

May 2019 | Initial Study

# CHRIST'S CHURCH OF THE VALLEY CAMPUS EXPANSION AND IMPROVEMENTS (DRC2018-00001, DRC2018-00023, & DRC2018-00843)

City of Rancho Cucamonga

*Prepared for:*

**City of Rancho Cucamonga**

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# MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code (PRC) Sections 2100 et seq.) and the State CEQA Guidelines (California Code of Regulations (CCR) Sections 15000 et seq.), the City of Rancho Cucamonga has completed this Mitigated Negative Declaration (MND) for the project described below based on the assessment presented in the attached Initial Study.

**LEAD AGENCY:** City of Rancho Cucamonga

**PROJECT TITLE:** Christ's Church of the Valley Campus Expansion and Improvements

**PROJECT LOCATION:** The project site is at 7576 Etiwanda Avenue, Rancho Cucamonga, California.

**PROJECT DESCRIPTION:** The proposed project includes the construction of a new auditorium building, children's building, and parking area and vehicular access improvements on the existing Etiwanda campus of Christ's Church of the Valley at 7576 Etiwanda Avenue in the City of Rancho Cucamonga. The proposed buildings and improvements are mainly focused in the western and central portions of the campus. Project implementation involves demolition of hardscape associated with existing parking areas and drive aisles, as well as demolition of a covered shelter structure and nursery/office building. A new driveway will also be constructed as an offsite improvement (within City right-of-way), extending west to Victoria Parkway from the northwest corner of the project site. Other project components include pedestrian circulation improvements; utility improvements; and various hardscape and landscape improvements.

**EXISTING CONDITIONS:** The project site is developed with the Etiwanda campus of Christ's Church of the Valley. Existing buildings and improvements on the project site encompass the central and eastern portions of the site—the western portion consists of an undeveloped lot.

**DOCUMENT AVAILABILITY:** The MND and supporting Initial Study for the proposed project are available for public review at the following locations:

- Rancho Cucamonga Civic Center, Planning Department, 10500 Civic Center Drive, Rancho Cucamonga, CA 91730
- Rancho Cucamonga Public Library, 12505 Cultural Center Drive, Rancho Cucamonga

**SUMMARY OF IMPACTS:** The attached Initial Study was prepared to identify the potential effects on the environment from development and operation of the proposed project and to evaluate the significance of those effects. Based on the environmental analysis, the proposed project would have no impacts or less-than-significant impacts related to the following environmental issues:

- |                               |                           |                                   |
|-------------------------------|---------------------------|-----------------------------------|
| • Aesthetics                  | • Air Quality             | • Agricultural/Forestry Resources |
| • Energy                      | • Geology/Soils           | • Greenhouse Gas Emissions        |
| • Hazards/Hazardous Materials | • Hydrology/Water Quality | • Land Use/Planning               |
| • Mineral Resources           | • Population/Housing      | • Public Services                 |
| • Recreation                  | • Transportation/Traffic  | • Utilities/Service Systems       |

The environmental assessment presented in the Initial Study identifies potentially significant environmental impacts related to the following environmental issues:

- Biological Resources
- Cultural Resources
- Noise
- Tribal Cultural Resources

However, compliance with the mitigation measures identified in the Initial Study would reduce potentially significant impacts related to these environmental issues to less than significant levels.

**FINDINGS:** It is hereby determined that, based on the information contained in the attached Initial Study, the proposed project would not have a significant adverse effect on the environment. Mitigation measures necessary to avoid the potentially significant effects on the environment are included in the attached Initial Study, which is hereby incorporated and fully made part of this MND. The City of Rancho Cucamonga has hereby agreed to implement each of the identified mitigation measures, which will be adopted as part of the Mitigation Monitoring and Reporting Program, which is provided in Section 4 of the Initial Study.



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## Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
afy	acre-feet per year
AQMP	air quality management plan
BMP	best management practices
BRTR	Biological Resources Technical Report
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources, Recycling, and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CMP	congestion management plan
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub> e	carbon dioxide equivalent
CVWD	Cucamonga Valley Water District
dB	decibel
dBA	A-weighted decibel
DPM	diesel particulate matter
FTA	Federal Transit Administration
G	acceleration of gravity
GHG	greenhouse gases
IEUA	Inland Empire Utility Agency
IPCC	Intergovernmental Panel on Climate Change
L <sub>dn</sub>	day-night noise level
L <sub>eq</sub>	equivalent continuous noise level
LID	low impact development
LOS	level of service
LST	localized significance thresholds
MBTA	Migratory Bird Treaty Act

