivers, which could be altered by the proposed Project. In addition, the proposed on-site detention/infiltration basin would limit the release of storm water from the site; therefore, minimizing the potential for flooding to occur on-site or off-site. Therefore, a less than significant impact would occur, and no mitigation is required.

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

Less Than Significant Impact. The proposed Project would comply with water quality requirements set forth in the Statewide General Construction Permit, the NPDES, and the City of Redlands Municipal Code Sections 13.54.120 (Prevention of Accidental Discharges), 13.54.170 (Non-Storm Discharges), 13.54.180 (Best Management Practices), and 13.54.300 (NPDES Program Regulatory Fees). Additionally, active groundwater management and conjunctive use programs have been implemented by the Integrated Regional Water Management Plan (IRWM) to ensure the Region's water suppliers meet water demands. By 2035, demand in the Region is projected to increase by over 100,000 acre-feet per year (AFY) and will require the continued development of a diverse water supply portfolio to overcome various challenges and uncertainties. Therefore, the project would not impede sustainable groundwater management of the basin. Therefore, a less than significant impact would occur, and no mitigation is required.

¹⁶ Redlands. 2017. *General Plan 2035, Figure 7-3: Flood Hazards*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 15, 2020.

Cumulative Impacts

The potential impacts related to hydrology and storm water runoff are typically site-specific. Furthermore, the analysis determined that the implementation of the proposed Project would not result in significant impacts. As a result, no cumulative impacts are anticipated. No mitigation is required.

LAND USE AND PLANNING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING. Would the Project:				
a) Physically divide an established community?			X	
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?			X	

a) Physically divide an established community?

Less than Significant Impact. An example of a project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The proposed Project would be located within an area zoned R-E for Residential use; refer to Exhibit 3, Existing Land Use and Zoning Designation. Following the approval of the CUP, the proposed Project would be consistent with the land use and zoning designations. The Project site is currently utilized as a private agricultural field that is fully fenced and no public access is available. Because the proposed Project would be a church/school, it is anticipated that instead of dividing the community, the Project would serve to bring the community together by providing a safe space to gather. The project is located on a corner and there is currently no pedestrian or vehicle connectivity through the site. The Project would be required to complete portions of the Pennsylvania Avenue right-of-way which will provide east-west connectivity for pedestrians to the school along the northern property line, as well as to adjacent residences. Additionally, the Project will dedicate the appropriate right-of-way (ROW) and would construct pedestrian improvements such as curb, gutter, sidewalk, and landscaping in their ultimate positions. Therefore, a less than significant impact would occur, and no mitigation is required.

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 proposed Project would require a CUP to establish a church/private school. The CUP would ensure the proposed Project is compatible with the neighborhood, and consistent with the allowable land uses for the Project site. Additionally, the Project is consistent with surrounding land uses. Therefore, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Moreover, the Project would pay the appropriate development fees to cover any public infrastructure fees. Therefore, a less than significant impact would occur, and no mitigation is required.

Standard Conditions and Requirements

1. Development Fee Policy - In accordance with the provisions of California Government Code Sections 66000 et. seq., all development projects as defined therein shall be required to pay development fees to cover 100% of their pro rata share of the cost of any public infrastructure, facilities, or services, including without limitation police and fire services, necessitated as a result of such development. The City Council shall set and determine development fees sufficient to cover 100% of the estimated cost of such public infrastructure, facilities and services based on appropriate cost-benefit analyses as required by the provisions of California law.

Cumulative Impacts

The analysis of potential impacts indicated that less than significant impacts would result from the proposed Project's implementation. As a result, less than significant cumulative impacts related to land use and planning would occur.

MINERAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?				X
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?				X

- 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?*

No Impact: The Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the area. Under SMARA, areas are categorized into MRZs as follows:

- MRZ-1** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral resources.
- MRZ-2** Areas where geologic data indicate that significant PCC-Grade aggregate resources are present.
- MRZ-3** Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.

The proposed Project is not within any of the previously mentioned MRZs, meaning significant mineral deposits or likelihood of significant mineral deposits exist.¹⁷ Implementation of the proposed Project would not utilize mineral deposits or involve mining activities. Furthermore, the Project site is not located in an area identified as a locally important mineral resource recovery site, nor is it currently being utilized for mining. Therefore, the proposed Project would not result in the loss of availability of a known mineral resource. Therefore, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

The analysis of potential impacts indicated that no significant impacts would result from the proposed Project. As a result, no cumulative impacts related to mineral resources would occur.

¹⁷ Redlands. 2017. *General Plan 2035, Figure 6-4: Mineral Resources*. Available at <https://gis.cityofredlands.org/generalplan/gp2035.pdf>, accessed April 15, 2020.

NOISE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Generation of excessive ground borne vibration or ground borne noise levels?			X	
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?			X	

ECORP Consulting, Inc. prepared a Noise Impact Assessment dated May 2020. Analysis and conclusions from this technical study are used as the basis for this technical section; refer to Appendix F.

Noise-Sensitive Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest sensitive receptors to the Project site are the residences directly contiguous to the western boundary of the Project site.

Noise Measurements

Redlands is impacted by various noise sources. It is subject to typical urban noise such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities. Mobile sources of noise, especially cars and trucks, are the most common source of noise in the community. Other sources of noise are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise. The Redlands Municipal Airport is located approximately 1 mile north of the Project site.

As previously described, the Project site is currently characterized by vacant, flat, and undeveloped land. The site is generally bounded by residential and undeveloped land to the north, a residential development to the east, E. Lugonia Avenue, and a residential development beyond to the south, and undeveloped land to the west. In order to quantify existing ambient noise levels in the Project area, ECORP Consulting, Inc. conducted three short-term noise measurements on June 18, 2019. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the Project site (see Attachment A of for the Noise Measurement Locations found in the Noise Impact Assessment provided as Appendix F to this ISMND). The 10-minute measurements were taken between 11:52 a.m. and 12:40 p.m. Short-term (Leq) measurements are considered generally representative of the noise levels throughout the daytime. The average noise levels and sources of noise measured at each location are listed in **Table 20, Existing (Baseline) Noise Measurements**.

As shown in **Table 20**, the ambient recorded noise levels ranged from 55.1 dBA to 70.0 dBA in the vicinity of the Project site (see Attachment A for noise measurement locations found in the Noise Impact Assessment provided as Appendix F to this ISMND). The noise most commonly in the Project vicinity is produced by automotive vehicles (cars, trucks, buses, motorcycles). For instance, Location 1 is located on E. Lugonia Avenue, which is a heavily traveled roadway within the City and accommodates a variety of vehicles. Locations 2 and 3 are not located on major roadways and accommodate less vehicle movement and are thus substantially quieter than Location 1. Traffic moving along streets produces a sound level that remains relatively constant and is part of the Project area's minimum ambient noise level. Vehicular noise varies with the volume, speed, and type of traffic. Slower traffic produces less noise than fast moving traffic. Trucks typically generate more noise than cars. Infrequent or intermittent noise also is associated with vehicles, including sirens, vehicle alarms, slamming of doors, garbage truck operation, and honking of horns. These noises add to urban noise and are regulated by a variety of agencies.

Existing Roadway Noise Levels

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B traffic volumes from the Project's Traffic Impact Study (Ganddini Group, Inc. 2020, provided as Appendix G to this ISMND). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by the California Department of Transportation (Caltrans). The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels.

The existing traffic-generated noise level on Project-vicinity roadways currently ranges from 38.2 to 59.7 dBA CNEL. CNEL is 24-hour average noise level with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of

10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Regulatory Setting

Federal

Occupational Safety and Health Act of 1970

OSHA regulates on-site noise levels and protects workers from occupational noise exposure. To protect hearing, worker noise exposure is limited to 90 dB with A-weighting (dBA) over an eight-hour work shift (29 Code of Federal Regulations 1910.95). Employers are required to develop a hearing conservation program when employees are exposed to noise levels exceeding 85 dBA. These programs include provision of hearing protection devices and testing employees for hearing loss on a periodic basis.

State

California Code of Regulations, Title 24

The State's noise insulation standards are codified in the CCR, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for the purpose of interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

State of California General Plan Guidelines

The State of California regulates vehicular and freeway noise affecting classrooms, sets standards for sound transmission and occupational noise control, and identifies noise insulation standards and airport noise/land-use compatibility criteria. The State of California General Plan Guidelines (State of California 2003), published by the Governor's Office of Planning and Research (OPR), also provides guidance for the acceptability of projects within specific CNEL/Ldn contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

State Office of Planning and Research Noise Element Guidelines

The State OPR Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that

describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL.

Local

City of Redlands General Plan Healthy Community Element

The Healthy Community Element of the City's General Plan provides policy direction for minimizing noise impacts on the community and for coordinating with surrounding jurisdictions and other entities regarding noise control. By identifying noise-sensitive land uses and establishing compatibility guidelines for land use and noise, noise considerations will influence the general distribution, location, and intensity of future land use. The result is that effective land use planning and mitigation can alleviate the majority of noise problems.

The most basic planning strategy to minimize adverse impacts on new land uses due to noise is to avoid designating certain land uses at locations within the City that would negatively affect noise-sensitive land uses. Uses such as schools, hospitals, childcare, senior care, congregate care, churches, and all types of residential use should be located outside of any area anticipated to exceed acceptable noise levels as defined by the Noise and Land Use Compatibility Guidelines or should be protected from noise through sound attenuation measures such as site and architectural design and sound walls. The City has adopted these guidelines in a modified form as a basis for planning decisions based on noise considerations. These guidelines are shown in **Table 19, *Land Use Compatibility for Community Noise Environments – City of Redlands***. In the case that the noise levels identified at a proposed project site fall within levels considered normally acceptable, the project is considered compatible with the existing noise environment.

The Healthy Community Element also contains principles and implementation policies that are used to guide decisions concerning land uses that are common sources of excessive noise levels. The following relevant and applicable principles and implementation policies from the City's Healthy Community Element have been identified for the Project.