## Abbreviations and Acronyms

mgd	million gallons per day
MT	metric ton
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
O <sub>3</sub>	ozone
OEHHA	Office of Environmental Health Hazard Assessment
PM	particulate matter
PPV	peak particle velocity
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SoCAB	South Coast Air Basin
SO <sub>x</sub>	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
TGD	Technical Guidance Document
TIA	traffic impact analysis
USFWS	United States Fish and Wildlife Service
VOC	volatile organic compound
WQMP	water quality management plan

# 1. Introduction

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The proposed project includes the construction of a new auditorium building, children's building, and parking area and vehicular access improvements on the existing Etiwanda campus of Christ's Church of the Valley. The proposed buildings and improvements are mainly focused in the western and central portions of the campus. Project implementation involves demolition of hardscape associated with existing parking areas and drive aisles, as well as demolition of a covered shelter structure and nursery/office building. A new driveway will also be constructed as an offsite improvement (within City right-of-way), extending west to Victoria Parkway from the northwest corner of the project site. Other project components include pedestrian circulation improvements; utility improvements; and various hardscape and landscape improvements.

The City of Rancho Cucamonga (City), as lead agency, is responsible for preparing environmental documentation in accordance with the California Environmental Quality Act (CEQA) to determine if approval of the discretionary actions requested and subsequent development would have a significant impact on the environment. As defined by Section 15063 of the CEQA Guidelines, an Initial Study is prepared primarily to provide the lead agency with information to use as the basis for determining whether an environmental impact report (EIR), Negative Declaration, or Mitigated Negative Declaration (MND) would be appropriate for providing the necessary environmental documentation and clearance for the proposed project. This Initial Study has been prepared to support the adoption of an MND.

## 1.1 PROJECT LOCATION

The approximately 9.7-acre project site (APN: 109041101), which has an address of 7576 Etiwanda Avenue, is in the eastern portion of the City of Rancho Cucamonga in San Bernardino County (see Figures 1, *Regional Location*, and 2, *Local Vicinity*). As shown in Figure 3, *Aerial Photograph*, the project site is generally bounded by Spring Mountain Drive to the south; Etiwanda Avenue to the east; Victoria Park Lane to the west; and Wine Cellar Court and Crestfield Court to the north. Vehicular and pedestrian access to the site is via Etiwanda Avenue.

Regional access to the project site is from Interstate 15 (I-15), approximately 0.7 mile to the northeast via Etiwanda Avenue and Base Line Road. State Route 210 (SR-210) also provides regional access to the project site—the freeway is approximately 1.9 miles north of the site. Foothill Boulevard (State Route 66), also known as Historic Route 66, passes approximately 0.7 mile south of the project site. Foothill Boulevard is one of the City's primary east-west commercial corridors.

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### 1.2 ENVIRONMENTAL SETTING

#### 1.2.1 Existing Land Use

As shown in Figures 3, *Aerial Photograph*, and 4, *Existing Site Plan*, the rectangular-shaped project site is developed with the Etiwanda campus of Christ's Church of the Valley. Existing buildings and improvements on the project site encompass the central and eastern portions of the site—the western portion consists of an undeveloped lot, which consists of disturbed habitat supporting grasses and other plants common to disturbed sites in urban southern California (Cadre 2018). Existing buildings onsite include a single-story temple/chapel building that houses the church's chapel and offices; a single-story building that serves as a children's wing during church services and other special events and functions (nursery/office building); a single-story banquet building that houses a café and kitchen, includes a rear loading dock, and serves as a children's wing during church services and other special events and functions; a small one-story storage building; a covered shelter structure for gatherings, eating, and relaxation; and two temporary portable bungalows. Other existing site features and improvements include various light fixtures throughout the campus, including stand-alone (i.e., light poles along walkways and in parking areas) and wall-mounted fixtures; a small playground area; open-lawn areas and courtyards; various asphalt parking areas and drive aisles; block walls that run along the southern, northern and western site boundaries; and various hardscape (e.g., planters, walkways) and landscape (e.g., trees, groundcover, shrubs) improvements throughout (see Figure 5a and 5b, *Site Photographs*).

#### 1.2.2 Surrounding Land Use

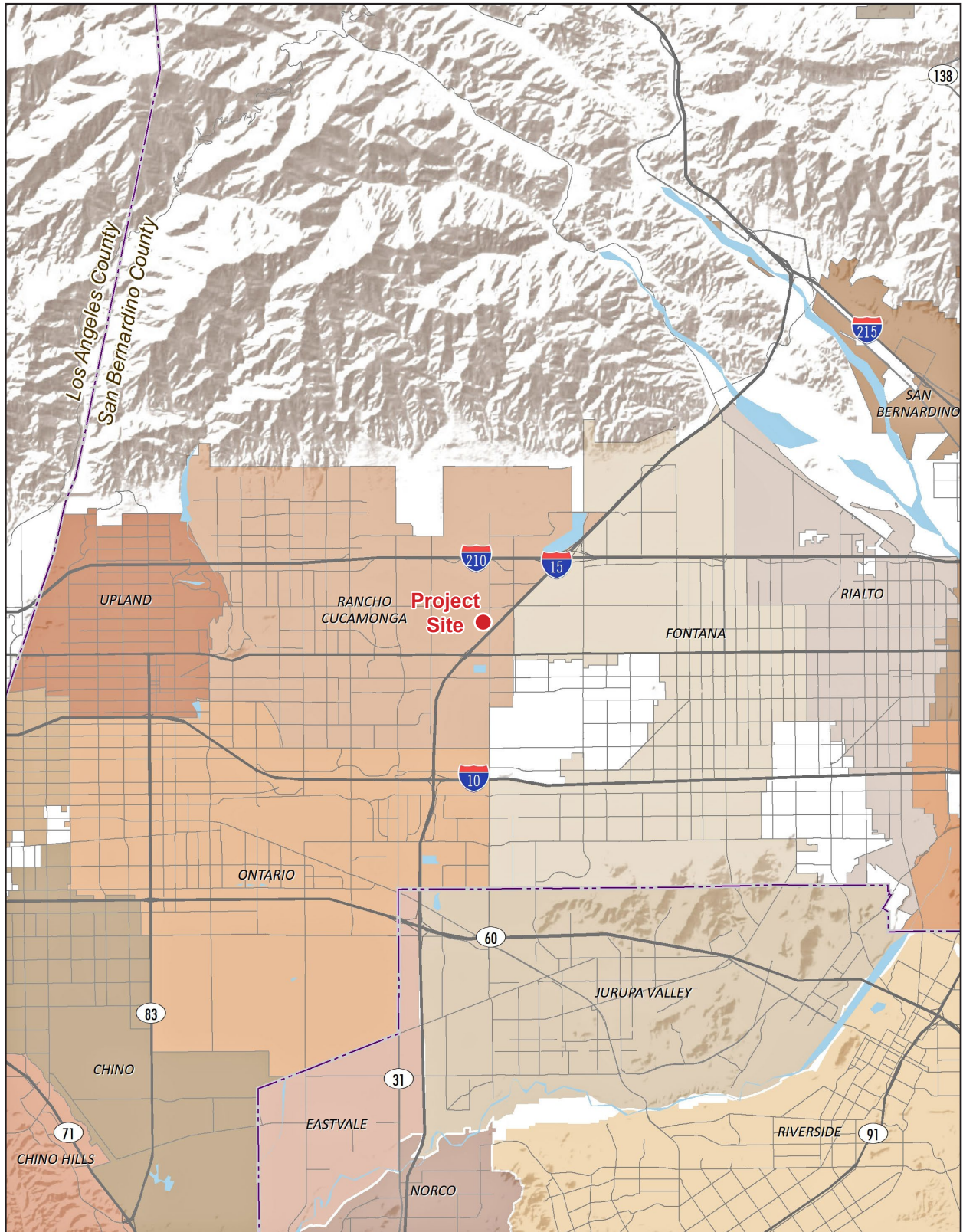
As shown in Figure 3, the project site is surrounded by single-family residential development. To the south, beyond the single-family residential neighborhood are commercial and retail uses associated with Victoria Gardens, a large open-air shopping mall.

#### 1.2.3 Existing General Plan and Zoning

The project site is designated for Mixed Use under the Land Use Plan (Figure LU-1) of the Rancho Cucamonga General Plan Land Use Element (Rancho Cucamonga 2010). This designation is intended to combine “complementary commercial, office, residential, and community uses in areas with easy access to transit.” The zoning for the project site is Etiwanda Specific Plan (SP-E) (Rancho Cucamonga 2012). In the Etiwanda Specific Plan, the project site is designated for Office/Professional (OP) uses (Rancho Cucamonga 1983). Public assembly uses and facilities, such as those of the proposed project, are permitted in the OP zoning designation through City issuance of a Conditional Use Permit.



Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.