- Principle 7-P.40: Protect public health and welfare by eliminating existing noise problems where feasible and by preventing significant degradation of the future acoustic environment.
- Principle 7-P.41: Ensure that new development is compatible with the noise environment by continuing to use potential noise exposure as a criterion in land use planning.
- Policy 9.0e: Use the criteria specified in the General Plan (Table 4) to assess the compatibility of proposed land uses with the projected noise environment and apply the noise standards in the General Plan (Table 17), which prescribe interior and exterior noise standards in relation to specific land uses. Do not approve projects that would not comply with the standards in the General Plan (Table 17).

Policy 9.0i: Require construction of noise barriers to mitigate sound emissions where necessary or when feasible and encourage the use of walls and berms to protect residential or other noise-sensitive land uses that are adjacent to major roads, commercial or industrial areas.

Policy 9.0s: Require mitigation to ensure that indoor noise levels for residential living spaces not exceed 45 dB Ldn/CNEL due to the combined effects of all exterior noise sources.

City of Redlands Municipal Code

The City's regulations with respect to noise are included in Title 8 of the Health and Safety Code, specifically Chapter 8.06, Community Noise Control. The Noise Control chapter provides noise standards within the City and the following references are those portions of the Noise Control chapter that may be applicable to the Project.

Section 8.06.070 provides exterior noise limits for various land uses within the city and is presented on page 16 of the Project Noise Impact Assessment.

Section 8.06.080 provides interior noise limits for various land uses within the city and is presented on page 17 of the Project Noise Impact Assessment.

Additionally, Section 8.06.120 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 a.m. and 8:00 p.m. on weekdays, including Saturdays, with no activity taking place at any time on Sundays or federal holidays. All motorized equipment used in such activities shall be equipped with functioning mufflers.

County of San Bernardino Development Code

Unincorporated San Bernardino County limits are located directly across Wabash Avenue, approximately 0.6 mile east of the Project site. There are sensitive noise receptors consisting of single-family residences located within this unincorporated neighborhood across Wabash Avenue, which could be potentially affected by Project-instigated offsite mobile noise sources. The County's Development Code (Title 8, Development Code; Division 3, Countywide Development Standards; Chapter 83.01, General Performance Standards, Section 83.01.080) sets interior and exterior noise standards for specific land users by type of noise source, stationary sources, and mobile sources. Noise standards for mobile noise sources are summarized **Table 21, Noise Standards for Mobile Noise Sources – San Bernardino County**. It is noted that these residences located within the unincorporated neighborhood east of Wabash Avenue would not be impacted by Project construction or stationary sources. As shown, the interior mobile-source noise standards for unincorporated residential properties are 45 CNEL and the exterior mobile-source noise standard is 60 CNEL.

Thresholds

Criteria for determining the significance of noise impacts were developed based on information contained in the California Environmental Quality Act Guidelines Appendix G. According to the

guidelines, a project may have a significant effect on the environment if it would result in the following conditions:

- 1) 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.
- 2) Generation of excessive ground borne vibration or ground borne noise levels.
- 3) 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.

For purposes of this analysis and where applicable, the City and County noise standards were used for evaluation of Project-related noise impacts.

Methodology

This analysis of the existing and future noise environments is based on noise prediction modeling and empirical observations. Predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Model (2008). Transportation-source noise levels in the Project vicinity were calculated using the FHWA Highway Noise Prediction Model (FHWA-RD-77-108). For Project operations trip generation was updated to reflect that generated by the Project, as supplied by Ganddini Group, Inc. (2020).

Onsite stationary source noise levels have been calculated with the SoundPLAN 3D noise model (Figure 3. SoundPLAN of the Noise Impact Assessment), which predicts noise propagation from a noise source based on the location, noise level, and frequency spectra of the noise sources as well as the geometry and reflective properties of the local terrain, buildings, and barriers.

Ground borne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical ground borne vibration levels associated with construction equipment. Potential ground borne vibration impacts related to structural damage and human annoyance were evaluated, considering the distance from construction activities to nearby structures and typically applied criteria for structural damage and human annoyance.

- 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.

Temporary - Construction

Construction noise associated with the proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities. Construction noise typically occurs intermittently and varies depending on the nature or phase

of construction (e.g., building construction, paving). Noise generated by construction equipment, including earthmovers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of material or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive receptors in the vicinity of the construction site.

Table 18, *Maximum Noise Levels Generated by Construction Equipment*, indicates the anticipated noise levels of construction equipment. The average noise levels presented in **Table 18** are based on the quantity, type, and acoustical use factor for each type of equipment that is anticipated to be used.

Table 18: Maximum Noise Levels Generated by Construction Equipment

Equipment Type	Maximum 8-Hour Noise (L_{eq}) at 335 Feet (dBA)	Exceed 85.0 dBA Threshold?
Crane	56.1	No
Dozer	61.2	No
Excavator	60.2	No
Generator	61.1	No
Grader	64.5	No
Paver	57.7	No
Roller	56.6	No
Tractor	63.5	No
Dump Truck	55.9	No
Concrete Pump Truck	57.9	No
Welder	53.5	No
Combined Construction Equipment	70.6	No
Source: FHWA, Roadway Construction Noise Model (FHWA-HEP-05-054), dated January 2008.		

The nearest existing noise-sensitive land uses to the Project site are a single-family residential neighborhood directly adjacent and west of the Project site. However, it is acknowledged that the majority of construction equipment is not situated at any one location during construction activities, but rather spread throughout the Project site and at various distances from sensitive receptors. Therefore, this analysis employs FTA guidance for calculating construction noise, which recommends measuring construction noise produced by all construction equipment from the center of the Project site (FTA 2018), which in this case is 335 feet from the nearest sensitive receptor to the west. As shown, the maximum noise levels from combined construction equipment, during the combined construction phase of the project, as experienced by the nearest noise sensitive receptors west of the Project site, are expected to reach 70.6 dBA Leq.

The City restricts the time that construction can take place but does not promulgate numeric thresholds pertaining to the noise associated with construction. Specifically, 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 a.m. and 8:00 p.m. on weekdays, including Saturdays, with no activity taking place at any time on Sundays or federal holidays. It is typical to regulate construction noise in this manner since construction noise is temporary, short term, intermittent in nature, and would cease on completion of the project. Furthermore, the city is a developing urban community and construction noise is generally accepted as a reality within the urban environment. Additionally, construction would occur throughout the Project site and would not be concentrated at one point.

For comparison purposes, Project construction noise is compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA Leq is used as an acceptable threshold for construction noise at the nearby sensitive receptors. Since this construction-related noise level threshold represents the energy average of the noise source over a given time period, the noise level is expressed in Leq. As discussed, the predicted maximum eight-hour noise levels at the nearest sensitive receptor could potentially reach approximately 70.6 dBA Leq, which is below the NIOSH threshold of 85 dBA.

Therefore, noise generated during construction activities, as long as conducted within the permitted hours, would not exceed City noise standards.

Permanent Operations

Project Land Use Compatibility

The City of Redlands land use compatibility table provides the City with a tool to gauge the compatibility of new land users relative to existing noise levels. This table, presented as **Table 19**, identifies clearly compatible, normally compatible, normally incompatible, and clearly incompatible noise levels for various land uses, including school classrooms and churches such as those proposed by the Project. In the case that the noise levels identified at the Project site fall within levels considered normally compatible, the Project is considered compatible with the existing noise environment. As shown in **Table 19**, a clearly compatible noise level for locating churches and school classrooms is 65 dBA CNEL and under. In order to quantify existing ambient noise levels in the Project Area, ECORP conducted three short-term noise measurements on June 18, 2019. The noise measurements were conducted in the middle of the day, on a weekday, and are therefore representative of typical existing noise exposure within and immediately adjacent to the Project site and are considered representative of the noise levels throughout the day. The closest noise measurement to the Project site is Location 2,

located approximately 70 feet away. As shown in **Table 20, Existing (Baseline) Noise Measurements**, the ambient noise at Location 2 is 55.1 dBA.

Table 19: Land Use Compatibility for Community Noise Environments – City of Redlands

Land Use Category		Community Noise Exposure (CNEL)			
Categories	Uses	Clearly Compatible (A)	Normally Compatible (B)	Normally Compatible (C)	Clearly Incompatible (D)
Residential	Single Family, Duplex Multiple Family	< -60	N/A	61 - 75	76 - >
Residential	Mobile Homes	< -60	N/A	61 - 75	76 - >
Commercial (Regional District)	Hotel, Motel, Transient Lodging	< -65	66 - 75	76 - 85	86 - >
Commercial (Regional Village District, Special)	Commercial Retail, Bank, Restaurant, Movie Theater	< -75	76 - 85	86 - >	N/A
Commercial (Industrial Institutional)	Office Building, Research & Dev., Professional Offices, City Office Building	< -70	71 - 80	81 - 85	86 - >
Commercial (Recreation) Institutional (Civic Center)	Amphitheater, Concert Hall, Auditorium, Meeting Hall	N/A	< -65	66 – 75	76 - >
Commercial (Recreation)	Children’s Amusement Park, Minatare Golf Course, Go-cart Track, Equestrian Center, Sports Club	< -75	76 ->	N/A	N/A
Commercial (General, Special) Industrial, Institutional	Automobile Service Station, Auto Dealership, Manufacturing Warehouse, Wholesale, Utilities	< -75	76 ->	N/A	N/A
Institutional (General)	Hospital, Church, Library, Schools Classroom	< -65	66 - 70	71 - 80	81 - >
Open Space	Parks	< -70	71 - 75	76 - 80	81 - >
Open Space	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	< -75	76 - 80	81 - >	N/A
Agriculture	Agriculture	N/A	N/A	N/A	N/A

Source: City of Redlands 2017

Notes:

NA: Not Applicable

Clearly Compatible – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Normally Compatible – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements are made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice. Outdoor environment will seem noisy.