0 3  
Scale (Miles)

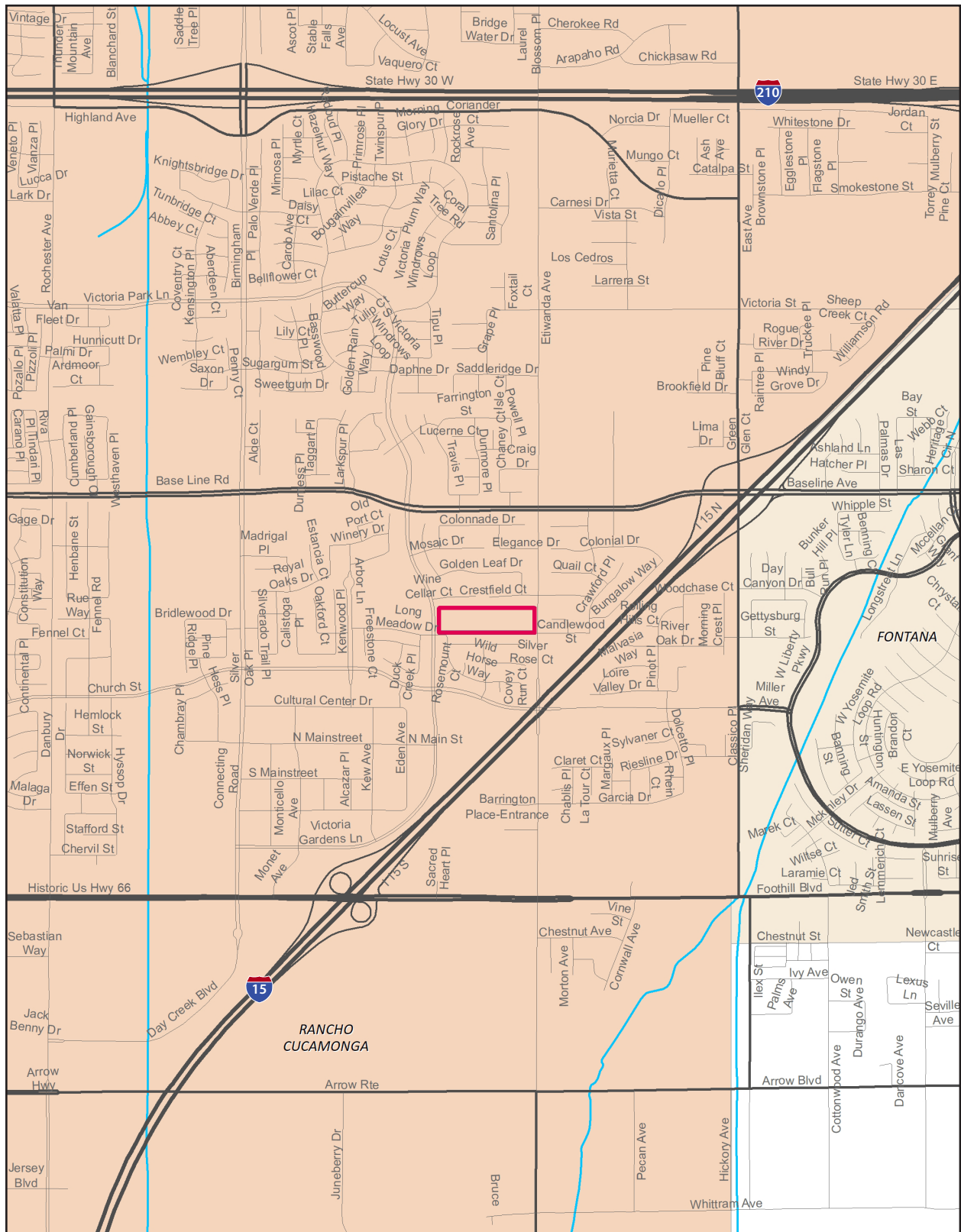


Source: ESRI, 2018

## 1. Introduction

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Figure 2 - Local Vicinity

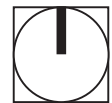


Project Boundary

Note: Unincorporated county areas are shown in white.