Normally Incompatible – New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. Outdoor areas must be shielded.

Clearly Incompatible – New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor environment would not be usable.

Table 20: Existing (Baseline) Noise Measurements

Location Number	Location	L _{eq} dBA	L _{min} dBA	L _{max} dBA	Time
1	On Darlene Court approximately 8 feet from East Lugonia Avenue.	70.0	42.2	84.2	11:52 am – 12:02 pm
2	On the parkway between Dearborn Street.	55.1	40.1	73.5	12:13 pm – 12:23 pm
3	Gate at the end of the cul-de-sac on East Pennsylvania Avenue.	55.8	36.4	77.9	12:30 pm – 12:40 pm

Source: Measurements were taken by ECORP with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Attachment A for noise measurement outputs.

In addition to baseline noise measurements conducted in the Project vicinity, existing roadway noise levels were calculated for the roadway segments in the Project vicinity. The modeled noise levels depicted in **Table 20** are reported in the noise metric, CNEL, which is the same noise metric promulgated by City noise compatibility guidelines. The noise emanating from the segment of E. Lugonia Avenue traversing the southern boundary of the Project site (between Judson Street and Dearborn Street) was calculated at 59.1 dBA CNEL. The segment of Dearborn Street traversing the eastern boundary of the Project site (between E. Lugonia Avenue and Pennsylvania Avenue) was calculated as generating noise levels of 52.5 dBA CNEL.

Therefore, baseline measurements conducted nearest to the Project site and calculated traffic noise levels generated by the nearest roadways fall within the range of sound considered clearly compatible for churches and school classrooms.

Project Operations

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise sensitive and may warrant unique measures for protection from intruding noise. The nearest noise-sensitive land uses consist of residences located contiguous to the west of the Project site. Operational noise sources associated with the proposed Project include mobile and stationary (i.e., mechanical equipment, onsite activity) sources.

Operational Traffic Noise

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise-sensitive residential land uses) were modeled based on the traffic volumes identified by Ganddini Group, Inc. (2020) to determine the noise levels along Project vicinity roadways. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the noise standards in the City General Plan for all roadways west of Wabash Avenue and the County of San Bernardino Development Code (see **Table 21**) for all roadway segments east of Wabash Avenue. In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant.

Table 21: Noise Standards for Mobile Noise Sources – San Bernardino County

Land Use		CNEL dBA	
Categories	Uses	Interior ¹	Exterior ²
Residential	Single and Multi-family, duplex, mobile homes	45	60 ³
Commercial	Hotel, motel, transient housing	45	60 ³
	Commercial retail, bank, restaurant	50	N/A
	Office building, research and development, professional offices	45	65
	Amphitheater, concert hall, auditorium, movie theater	45	N/A
Institutional/Public	Hospital, nursing home, school classroom, religious institution, library	45	65
Open Space	Park	N/A	65
Source: Source: County of San Bernardino Development Code, Section 83.01.080, Table 83-3 Notes: (1) The indoor environment shall exclude bathrooms, kitchens, toilets, closets, and corridors. (2) The outdoor environment shall be limited to hospital/ office buildings, hotel/motel recreation areas, mobile home parks, multi-family private patios or balconies, park picnic areas, private yard for single-family dwellings and school playgrounds. (3) An exterior noise level of up to 65 dB(A) (or CNEL) shall be allowed provided exterior noise levels have been substantially mitigated through a reasonable application of the best available noise reduction technology, and interior noise exposure does not exceed 45 dB(A) (or CENL) with windows and doors closes. Requiring that windows and doors remain closed to achieve an acceptable interior noise level shall necessitate the use of air conditioning or mechanical ventilation.			

Stationary Noise

The main onsite operational noise associated with the Project would be events occurring on the Project site such as masses, weddings, quinceaneras, parking lot activity/circulation, sporting events, weekly school activity, and office/hall building operations. Per information supplied by the Diocese of San Bernardino these events would mainly occur between the hours of 7:00 a.m. to 6:00 p.m., Monday thru Sunday.

Table 22 shows the predicted noise propagation associated with full operation of the proposed Project, as predicted by the SoundPLAN 3D noise model. This includes the three locations where baseline noise measurements were taken as well as three additional locations at residences adjacent to the Project site. Full operation at the Project site would occur between the hours of 7:00 a.m. and 6:00 p.m.

Table 22: Modeled Operational Noise Levels

Site Location	Location	Modeled Operational Noise Attributable to Project (Leq dBA)	Affected Land Use	City Standards dBA	Exceed Standard?
1	On Darlene Court approximately 8 feet from East Lugonia Avenue.	43.9	Residential	60	No
2	On the parkway between Dearborn Street.	49.9	Agriculture	N/A	No
3	Gate at the end of the cul-de-sac on East Pennsylvania Avenue.	44.1	Residential	60	No
4	Northeast of Project site at residence located behind wall across Dearborn Street.	45.3	Residential	60	No
5	East of Project site at residence located behind wall Dearborn Street.	46.8	Residential	60	No
6	East of Project site at residence south of Sundown Court.	40.0	Residential	60	No
7	West of Project site adjacent to proposed soccer field.	44.3	Residential	60	No
8	West of Project site adjacent to proposed student gathering area.	38.0	Residential	60	No
9	West of Project site adjacent to proposed parking lot.	43.1	Residential	60	No

Source: Stationary source noise levels were modeled by ECORP using SoundPLAN 3D noise model. Refer to Attachment C for noise modeling assumptions and results.

As shown on **Table 22**, Project noise levels would reach between 38.0 and 49.9 dBA at the nearby noise-sensitive residences during Project operations between 7:00 a.m. – 10:00 p.m. These numbers fall below the City’s single-family residential noise standards. Additionally, as previously stated, the interior-to-exterior noise reduction attributable to newer structures is generally 30 dBA or more. This reduction would reduce the depicted noise levels further, as they are experienced within the vicinity residences.

The loudest noise levels that would be generated by Project onsite sources would reach 49.9 dBA at the east side of Dearborn Street within a strip of orange trees. This landscape feature located between Dearborn Street and the residential neighborhood to the east is not considered a sensitive receptor as there is no connectivity with the residential neighborhood nor does it contain any pedestrian pathways. It is noted that SoundPLAN was used to model operational noise on a worst-case basis. All noise producing sources on the Project site was modeled for noise as if operating at the same time and at the highest activity level to produce noise levels as high as those predicted. Further, the soft surfaces and vegetative screening innate to the strip of orange trees, which can absorb sound, was not accounted for in the SoundPLAN model. Thus, it is unlikely that noise on the Project site would reach the levels of those modeled.

Offsite Traffic Noise

Future traffic noise levels throughout the Project vicinity (i.e., vicinity roadway segments that traverse noise-sensitive residential land uses) were modeled based on the traffic volumes identified by Ganddini Group, Inc. (2020) to determine the noise levels along Project vicinity roadways. The calculated offsite roadway noise levels under existing traffic levels compared to existing traffic levels plus of the Project. The calculated noise levels as a result of the Project at affected sensitive land uses are compared to the noise standards in the City General Plan for all roadways west of Wabash Avenue and the County of San Bernardino Development for all roadway segments east of Wabash Avenue. In the case that the existing ambient noise levels already exceed the applicable numeric noise threshold, an increase of more than 5 dBA over the existing ambient noise level is considered significant; refer to **Table 23**.

Table 23: Existing Plus Project Conditions - Predicted Traffic Noise Levels

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
Orange Street					
Between Lugonia Avenue and San Bernardino Avenue	Residential and Commercial	57.3	57.3	60	No
South of Lugonia Avenue	Residential and Commercial	57.6	57.7	60	No
North of San Bernardino Avenue	Residential and Commercial	57.5	57.6	60	No
Church Street					
North of San Bernardino Avenue	Residential	52.0	52.0	60	No
South of Lugonia Avenue	Residential	53.4	53.5	60	No
Between Lugonia Avenue and San Bernardino Avenue	Residential	53.6	53.6	60	No
University Street					
South of Lugonia Avenue	Residential	53.2	53.2	60	No
Between Lugonia Avenue and San Bernardino Avenue	Residential	47.6	47.6	60	No
Judson Street					
South of Colton Avenue	Residential	54.4	54.6	60	No
Between Colton Avenue and Lugonia Avenue	Residential	54.2	54.4	60	No
Between Lugonia Avenue and Pennsylvania Avenue	Residential	52.5	52.5	60	No
Between Pennsylvania Avenue and San Bernardino Avenue	Residential	50.9	52.2	60	No
West of San Bernardino Avenue	Residential	53.2	53.6	60	No
Dearborn Street					
South of Lugonia Avenue	Residential	52.1	52.4	60	No
Between Lugonia Avenue and Pennsylvania Avenue	Residential	51.0	51.8	60	No
Between Pennsylvania	Residential	53.4	51.7	60	No

Roadway Segment	Surrounding Uses	CNEL at 100 feet from Centerline of Roadway		Noise Standard (dBA CNEL)	Exceed Standard/ Significant Impact?
		Existing Conditions	Existing + Project Conditions		
Avenue and San Bernardino Avenue					
North of San Bernardino Avenue	Residential	51.9	51.9	60	No
Wabash Avenue					
South of Lugonia Avenue	Residential and Commercial	52.2	54.8	60	No
North of Lugonia Avenue	Residential and Commercial	52.6	52.7	60	No
San Bernardino Avenue					
West of Orange Street	Residential	56.8	57.1	60	No
Between Orange Street and Church Street	Residential	55.9	58.1	60	No
Between Church Street and University Avenue	Residential	57.2	57.3	60	No
Between University Avenue and Judson Street	Residential	55.8	56.4	60	No
Between Judson Street and Dearborn Street	Residential	55.4	55.7	60	No
East of Dearborn Street	Residential	56.5	56.6	60	No
Pennsylvania Avenue					
West of Judson Street	Residential	45.4	45.3	60	No
Between Judson Street and Dearborn Street	Residential	38.2	40.5	60	No
Lugonia Avenue					
West of Orange Street	Residential	55.9	56.6	60	No
Between Orange Street and Church Street	Residential	58.7	58.7	60	No
Between Church Street and University Street	Residential	58.8	58.9	60	No
Between University Street and Judson Street	Residential	59.1	59.2	60	No
Between Judson Street and Dearborn Street	Residential	59.1	59.2	60	No
Between Dearborn and Wabash Avenue	Residential	55.0	58.9	60	No
East of Wabash Avenue	Residential (In Unincorporated San Bernardino County)	59.7	59.8	60	No
Colton Avenue					
West of Judson Street	Residential	52.5	53.3	60	No
East of Judson Street	Residential	53.6	53.6	60	No

Source: Traffic noise levels were calculated by ECORP Consulting using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by Ganddini Group, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.
Notes: A total of 18 intersections were analyzed in the Traffic Impact Study; however, only roadway segments that impact sensitive receptors were included for the purposes of this analysis.