Source: ESRI, 2018

0 2,000  
Scale (Feet)



## 1. Introduction

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Figure 3- Aerial Photograph



## 1. Introduction

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## 1. Introduction

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Figure 5a - Site Photographs



1



2



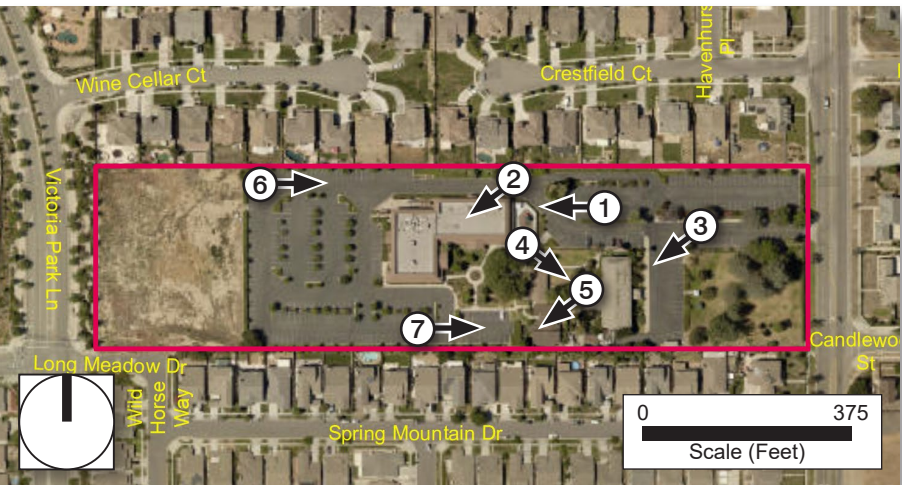
3



4



5



Key Map 2 Photo Location and Direction Site Boundary



6



7

Key Map Source: Google Earth Pro, 2018



## 1. Introduction

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Figure 5b - Site Photographs



1



2



3



4



5



Key Map      2 → Photo Location and Direction      — Site Boundary



6



7

Key Map Source: Google Earth Pro, 2018



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## 1. Introduction

### 1.3 PROJECT DESCRIPTION

Following is a detailed description of the project's overall site plan and character and the various development features/elements and improvements that would be implemented as a part of the project. The detailed project phasing and construction discussion is provided below in Section 1.3.7, *Project Phasing and Construction*.

#### 1.3.1 Site Plan and Character

The proposed expansion and improvements to the Etiwanda campus of Christ's Church of the Valley involve redevelopment of a portion of the project site (western and central portions) and development of the vacant lot on the western end (Proposed Project). Figure 4, *Existing Site Plan*, shows the existing site design of the campus, and Figure 6, *Conceptual Site Plan*, illustrates the overall site design of the campus under the Proposed Project. As shown in Figure 6, the proposed buildings and improvements are mainly focused in the western and central portions of the campus. Proposed buildings include a new auditorium building and children's building; proposed improvements include new parking areas and drive aisles; a new driveway and redesign of an existing driveway; and various hardscape and landscape improvements.

Project implementation involves demolition of hardscape associated with existing parking areas and drive aisles, as well as demolition of a covered shelter structure and nursery/office building. Project development is anticipated to be completed in three phases—with each phase including site clearing and demolition, grading and earthwork, and construction activities. A detailed discussion regarding the projects phasing and construction activities is provided in Subsection 1.3.7, *Project Phasing and Construction*, below.

As shown in Figure 6, the new auditorium building would be placed just west of the existing banquet building. The auditorium building—which would serve as the main sanctuary for church services and other special events and functions (e.g., large community funerals, conferences)—would encompass 36,000 square feet, be two stories in height, and have a seating capacity of 1,200 (600 more seats than the existing temple/chapel building). In addition to the auditorium, other uses in the building would include a nursery; pastoral and counseling offices; security and video control rooms; restrooms; a loading dock; and janitorial, storage, and electrical rooms. An existing parking area would be demolished to make room for the auditorium building.

As shown in Figure 6, the new children's building would be located between the existing banquet and temple/chapel buildings. The proposed single-story children's building would encompass 11,000 square feet and would be located between the existing banquet and temple/chapel buildings (see Figure 6). To make room for the new children's building, a few structures would be demolished, including a shade structure and the 2,900 square-foot single-story nursery/office building.

Figure 7, *Conceptual Building Elevations: Auditorium*, Figure 8, *Conceptual Building Elevations: Children's Building*, and Figure 9, *Conceptual Renderings: Auditorium*, illustrate the conceptual building elevations and architectural style and elements/features of the proposed auditorium and children's buildings. The new buildings are designed to meet the development and design standards established in the City of Rancho Cucamonga's Etiwanda Specific Plan, which covers development of the project site. They are an interpretation of classic California Ranch Style and feature a mix of stucco, split face concrete masonry, stone veneer, and horizontal format wood siding.

## 1. Introduction

exteriors along with flat profile concrete tile roofs with exposed rafter tails/brackets. Dual post wood columns with stone veneer accents support the deep overhang 'porches' that surround the base of each building. In keeping with City standards, the buildings feature multiple materials in a mix of earth-tone colors designed to break up long expanses and accentuate the architectural massing. Additionally, as shown in Figures 7 through 9, the mixture of colors, textures, and materials of the buildings would help balance the intended permanence of the buildings with the people scale of the buildings and their surroundings, as well as with the people scape of the overall campus.

Discussion is provided below for other project features/elements such as parking, vehicular access and circulation improvements, infrastructure improvements, and landscape improvements.

### 1.3.2 Church Staffing, Activities, and Operations

#### 1.3.2.1 STAFF, VOLUNTEERS, AND CONGREGANTS

Over the next five years the church plans to have between 15-20 full-time equivalent staff operating on the campus. Staff will operate during various hours on all days with the majority present: Monday to Thursday between 7:00 am and 10:00 pm; Saturday's between 12:00 pm and 10:00 pm; and Sunday's between 9:00 am and 10:00 pm. Janitorial and security staff will be present at various times during any given 24-hour period.

Church volunteers and congregates will be on campus in small numbers (under 100) from Monday to Sunday between the hours of 7:00 am and 10:00 pm, with larger numbers (100+) primarily on Wednesday's from 5:00 pm to 10:00 pm, Saturday's from 4:00 pm to 10:00 pm, and Sunday's from 7:00 am to 10:00 pm.

#### 1.3.2.2 BUILDING AND OUTDOOR SPACE USES AND OPERATIONS

The new auditorium building (or worship center building) would serve as the main sanctuary for church services and other special events and functions (e.g., large community funerals, conferences). The new children's building will be for children's teaching and play for ages birth to 3rd grade during church services (e.g., Sunday school) and other special events and functions—it will also be used to provide coffee and light refreshments as a service to the church's staff and congregants.

The existing banquet and temple/chapel buildings would remain in their existing condition and not undergo any modifications or upgrades under the Proposed Project. The banquet building's primary use will be for children's teaching and play for ages 4th to 6th grade during church services (e.g., Sunday school) and other special events and functions—it will also be used for various gatherings for church congregants, including ministry meetings, bible studies, receptions, potlucks, youth meetings, etc. The temple/chapel building's primary use will be offices and for small gatherings such as weddings, funerals, bible studies, etc.

Outdoor space (both existing and proposed, which are described below), would be used occasionally for outdoor events such as movie nights, vacation bible school, open mic night, etc. Additionally, from time to time portions of the campus will be used for various ministry events. Some of these events might include overnight youth events (indoors), small concerts(indoors), holiday events and festivals (indoor and outdoor), meeting space and events for local businesses and entities (indoor), overnight parking for offsite events, etc.



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Figure 7 - Conceptual Building Elevations: Auditorium



Auditorium - South Elevation



Auditorium - West Elevation



Auditorium - North Elevation



Auditorium - East Elevation

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Figure 8 - Conceptual Building Elevations: Children's Building



Children's Center - West Elevation



Children's Center - South Elevation



Children's Center - North Elevation



Children's Center - East Elevation

## 1. Introduction

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Figure 9 - Conceptual Renderings: Auditorium



Northwest Corner



Southeast Corner



Southwest Corner

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### 1.3.3 Landscaping, Site Features, and Lighting

The Proposed Project's landscape plan would include new landscaping for the redeveloped portions of the project site. The landscaping in the areas of the project site that will not be redeveloped or modified will remain in its existing condition. The proposed landscape plan would include a variety of new ornamental trees, shrubs, and groundcover along the building perimeters, within the parking and common areas, and along the perimeter of the project site. Project development would include the removal of approximately 50 existing trees onsite in the immediate area of the Proposed Project improvements. Additionally, there are 20 heritage trees, as defined in Subsection 17.16.080.C (Heritage Trees) of the City's Municipal Code, in the immediate area of the Proposed Project improvements. Project development includes removal of 10 (which is included in the 50 noted above) of the 20 heritage trees, with the other 10 to be preserved in place. Removal of the heritage trees and the required discretionary action are discussed in Section 1.3.8, *Project Entitlements*. However, the Proposed Project would provide a greater number of new trees (approximately 100) than currently exist.

Other proposed campus improvements and features include an entry plaza for the auditorium building, low block walls in key areas, and pedestrian walkways. Outdoor space (both existing and proposed) consists of the front lawn area abutting Etiwanda Avenue (existing); fellowship courtyard between the banquet building and children's building (existing), and auditorium courtyard (proposed), which would feature seating areas and landscaping.