As shown in **Table 23**, predicted increase in traffic noise levels associated with the Project would be less than City and County noise standards. Therefore, a less than significant impact would occur, and no mitigation is required.

b) *Generation of excessive ground borne vibration or ground borne noise levels?***Less than Significant Impact.****Short-term Construction**

Excessive ground borne vibration impacts result from continuously occurring vibration levels. Increases in ground borne vibration levels attributable to the proposed Project would be primarily associated with short-term, construction-related activities. Construction on the Project site would have the potential to result in varying degrees of temporary ground borne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is noted that pile drivers would not be necessary during Project construction as such equipment is not generally necessary for the construction of single-story structures. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to sensitive receptors. Ground borne vibration levels associated with construction equipment are summarized in **Table 24**, *Vibration Source Amplitudes for Construction Equipment*.

Table 24: Vibration Source Amplitudes for Construction Equipment

Equipment Type	Peak Particle Velocity (PPV) at 25 feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Rock Breaker	0.082
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2018; Caltrans 2013

The City does not regulate vibration associated with construction. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2004) recommended standard of 0.2 inch per second PPV with respect to the prevention of structural damage for residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings.

It is acknowledged that construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest structure. The nearest structures of concern to the construction site are residences located approximately 335 feet from the Project's center. Based on the vibration levels presented in **Table 24**, ground vibration generated by heavy-duty equipment would not be anticipated to exceed approximately 0.089

inch per second PPV at 25 feet. Thus, structures located at 335 feet would not be negatively affected.

Long-Term Operation

Project operations would not include the use of any stationary equipment that would result in excessive ground borne vibration levels.

Therefore, a less than significant impact would occur, and no mitigation is required.

- 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?*

Less than Significant Impact. The Project site is located approximately one mile south of the Redlands Municipal Airport. The Project site is located outside of the 60 dBA CNEL noise contour per the Airport Hazards Map in the City's General Plan Healthy Community Element as such the project would not expose people to excessive noise levels. Implementation of the Proposed Project would not affect airport operations nor result in increased exposure of noise-sensitive receptors to aircraft noise. Therefore, a less than significant impact would occur, and no mitigation is required.

Cumulative Impacts

Cumulative Construction Noise

Construction activities associated with the proposed Project and other construction projects in the area may overlap, resulting in construction noise in the area. However, construction noise impacts primarily affect the areas immediately adjacent to the construction site. Construction noise for the proposed Project was determined to be less than significant, following compliance with the City Municipal Code. Cumulative development in the vicinity of the Project site could result in elevated construction noise levels at sensitive receptors in the Project area. However, each project would be required to comply with the applicable City Municipal Code limitations on construction. Therefore, the Project would not contribute to cumulative impacts during construction.

Cumulative Traffic Source Noise Impacts

Cumulative noise impacts represent the "combined" and "incremental" effects of human activities that accumulate over time. A significant impact would result only if both the combined and incremental effects criteria have been exceeded. For instance, although there may be a significant noise increase due to the proposed Project in combination with other related projects (Combined effects), it must also be demonstrated that the Project, considered on its own, has an Incremental effect. In other words, a significant portion of the noise increase must be due to the proposed Project.

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to construction of the Project and other projects in the vicinity. A project's

contribution to a cumulative traffic noise increase could be considered substantial when the Combined effect exceeds the perception level (i.e., auditory level increase) threshold. The Combined effect compares the “Cumulative Plus Project” condition to the “Existing without Project” condition. This comparison accounts for the traffic noise increase generated by a project combined with the traffic noise increase generated by other projects in the area. The Incremental effect compares the “Cumulative Plus Project” condition to the “Cumulative No Project” condition. This comparison accounts for the effect of future traffic noise as a result of the proposed Project only.

The following Combined effect and Incremental effect criteria have been utilized to evaluate the overall effect of the cumulative noise increase.

- Combined Effect. Does the Cumulative Plus Project noise level generate an increase of 3.0 dB over Existing without Project conditions, resulting noise levels exceeding the applicable exterior standard at a sensitive use? and
- Incremental Effects. Does the Cumulative Plus Project noise level cause a 1.0 dBA increase in noise over the Cumulative without Project noise level?

Although there may be a significant noise increase due to the proposed Project in combination with other related projects (Combined effects), it must also be demonstrated that the Project has an Incremental effect. In other words, a significant portion of the noise increase must be due to the proposed Project. Thus, a significant impact would result only if both the Combined and Incremental effects criteria have been exceeded at a single roadway segment, resulting noise levels exceeding the applicable exterior standard at a sensitive use. This would indicate that there is a significant noise increase due to the proposed Project in combination with other related projects and a significant portion of the noise increase is due to the proposed Project. Noise by definition is a localized phenomenon and reduces as distance from the source increases. Consequently, only the proposed Project and growth due to occur in the Project site’s general vicinity would contribute to cumulative noise impacts.

As such, no significant cumulative traffic noise impact would result. As previously described, the Combined effect and Incremental effect criteria have been utilized to evaluate the overall effect of the cumulative noise increase, and a significant impact would result only if both the Combined and Incremental effects criteria have been exceeded at a single roadway segment. While traffic noise at a number of segments, such as that on Pennsylvania Avenue west of Judson Street, would surpass the Combined effect threshold of 3.0 dBA over Existing without Project conditions, there is no increase in noise beyond the Cumulative without Project scenario as a result of the Project, and thus no Incremental effect. Therefore, no mobile-source cumulative impacts would occur.

Table 25: Cumulative Traffic Noise Scenario

Roadway Segment	Existing	Cumulative No Project	Cumulative Plus Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
	CNEL @ 100 Feet from Roadway Centerline	CNEL @ 100 Feet from Roadway Centerline	CNEL @ 100 Feet from Roadway Centerline	Difference in CNEL Between Existing and Cumulative + Project	Difference in CNEL Between Cumulative No Project and Cumulative + Project	
Orange Street						
Between Lugonia Avenue and San Bernardino Avenue	57.3	58.1	58.1	0.8	0.0	No
South of Lugonia Avenue	57.6	58.5	58.6	1.0	0.1	No
North of San Bernardino Avenue	57.5	59.1	59.1	1.6	0.0	No
Church Street						
North of San Bernardino Avenue	52.0	52.3	52.4	0.4	0.1	No
South of Lugonia Avenue	53.4	54.0	54.0	0.6	0.0	No
Between Lugonia Avenue and San Bernardino Avenue	53.6	54.0	55.0	1.4	1.0	No
University Street						
South of Lugonia Avenue	53.2	53.8	53.8	0.6	0.0	No
Between Lugonia Avenue and San Bernardino Avenue	47.6	49.1	49.1	1.4	0.0	No
Judson Street						
South of Colton Avenue	54.4	55.3	55.4	1.0	0.1	No
Between Colton Avenue and Lugonia Avenue	54.2	55.0	56.2	2.0	1.2	No
Between Lugonia Avenue and Pennsylvania Avenue	52.5	53.5	53.5	1.0	0.0	No
Between Pennsylvania Avenue and San Bernardino Avenue	50.9	52.3	53.1	2.2	0.8	No
West of San Bernardino Avenue	53.2	55.5	55.7	2.5	0.2	No
Dearborn Street						
South of Lugonia Avenue	52.1	52.9	53.1	1.0	0.2	No
Between Lugonia Avenue and Pennsylvania Avenue	51.0	53.3	53.3	2.3	0.0	No
Between Pennsylvania Avenue and San Bernardino Avenue	53.4	52.3	53.6	0.2	1.3	No
North of San Bernardino Avenue	51.9	52.4	52.4	0.5	0.0	No
Wabash Avenue						
South of Lugonia Avenue	52.2	56.1	56.1	3.9	0.0	No
North of Lugonia Avenue	52.6	53.7	53.7	1.1	0.0	No
San Bernardino Avenue						
West of Orange Street	56.8	58.8	58.9	2.1	0.1	No
Between Orange Street and Church Street	55.9	59.4	59.5	2.1	0.1	No
Between Church Street and University Avenue	57.2	58.6	58.7	1.5	0.1	No

Roadway Segment	Existing	Cumulative No Project	Cumulative Plus Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
	CNEL @ 100 Feet from Roadway Centerline	CNEL @ 100 Feet from Roadway Centerline	CNEL @ 100 Feet from Roadway Centerline	Difference in CNEL Between Existing and Cumulative + Project	Difference in CNEL Between Cumulative No Project and Cumulative + Project	
Between University Avenue and Judson Street	55.8	57.9	58.9	3.1	1.0	No
Between Judson Street and Dearborn Street	55.4	57.5	57.7	2.3	0.2	No
East of Dearborn Street	56.5	57.7	57.7	1.1	0.0	No
Pennsylvania Avenue						
West of Judson Street	45.4	48.8	49.2	3.8	0.4	No
Between Judson Street and Dearborn Street	38.2	41.9	42.6	4.4	0.7	No
Lugonia Avenue						
West of Orange Street	55.9	57.4	57.5	1.6	0.1	No
Between Orange Street and Church Street	58.7	59.6	59.7	1.0	0.1	No
Between Church Street and University Street	58.8	59.6	60.0	1.2	0.4	No
Between University Street and Judson Street	59.1	60.0	60.1	1.0	0.1	No
Between Judson Street and Dearborn Street	59.1	60.0	60.1	1.0	0.1	No
Between Dearborn and Wabash Avenue	55.0	59.6	59.7	4.7	0.1	No
East of Wabash Avenue	59.7	60.1	60.3	0.6	0.2	No
Colton Avenue						
West of Judson Street	52.5	53.4	53.5	0.9	0.1	No
East of Judson Street	53.6	54.3	54.3	0.7	0.0	No

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by Gandini Group, Inc. 2020. Refer to Attachment B for traffic noise modeling assumptions and results.