As noted earlier, various light fixtures exist throughout the campus, including stand-alone (i.e., light poles along walkways and in parking areas) and wall-mounted fixtures. Under the Proposed Project, new lighting fixtures would be introduced in the redeveloped portions of the project site. Specifically, new lighting would consist of building-mounted light fixtures; lighting for pedestrian walkways and common gathering areas; ground-mounted decorative lighting for landscape and architectural features; interior lighting for the new buildings; lighting for the new parking areas; and security lighting. See Figure 9, *Conceptual Renderings: Auditorium*, for an illustration of the some of the proposed lighting fixtures.

### 1.3.4 Access, Circulation and Parking

As shown in Figure 6, *Conceptual Site Plan*, the primary vehicular access for the project site will continue to be via the full-access driveway (all turning movements permitted) off Etiwanda Avenue. However, improvements to the internal drive aisle throat that connects to this driveway would be implemented under the Proposed Project. Under existing conditions, the drive aisle throat that connects to the driveway provides for two lanes in each direction (see Figure 4, *Existing Site Plan*). The current design creates vehicular back-ups and conflicts onsite during church services and other special events and functions, as vehicles exiting the site only have one travel lane at their disposal. For vehicles wanting to exit the site and make a right turn onto Etiwanda Avenue, in many instances these vehicles get stacked onsite when another vehicle (or vehicles) ahead of them is wanting to exit the site and turn left onto Etiwanda Avenue. Under the proposed condition (see Figure 6), the width of the drive aisle throat would be widened to provide dedicated left and right turn lanes out of the site, as well as a modified and slightly skewed/angled entry lane into the site for vehicles entering the site.

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Additionally, a new driveway would be constructed as an offsite improvement (within City right-of-way), extending west to Victoria Park Lane from the northwest corner of the project site. This new driveway would be restricted to right ins and outs only. In order to construct this new driveway, existing landscape and hardscape improvements within the City's right-of-way would be removed/demolished and a portion of the existing block wall would be demolished.

As shown in Figure 6 (when compared to Figure 4), the vehicular circulation system on the eastern and most of the central portion of the project site would remain in its existing condition. A new and redesigned vehicular circulation system would be provided in the western and central portions of the site. The circulation system would provide an efficient means for vehicles to access almost any portion of the campus, as well as provide an adequate circulation system for emergency vehicles. Additionally, a new oval-shaped drive aisle would be provided just south of the existing banquet building, which would serve for vehicular circulation and as a drop-off/pick-up and/or loading/unloading zone. Further, with the new driveway proposed off Victoria Park Lane, vehicles would be able to get from Victoria Park Lane to Etiwanda Avenue (or vice versa) via the main internal drive aisle connecting these streets.

Pedestrian access to the project site would continue to be provided via the existing public sidewalk along Etiwanda Avenue, which connects to the project site's internal pedestrian circulation system. As shown in Figure 6, the pedestrian circulation includes existing and proposed walkways along the parking area edges, through common areas, and to and around buildings.

The parking improvements for the portion of the project site to be redeveloped would include modifications to the existing parking lot on the western and central portions of the campus, as well as development of a new parking lot on the westernmost half. The parking areas in the eastern portion of the site would remain in their existing condition. Under existing conditions, there are approximately 364 parking spaces onsite. Under proposed conditions, approximately 428 parking spaces would be provided.

### 1.3.5 Infrastructure Improvements

#### 1.3.5.1 WATER

The Cucamonga Valley Water District currently provides and would continue to provide potable water service to the project site. As a part of the Proposed Project, new potable water lines would connect to existing onsite potable water lines, which connect to the existing offsite water main in Etiwanda Avenue. Proposed potable water infrastructure improvements would entail demolition of any existing lines onsite (i.e., those that serve the existing nursery building to be demolished), trenching and installing new lines, and connection to the existing water lines onsite. No offsite water line construction or upsizing would be required to accommodate the Proposed Project.

#### 1.3.5.2 WASTEWATER

The Cucamonga Valley Water District currently provides and would continue to provide wastewater service to the project site. Wastewater service for the new auditorium and children's buildings would be provided via new internal sewer lines that connect to the existing sewer lines onsite, which connect to the existing sewer trunk in



## 1. Introduction

Etiwanda Avenue. Proposed wastewater infrastructure improvements would entail demolition of any existing lines onsite (i.e., those that serve the existing nursery building to be demolished), trenching and installing new lines, and connection to the existing sewer lines onsite. No offsite sewer line construction or upsizing would be required to accommodate the Proposed Project.