As shown in **Table 25**, no significant cumulative traffic noise impact would result. As previously described, the Combined effect and Incremental effect criteria have been utilized to evaluate the overall effect of the cumulative noise increase, and a significant impact would result only if both the Combined and Incremental effects criteria have been exceeded at a single roadway segment. While traffic noise at a number of segments, such as that on Pennsylvania Avenue west of Judson Street, would surpass the Combined effect threshold of 3.0 dBA over Existing without Project conditions, there is no increase in noise beyond the Cumulative without Project scenario as a result of the Project, and thus no Incremental effect. Therefore, no mobile-source cumulative impacts would occur.

Cumulative Stationary Source Noise Impacts

Long-term stationary noise sources associated with the development at the Project, combined with other cumulative projects, could cause local noise level increases. Noise levels associated with the proposed Project and related cumulative projects together could result in higher noise levels than considered separately. As previously described, onsite noise sources associated with

the proposed Project was found to not exceed City noise standards. Therefore, the Project would not contribute to cumulative impacts during operations.

POPULATION AND HOUSING

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

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)?*

Less than Significant. As of 2019, the population in the City of Redlands was 71,839 residents, with 27,045 housing units.¹⁸ Population and housing projections anticipate that population will grow to approximately 85,500 residents and housing unit to 32,400 units by 2040.¹⁹ The proposed Project involves the development of a new church/private school and does not include the construction of new homes or the extension of roads. Therefore, it would not directly or indirectly induce population growth in the area. The Project would generate temporary construction employment. However, construction workers generally travel from work site to work site and do not relocate for a specific project of average size, such as the Project.

The Project would generate operational employment. Projected employment densities for various land uses vary widely, depending on the location and actual business activities. The unemployment rate in San Bernardino County from 2015 to 2040 will see an approximately 1.3 percent change, or approximately 299,000 new jobs, which is the second highest in the region behind Riverside County (SCAG 2016). Thus, it is expected that the project would absorb workers from the regional labor force and would not attract new workers into the region. Therefore, a less than significant impact would occur, and no mitigation is required.

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

No Impact. The proposed Project is vacant, and no housing exists onsite. The Project site zoned Residential Estate (R-E) and has a Very Low Density Residential General Plan Designation. As

¹⁸ DOF. 2020. Table 2: E-5 City/County Population and Housing Estimates, 1/1/2019. Available at <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>, accessed April 15, 2020.

¹⁹ SCAG. 2016. 2016-2040 RTP/SCS, Demographic and Growth Forecast Appendix.

such, should the project be developed, a very small number of future residential units would not be developed. Given that the proposed Project is consistent with existing zoning and there is no site-specific development application to develop the site with residential units, no impacts would occur. No displacement of existing people or housing would occur; therefore, no impacts would occur, and mitigation would not be necessary.

PUBLIC SERVICES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. Would the Project:				
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:				
i) Fire protection?			X	
ii) Police protection?			X	
iii) Schools?				X
iv) Parks?			X	
v) Other public facilities?			X	

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:*

i) *Fire protection?*

Less Than Significant Impact: Fire protection services within the City are provided by the Redlands Fire Department (RFD). The proposed Project site would be served by Fire Station 264, located at 10 W. Pennsylvania Avenue, which is approximately 1.85 miles west of the Project site.

The proposed Project would be designed and constructed within building code standards. In addition, to protect the health, safety, and general welfare of the City’s populations, the City has established a fire/police protection facilities fee that is charged to all new development within the City’s boundaries. Continuous fire access roadways would be provided throughout the Project site to allow adequate emergency service. The facility fees associated with the proposed Project would help the City provide fire services at the Project site and finance new fire stations and equipment. Therefore, a less than significant impact would occur, and no mitigation is required.

ii) Police protection?

Less Than Significant Impact: The proposed Project site would be served by the Redlands Police Department. The proposed Project would be served by the police station located at 1270 West Park Avenue, which is approximately 3.0 miles west of the Project site. This station staffs patrol officers, custody services, dispatch services, and records services. Development impact fees paid by the Project would be partially allocated for police services and new police stations and equipment. Therefore, a less than significant impact would occur, and no mitigation is required.

iii) Schools?

No Impact. The Project site is located within the boundaries of Redlands Unified School District. However, as previously discussed, the Project would include the development of a church and private school. The proposed Project would provide an additional educational opportunity for students in the greater Project area in the form of a private school with specific enrollment criteria. Therefore, no impacts would occur, and no mitigation is required.

iv) Parks?

Less Than Significant Impact. The Project would not add population growth that would require the use of parks. The Project includes recreational amenities onsite in the form of ball fields and open areas. Therefore, a less than significant impact would occur, and no mitigation is required.

v) Other public facilities?

Less Than Significant Impact. The proposed Project would not cause an increase in population that would require additional or expanded public facilities. Less than significant impacts would occur, no further environmental review is required, and no mitigation is required.

Standard Conditions and Requirements

The Project Applicant would comply with the City of Redlands development impact fee requirements for the applicable fire, police, and school district, if applicable.

Cumulative Impacts

The proposed Project would not increase the demand for public services, as it does not propose uses that would increase the population. Therefore, no cumulative impacts to public services would result from Project implementation.

RECREATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION. Would the Project:				
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?				X
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?				X

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?*

No Impact. The proposed Project does not include residential development or increase demand on parks and recreational trail systems as it includes the development of a church and a private school. The proposed Project would not directly or indirectly increase the population and therefore would not increase the demand on neighborhood and regional parks. No impacts would occur, and no mitigation is required.

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

No Impact. The Project includes the construction of sports and recreation facilities (playground); however, they would not be open for public use. The effects of the development of these facilities, is discussed throughout this document. The impact of the recreational facilities as a standalone feature would not create impacts. Therefore, no impacts would occur, and no mitigation is required.

Cumulative Impacts

The Project would not result in an increased use of recreational facilities or require construction or expansion of existing recreational facilities. Therefore, no cumulative impacts on recreational facilities would result from Project implementation.

TRANSPORTATION

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless 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?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

A Traffic Impact Analysis for the proposed Project was prepared by Ganddini Group, Inc., dated November 8, 2021; refer to Appendix G.

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

Less Than Significant Impact with Mitigation. The proposed Project was evaluated to determine if it would likely conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) or generate pedestrian, bicycle, or transit travel demand that would not be accommodated by transit, bicycle, or pedestrian facilities and plans. The City of Redlands adopted the City of Redlands Bicycle Master Plan in January 2015, which documents the trail circulation network. There are no existing bike routes along the Project frontages. The General Plan indicates that both Lugonia Avenue and Dearborn Street are planned bike routes. However, it is not known when this will take place. As such, the Project would not conflict with a bicycle plan. Currently, there Project site does not have fully built pedestrian facilities along its roadway frontage.

As part of the Project implementation, fully built pedestrian facilities would be provided along the Project frontages which would increase pedestrian connectivity. The Project area is currently served by Omnitrans Route 8 along Lugonia Avenue with a stop at the intersection of Dearborn Street and Lugonia Avenue. Project construction is not anticipated to conflict with transit services. The impact on transit, pedestrian or bicycle facilities is determined to be less than significant, and no mitigation is required.

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

Less Than Significant Impact. This section presents the Vehicle Miles Travelled (VMT) assessment for the project for compliance with SB 743 and current CEQA requirements.

Background

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives that “promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses.” In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Traveled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies may currently opt-in to applying the updated CEQA guidelines for VMT analysis and implementation is required State-wide by July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) [“Technical Advisory”] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

The VMT analysis has been prepared in accordance with City of Redlands CEQA Assessment VMT Analysis Guidelines. These guidelines establish the VMT methodology and thresholds of significance for assessing VMT impacts in the City of Redlands.

Project Screening

The City of Redlands VMT guidelines identify three types of screening criteria that lead agencies can apply to effectively screen projects from project-level assessment. They are as follows:

Transit Priority Area (TPA) Screening

A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor. Projects located within a TPA may be presumed to have a less than significant impact absent evidence to the contrary. The presumption may not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75.
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking).

- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate or high-income residential units.

The proposed development does not satisfy this screening criteria.

Low VMT Area Screening

Residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.

For this screening in the SBCTA area, the SBTAM travel forecasting model was used to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to census block groups used to represent areas of homogenous travel behavior. Total daily VMT per service population (population plus employment) was estimated for each TAZ. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

To identify if the Project is in a low VMT generating area, the analyst may review the SBCTA screening tool and apply the appropriate threshold (identified later in this chapter) within the tool. Additionally, as noted above, the analyst must identify if the Project is consistent with the existing land use within that TAZ and use professional judgment that there is nothing unique about the project that would otherwise be misrepresented utilizing the data from the travel demand model.

Based on the City of Redlands guidelines, low VMT screening analysis was performed for the Project using the SBCTA Screening Tool for origin-destination VMT per service population, a 2020 baseline year, and a threshold of 15 percent below the San Bernardino County regional average VMT per service population. The Project is located in APN 168161020000 and 168161030000, which produce a VMT per service population that is below the San Bernardino County regional average VMT per service population. The proposed Project is estimated to generate approximately 29.6 VMT per service population. The Project VMT does not exceed the screening threshold based on jurisdictional average and is less than the 15% threshold of 30.5. Therefore, as shown on **Table 26, VMT Threshold**, the proposed Project satisfies the criteria for low VMT area screening and the Project may be presumed to result in a less than significant VMT impact.

Table 26: VMT Threshold

Metric	Project	Thresholds	
	(TAZ 53841103)	Jurisdictional VMT (SBCTA)	15% Below Jurisdictional Average
Total VMT / SP	29.6	35.9	30.5
Project VMT less than Threshold?	--	Yes (Pass)	Yes (Pass)
Notes: Source: SBCTA VMT Screening Tool VMT = Vehicle Miles Traveled; SP = Service Population			

Project Type Screening

Local serving retail projects with stores less than 50,000 square feet may be presumed to have a less than significant impact absent substantial evidence to the contrary. Local serving retail generally improves the convenience of shopping close to home and has the effect of reducing vehicle travel. Additional screening for retail projects is discussed below.

In addition to local serving retail, the following uses can also be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local-serving K-12 schools
- Local Parks
- Day care centers
- Local-serving gas stations
- Local-serving banks
- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects on or adjacent to a college campus
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fires stations, local government)
- Local-serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Affordable or supportive housing
- Assisted living facilities
- Senior housing (as defined by HUD)

Projects which generate less than 3,000 MT CO₂e per year can be presumed to have a less than significant impact on VMT. Projects which generate less than 3,000 MT CO₂e per year include the following:

- Single-family residential – 167 dwelling units or fewer
- Multi-family residential (1-2 stories) – 232 dwelling units or fewer
- Multi-family residential (3+ stories) – 299 dwelling units or fewer
- Office – 59,100 square feet or less
- Local-serving retail center – 112,400 square feet or less (no stores larger than 50,000 square feet)

- Warehousing – 463,400 square feet or less
- Light industrial – 74,600 square feet or less

The proposed Project consists of church and school uses. Since both of these land uses are local serving in nature, the proposed Project satisfies the project type screening criteria established by the City of Redlands and the Project can be presumed to result in a less than significant impact.

VMT Assessment

The proposed Project satisfies the low VMT area and Project type screening criteria established by the City of Redlands and therefore can be presumed to result in a less than significant VMT impact.

Standard Measures:

The following SMs are to be provided by the proposed Project for Existing Plus Project conditions to reduce the Project related traffic deficiency. The direct impacts for the Project are based on the total project trips. The direct impacts will be provided by the Project and installed with the completion of the phase of construction. The direct impact improvements are consistent with City of Redlands Measure U; refer to **Exhibit 9, Traffic Improvements**.

General Standard Measures

- SM-1** Improvements at the Project driveways are Project design features which shall be constructed by the Project. Site-adjacent roadway improvements shall be constructed in conjunction with the Project.
- SM-2** On-site and site-adjacent improvements including Project driveways, roadway design, traffic signing and striping, and traffic control improvements relating to the proposed Project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of Redlands.
- SM-3** Sight distance at Project access points would comply with applicable City of Redlands/California Department of Transportation sight distance standards. The final grading, landscaping, and street improvement plans would demonstrate that sight distance standards are met.
- SM-4** Off-street parking would be provided to meet the City of Redlands Municipal Code requirements.

As is the case for any roadway design, the City of Redlands would periodically review traffic operations in the vicinity of the Project once the Project is constructed to assure that the traffic operations are satisfactory. Therefore, a less than significant impact would occur, and no mitigation is required.

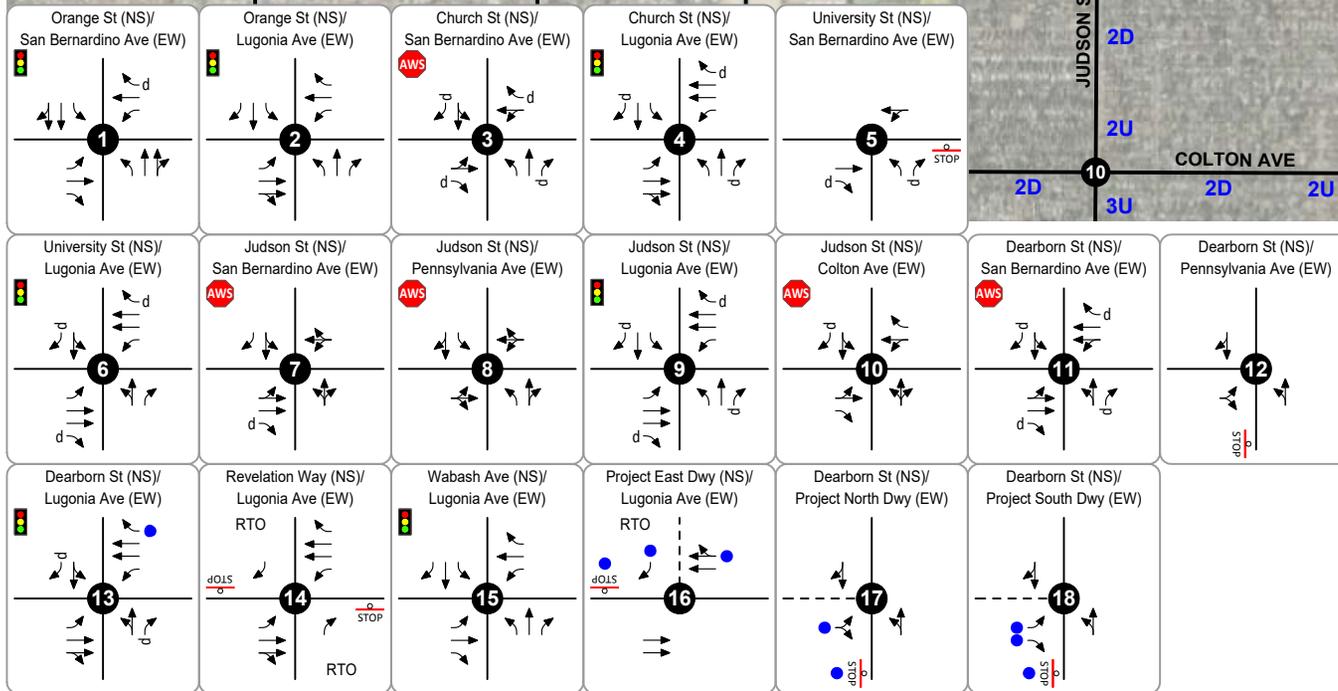
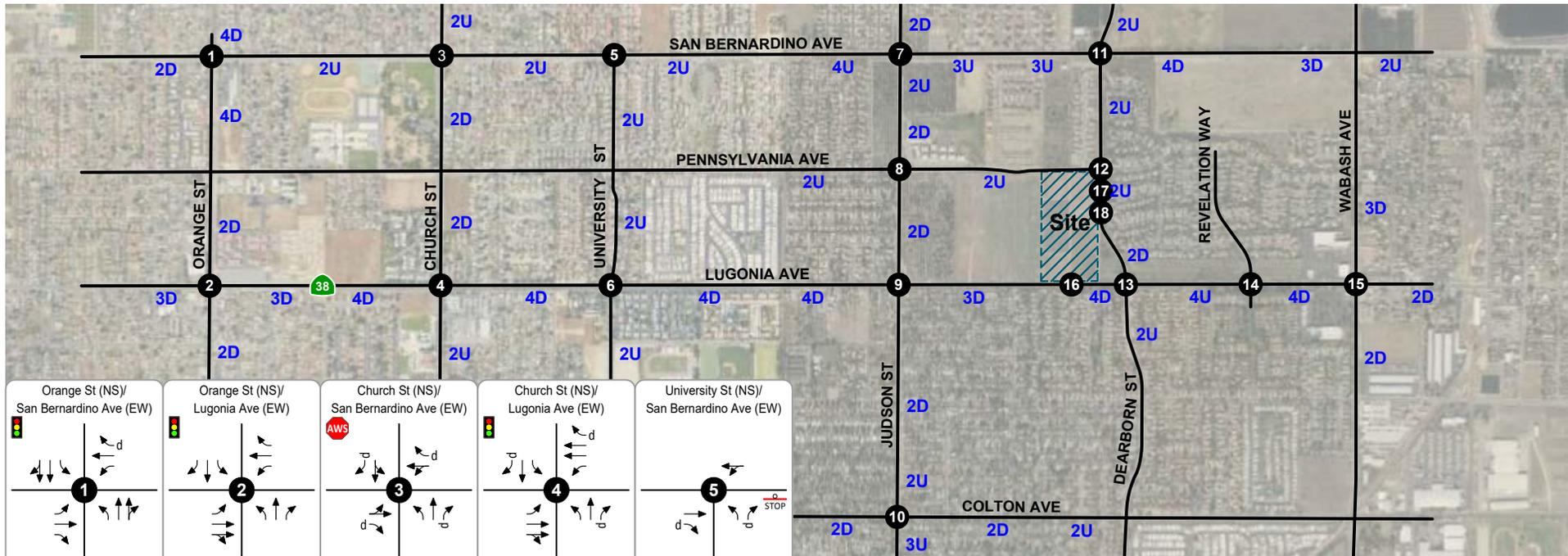
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Less Than Significant Impact. The City of Redlands implements development standards designed to ensure standard engineering practices are used for all improvements. The proposed Project would be reviewed for compliance with these standards as part of the City's review process. Although the Project would not introduce new roadways or hazardous geometric design features, as part of Project implementation, improvement and Project design features required by the City and Caltrans will modify existing intersections and adjacent roadways. These improvements such as the widening of Lugonia Avenue and the installation of a median within Lugonia Avenue to limit turning movements into the site will reduce hazards. Finally, there will be no incompatible or hazardous uses associated with the Project. Therefore, a less than significant impact will occur, and no mitigation is necessary.

d) Result in inadequate emergency access?

Less Than Significant Impact. Emergency ingress and egress is available via the four proposed driveways. Because the Project provides ample ingress and egress opportunities, these driveways ensure that emergency vehicles have an unobstructed access and movement throughout the Project site. All driveways will be gated but will be provided with a knock box in case of emergency situations.

As a standard City practice, if road closures (complete or partial) are necessary, the Police and Fire Departments would be notified of the construction schedule and any required detours would allow emergency vehicles to use alternate routes for emergency response. The RFD would review the proposed Project and would provide comments regarding fire and emergency access. The proposed Project would comply with the RFD requirements. The impact on emergency access from Project implementation cause a less than significant impact will occur, and no mitigation is necessary.



- Legend**
- Traffic Signal
 - All Way Stop
 - Stop Sign
 - #Lane Divided Roadway
 - #Lane Undivided Roadway
 - Existing Lane
 - De Facto Right Turn Lane
 - Project Driveway
 - Right Turn Only
 - Improvements

EXHIBIT 9: Traffic Improvements
 The Holy Name of Jesus Catholic Church/School Project
 Initial Study/Mitigated Negative Declaration
 City of Redlands

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TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
18. TRIBAL CULTURAL RESOURCES. Would the Project:				
a) 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:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?*

Less Than Significant Impact with Mitigation. Chapter 532 Statutes of 2014 (i.e., AB 52) requires that lead agencies evaluate a project’s potential impact on “tribal cultural resources,” which 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 of Historical Resources or included in a local register of historical resources.” AB 52 also gives lead agencies the discretion to determine, based on substantial evidence, whether a resource qualifies as a “tribal cultural resource.”

In compliance with AB 52 (specifically Public Resources Code [PRC] Section 21080.3.1), the City has provided formal notification to California Native American tribal governments that had

previously requested that the City provide it with notice of such projects, on March 30, 2020. The following are the tribes contacted:

- San Manuel Band of Mission Indians
- Soboba Band of Luiseno Indians
- Morongo Band of Mission Indians
- Gabrieleno Band of Missions Indians – Kizh Nation
- Torres Martinez Desert Cahuilla Indians

The notification provided information on the Project location, scope of work, and instructions on obtaining technical reports related to the Project.

The following tribes responded to the initial consultation:

- San Manuel Band of Mission Indians
- Soboba Band of Luiseno Indians
- Morongo Band of Mission Indians
- Gabrieleno Band of Missions Indians – Kizh Nation

Consultation with the above referenced tribes resulted in the request for the implementation of Tribal Cultural Resources (TCR) Mitigation Measures (MMs) TCR-1 through TCR-4. After consultation with the tribes, official closing consultation letters were sent to the tribes on February 11, 2021.

Mitigation Measures:

MM TCR-1: Archaeological/Tribal Monitoring

Prior to the issuance of any ground disturbance-related permits (such as grading permits), the project developer/applicant shall provide the lead agency evidence of agreements for a qualified archaeological monitor that has at least 3 years of regional experience and agreements with the consulting tribe(s) for Tribal monitor(s) representing tribe(s) that participated in consultation with the Lead Agency. Tribal monitors shall be present for all project related ground-disturbing activities (which includes ground disturbing activities such as tree/shrub removal and planting, clearing/grubbing, grading, excavation, trenching, compaction, fence/gate removal, drainage and irrigation removal, hardscape removal (benches, signage, boulders, walls, seat walls, fountains, etc.), and archaeological surveys, testing, and data recovery.

Prior to the issuance of any ground disturbance-related permits (such as grading permits), the Lead Agency shall contact and coordinate with consulting Tribe(s) as reasonably determined by the Lead Agency to facilitate communications with the Project developer/applicant so that all Parties can develop a mutually-

acceptable Archaeological and Tribal Monitoring and Treatment Plan which includes the scope of monitoring, scheduling of monitors from individual consulting Tribe(s), and the course of action for inadvertent discoveries. The Plan shall include a research design shall be developed in accordance with current professional archaeology standards. Any mitigation plan that results in the removal of cultural resources (artifacts, ecofacts, features, etc.) from their original provenience shall also include a comprehensive discussion of resource processing, analysis, curation, and reporting protocols and obligations. This Plan shall be approved and adopted by the Lead Agency prior to the of any ground disturbance-related permits. The Plan's implementation in the field shall be enforced by the Lead Agency for the life of the Project's ground disturbing activities.

MM TCR-2: Discovery Protocol & Treatment

If an archaeological deposit or tribal cultural resource is discovered within the Project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and, if necessary, an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. Representatives from the Participating Tribes, the Archaeological Monitor, the Project applicant/developer, and the Lead Agency shall confer regarding treatment of the discovered resource(s). No historic or prehistoric resources identified during monitoring will require preservation; however, all discoveries must be assessed for archaeological or cultural significance in adherence to CEQA, and if determined to be CEQA-significant, additional mitigation measures may be required to reduce the effect of grading impacts. Following the securing of the discovery site from further disturbance, the archaeological consultant, in conjunction with tribal representatives, will adhere to the stipulation for inadvertent discoveries within the Archaeological and Tribal Monitoring and Treatment Plan. This evaluation process may include archaeological excavations or test trenches, basic recordation, non-destructive methods for analysis of artifacts, and Native American participation in the site assessment. If that evaluation process concludes that the discovered resources are CEQA significant, then the stipulations of TCR-3 will be implemented for treatment and disposition. All final reports regarding the resource recovery fieldwork are to be submitted to the local CHRIS Information Center, the Lead Agency, and Consulting Tribe(s).

MM TCR-3: Treatment and Disposition of Tribal Cultural Resources and Items of Cultural Patrimony

California Public Resources Code 21074 defines "tribal cultural resources. In brief, a resource is a "tribal cultural resource" if it is either: (l) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national or

state register of historical resources, or listed in a local register of historic resources. Pub. Resources Code, § 21074 (a) In the event that Tribal Cultural Resources or Items of Cultural Patrimony are inadvertently discovered during the course of grading for this project, the following procedures will be carried out for treatment and disposition of the discoveries:

- The landowner(s) shall relinquish ownership of all cultural resources, including sacred items, burial goods, and all archaeological artifacts and non-human remains as part of the required mitigation for impacts to tribal cultural resources. The applicant shall relinquish the artifacts through one or more of the following methods and provide the City of Redlands with evidence of same:
 - a) Complete avoidance and preservation in situ, or reburial of the resources in a location onsite. This shall include measures and provisions to protect the future reburial area from any future impacts. Reburial shall not occur until all cataloguing and basic recordation have been completed.
 - b) A curation agreement with an appropriate qualified repository within San Bernardino County or Riverside 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 within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.
 - c) If more than one Native American Group is involved with the project and cannot come to a consensus as to the disposition of cultural materials, they shall be curated qualified repository within San Bernardino County or Riverside County that meets federal standards per 36 CFR Part 79 by default.

Should reburial of collected cultural items be preferred, it shall not occur until after the Phase IV monitoring report has been submitted to the City of Redlands. Should curation be preferred, the developer/permit applicant is responsible for all costs and the repository and curation method shall be described in the Phase IV monitoring report.

MM TCR-4: Discovery and Treatment of Human Remains Health and Safety Code §7050.5

- (b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27 460) of Part 3 of Division 2 of Title 3 of the

Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made 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. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

- (c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Inadvertent Discovery of Native American Human Remains: Public Resources Code §5097.98 This code invests the NAHC with the authority to designate a Most Likely Descendant (MLD) when Native American human remains and any associated grave items are inadvertently discovered:

- (a) Whenever the commission receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.
- (b) Upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section, with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.

- (1) The descendants' preferences for treatment may include the following:
 - (A) The nondestructive removal and analysis of human remains and items associated with Native American human remains.
 - (B) Preservation of Native American human remains and associated items in place.
 - (C) Relinquishment of Native American human remains and associated items to the descendants for treatment.
 - (D) Other culturally appropriate treatment.
 - (2) The parties may also mutually agree to extend discussions, taking into account the possibility that additional or multiple Native American human remains, as defined in this section, are located in the project area, providing a basis for additional treatment measures.
- (c) For the purposes of this section, "conferral" or "discuss and confer" means the meaningful and timely discussion and careful consideration of the views of each party, in a manner that is cognizant of all parties' cultural values, and where feasible, seeking agreement. Each party shall recognize the other's needs and concerns for confidentiality of information provided to the other.
- (d)
 - (1) Human remains of a Native American may be an inhumation or cremation, and in any state of decomposition or skeletal completeness.
 - (2) Any items associated with the human remains that are placed or buried with the Native American human remains are to be treated in the same manner as the remains, but do not by themselves constitute human remains.

UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
19. UTILITIES AND SERVICE SYSTEMS. Would the Project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
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?			X	
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?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Local Water Supply

The Redlands Planning Area domestic water sources consist of both surface (about 50 percent of total supply) and groundwater (about 50 percent of total supply). The City is entitled to surface water from both Mill Creek and the Santa Ana River. Mill Creek water is treated at the Henry Tate Water Treatment Plant, located northeast of the City. Water then flows by gravity from the Tate Treatment Plant to the City's distribution system. Santa Ana River water is treated at the Horace Hinckley Surface Water Treatment Plant, located northeast of the City.

Imported Water

Imported State Water Project (SWP) water is available to the Planning Area. The San Bernardino Valley Municipal Water District (SBVMWD) has an entitlement of about 102,600-acre feet a year of SWP water. The City of Redlands may purchase SWP water, which is conveyed eastward to the Planning Area via the 17-mile Foothill Pipeline. SWP water is treated at the City's Hinckley Plant or infrequently the Tate Treatment Plant.

Groundwater

The City of Redlands uses 18 wells that pump directly into the system or into reservoirs. All of these wells are adequately separated from sewerage facilities and are free from serious flooding hazard. Although the City's domestic water wells constitute about 50 percent of the water supply, some of the wells require treatment. Because of contamination, the City has wells that are not used for domestic purposes and are instead used for irrigation. It is anticipated that the contaminant levels will not decrease for many years due to the slow movement of water through the basin. However, non-treated nitrate-contaminated water not suitable for human consumption can be used for irrigation (non-potable system). The source of this contamination is typically due to agricultural nitrates and would require costly treatment if the wells were to be used for domestic purposes.

Water Infrastructure

Redlands operates two surface water treatment plants and uses 15 wells, 37 booster pumps, 18 reservoirs, and 400 miles of transmission and distribution lines to provide water to its customers. Of this infrastructure, one booster station is used for non-potable water. The capacity of the City's 18 reservoirs is a total of 54.45 million gallons. Additionally, there are 30 miles of existing non-potable water pipeline and one non-potable reservoir planned for construction. Redlands owns other facilities that are currently not in use due to age, contamination, or other factors.

Recycled Water

Currently, the City produces recycled water capable of being used for irrigation and industrial uses. The City's wastewater treatment plant (WWTP) has the capability of treating to a tertiary level of 7.2 million gallons of wastewater each day, which is greater than the average flow of approximately 5.6 million gallons per day (mgd). Currently, the City supplies recycled water to the Southern California Edison Company (SCE) that is used for cooling water at its Mountain View Power Plant (MVP), to the City landfill for the purpose of dust control, and to businesses in the northwest portion of the City service area for irrigation purposes.

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

Wastewater Treatment

Most wastewater generated by developments within the City is treated at the City's WWTP on the south side of the Santa Ana River wash at Nevada Street. Average flow is about 5.6 mgd.

Secondary treatment capacity is about 9.5 mgd, which will allow for anticipated growth of the City over the next 20 years, as of 2017.²⁰ According to the General Plan, there would be available wastewater and sewer capacity to treat growth, including the proposed Project. Therefore, impacts are less than significant.

Stormwater

The proposed project would preserve existing drainage patterns to help maintain the time of concentration and infiltration rates of runoff and decrease peak flows. Additionally, the proposed Project directs runoff from impervious areas to adjacent landscaping, to the underground water quality management plan chamber and to the stormwater basin.

Additionally, the BMP facilities implemented by the proposed Project would improve water quality. Impacts are less than significant. Stormwater drainage improvements would not exceed the capacity of storm drain systems, in accordance with the County MS4 Permit.

Electricity and Natural Gas

The utility improvements will all be within the Project site or within existing adjacent streets or public rights-of-way. Construction impacts of utility installation will be temporary and are not anticipated to result in significant environmental impacts as they will be within currently paved and/or developed areas and public rights-of-way. No long-term significant environmental impacts are anticipated due to this utility construction.

Therefore, a less than significant impact will occur, and no mitigation is necessary.

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

Less Than Significant Impact. The City and the Project site are provided water services by the City's Municipal Utilities Department; which uses water from the Upper Santa Ana River Watershed (USARW). According to the Integrated Regional Water Management Plan (IRWMP) for the USARW, the USARW is highly dependent on local water supplies, specifically precipitation stored as groundwater. This provides approximately 67% of supplies during average years and over 70% of supplies during drought years. The IRWMP determined that the water supplies within the USARW are adequate to meet the demands of the region through 2035. However, it should be noted that the IRWMP analysis relied on the 20% by 2020 reduction in water demand as a result of Senate Bill X7-7 and the conservation efforts of agencies within the region.

It is anticipated that the proposed Project would utilize less water than the existing agricultural use of the site; thus, no increase in overall water demand would occur. The proposed Project does not directly increase population within the City because it is not a residential project. Therefore, the proposed Project would have sufficient water supplies through the buildout year of the General Plan in 2035. Therefore, a less than significant impact will occur, and no mitigation is necessary.

²⁰ Redlands. 2017. *General Plan 2035*, page. 4-43.

- 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's California Street Landfill is currently being planned and permitted to provide capacity to approximately the year 2031. The remaining capacity of the landfill is estimated to be about 5 million cubic yards/tons. Current average daily tonnage is estimated by the City to be about 300 tons per day, or about 109,500 tons per year. The proposed Project would not create a significant increase in solid waste production. Therefore, a less than significant impact will occur, and no mitigation is necessary.

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

Less Than Significant Impact. Implementation of the proposed Project would be expected to generate additional waste during the temporary, short-term construction phase, as well as the operational phase, but it would not be expected to result in inadequate landfill capacity. The proposed Project, as with all other development in the City, would be required to adhere to City ordinances with respect to waste reduction and recycling. Therefore, a less than significant impacts related to State and local statutes governing solid waste are anticipated, and no mitigation is required.

Cumulative Impacts

The proposed Project would have a less than significant impact with respect to utilities/service systems. The Project would require water and wastewater infrastructure, as well as solid waste disposal for building facility operation. Development of public utility infrastructure is part of an extensive planning process involving utility providers and jurisdictions with discretionary review authority. The coordination process associated with the preparation of development and infrastructure plans is intended to ensure that adequate resources are available to serve both individual Projects and cumulative demand for resources and infrastructure because of cumulative growth and development in the area. Each individual project is subject to review for utility capacity to avoid unanticipated interruptions in service or inadequate supplies. Coordination with the utility companies would allow for the provision of utility service to the proposed Project and other developments. The Project and other planned projects are subject to connection and service fees to assist in facility expansion and service improvements triggered by an increase in demand. Because of the utility planning and coordination activities described above, no significant cumulative utility impacts are anticipated.

WILDFIRE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
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?			X	
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?			X	
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?				X

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

Less Than Significant Impact. California Government Code Chapter 6.8 directs the California Department of Forestry and Fire Protection (CALFIRE) to identify areas of very high fire hazard severity within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities, which quantifies the likelihood and nature of vegetation fire exposure to buildings. LRA VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data. In 2008, the California Building Standards Commission adopted California Building Code Chapter 7A requiring new buildings in VHFHSZs to use ignition-resistant construction methods and materials.

The City of Redlands has completed its Hazard Mitigation Plan (HMP) in accordance to 44 Code of Federal Regulations (44 CFR Parts 201 and 206). The intent of “hazard mitigation” is to reduce and/or eliminate loss of life and property. Hazard mitigation is defined by the Department of Homeland Security-Federal Emergency Management Agency (FEMA) as “any action taken to reduce or eliminate the long-term risk to human life and property from natural hazards.” A “hazard” is defined by FEMA as “any event or condition with the potential to cause

fatalities, injuries, property damage, infrastructure damage, agricultural loss, environmental damage, business interruption, or other loss.”

The purpose of the HMP is to demonstrate the plan for reducing and/or eliminating risk in the City. The HMP process encourages communities to engage community stakeholders to develop goals and projects that will reduce risk and build a more disaster resilient community by analyzing potential hazards.

Refer to Section 9, Hazards and Hazardous Materials, Response (g). No portion of the site is within an Extreme, Very High, or High threat area. Thus, no impacts are anticipated, and no mitigation is required. Additionally, the City of Redlands is covered by the LEPC for California Region VI (CA105), located in Hemet. The City is a member of a Countywide Hazardous Materials Response Team. As a part of this, all City of Redlands Fire Department field employees are trained in Hazardous Materials First Responder Certifications. The Countywide team would provide a response if the level of hazard were above the certified level of City Staff. From there, the County Hazardous Materials response team would provide for the evacuation, mitigation and facilitation of cleanup efforts in the event of an accidental release of hazardous materials. Therefore, impacts would be less than significant, and no mitigation is required.

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?*

Less Than Significant Impact. As discussed above, no portion of the site is located within the Extreme Threat, Very High Threat, or High Threat Fire Hazard areas. Additionally, the Project site is in an urban portion of the site surrounding by residential developments to the north, south, and east. The Project site is flat, as well as all of its surroundings. The Project is not anticipated to exacerbate wildfire risks. Therefore, a less than significant impact will occur, and no mitigation is necessary.

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?*

Less Than Significant Impact. All proposed Project components (including utilities) would be located within the boundaries of the Project site, and impacts associated with the development of the Project within this footprint are analyzed throughout this document. Additionally, the Redlands Fire Department, as part of the city’s process, will review all plans for adequate fire suppression, fire access, and emergency evacuation. Therefore, adherence to standard City policies would reduce potential impacts to a level of less than significant, and no mitigation is required.

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

No Impact. As discussed above, the proposed Project is not located within a High to Extreme fire hazard area. The Project site is not located on a slope or downstream where flooding or landslides could pose a threat due to post-fire slope instability. Therefore, the proposed Project would not expose people to flooding or landslides due to runoff, post-fire slope instability, or drainage changes. Therefore, no impact will occur, and no mitigation is necessary.

Cumulative Impacts

The incremental effects of the proposed Project related to wildfire, if any, are anticipated to be minimal, and any effects would be site specific. Therefore, the proposed Project would not result in incremental effects to wildfire that could be compounded or increased when considered together with similar effects from other past, present, and reasonably foreseeable future projects. The proposed Project would not result in cumulatively considerable impacts to or from wildfires.

MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS Issues	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE. Does the Project:				
a) 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?			X	
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)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

a) *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. All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this IS/MND. Throughout this IS/MND, no impacts were determined to be potentially significant, and no mitigation measures are required. The Project would not substantially degrade the quality of the environment and impacts would be less than significant.

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

Less Than Significant Impact with Mitigation. As discussed throughout this IS/MND, in all instances where the proposed Project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential effects to less-than significant levels. As such, with incorporation of the mitigation measures imposed throughout this IS/MND, the Project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

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

Less Than Significant Impact with Mitigation. The Project's potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this IS/MND. In instances where the Project has potential to result in direct or indirect adverse effects to human beings, mitigation measures have been applied to reduce the impact to below a level of significance. With required implementation of mitigation measures identified in this IS/MND, construction and operation of the proposed Project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

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