### 1.3.5.3 DRAINAGE

Under existing conditions, the project site is relatively flat with the central and eastern portions fully developed and the western portion consisting of an undeveloped lot. Existing runoff from the project site is delineated into two subareas. Subarea A1 consist of the central and easterly developed portions of the project site. This subarea is mostly hardscape and flows from the northeast to the southwest. Subarea A1 discharges to a low point at the southwestern corner of the project site. Subarea A2 encompasses the westerly undeveloped portion of the project site. This subarea drains from north to south and is collected in an existing corrugated metal pipe storm drain. The flow from Subarea A1 is also collected in the existing storm drain structure. The collected stormwater is discharged into the City's storm drain system in Long Meadow Drive, near the southwestern end of the project site.

Under the Proposed Project, the redeveloped portion of the project site would be graded to closely mimic the existing drainage patterns. Flow patterns would flow generally from northeast to southwest. The proposed condition would be delineated into two subareas. Subarea A1 would collect runoff from the easterly majority of the re-developed area. This area will collect runoff from the proposed auditorium building and hardscape and landscaped improvements. Th flow from this area would collect in a landscaped island on the east side of the proposed drive approach. Subarea A2 would collect runoff from the westerly majority of the re-developed area. This area would collect runoff from the hardscape and landscaped improvements. Runoff from Subarea A2 would collect in the aforementioned landscaping island. Two different curb openings would be used for each subarea. A drop inlet would be proposed in the middle of the landscaped island to transport stormwater into proposed underground storage chambers for retention.

### 1.3.5.4 UTILITIES AND SERVICE SYSTEMS

Plans for utilities that would serve the Proposed Project would include provision of electricity (Rancho Cucamonga Municipal Utility), natural gas (Southern California Gas Company), telecommunications facilities (AT&T, Charter Communications, Verizon), cable service (Time Warner), and solid waste (Burrtec Waste Industries). All new utility infrastructure for electricity, natural gas, telecommunications, and cable service would be installed underground or placed in enclosed spaces (e.g., utility closets).

### 1.3.6 Green Building and Sustainability

The Proposed Project is required to be designed using green building practices, including those of the most current California Green Building Standards Code (CALGreen [Title 24, California Code of Regulations, Part 11]; incorporated by reference in Chapter 15.26 (Green Building Standards Code) of the Rancho Cucamonga Municipal Code). Some of the green building practices/features that would be incorporated into the Proposed Project include:

## 1. Introduction

### Site Development

- Development of a site with existing uses (no undeveloped natural land consumed)
- Installation of electrical conduits/raceways for future electric vehicle charging stations
- Provision of bicycle parking
- Recycling of site construction waste
- Drought tolerant planting with drip irrigation
- Preservation of existing heritage trees
- Storm water retention system
- Heat island reduction via hardscape planting

### Buildings

- Reflective roof coatings
- High performance building envelope insulation
- Dual, insulated glazing
- Low volatile organic compound products used throughout
- Local material sourcing
- High efficiency HVAC systems with energy management controls
- High efficiency plumbing fixtures
- Recycle and sorting of construction waste
- Recycled-content materials specified
- Commissioning services for all building systems

Other green building practices/features would be considered by the City as the Proposed Project is refined during the design and construction phase.

### 1.3.7 Project Phasing and Construction

Upon City approval of the Proposed Project, project development is anticipated to be completed in three phases—with each phase including site clearing and demolition, grading and earthwork, and construction activities. Site demolition would involve the removal of a covered shelter structure, a single-story nursery/office building, existing parking lot asphalt, and various hardscape improvements. Various landscaping improvements (e.g., trees, shrubs, ground cover) would also be removed during the site clearing and demolition phase.

Phase one would involve alteration of existing parking area improvements and construction of a new children's building and its associated hardscape and landscape improvements—this phase would take approximately 9 months to complete. It would require demolition of the single-story nursery/office building, a covered shelter structure, surface parking areas, and hardscape improvements. Phase two would include construction of parking area improvements only and is anticipated to take approximately 2 months to complete—this phase would require demolition of surface parking areas and hardscape improvements. The third and final phase would involve construction of parking area improvements and the new auditorium building and its associated

## 1. Introduction

hardscape and landscape improvements—this phase would take approximately 16 months to complete and would require demolition of surface parking areas and hardscape improvements. Overall construction is estimated to take approximately 30 months, starting in early 2019 and ending in mid-2021. Christ's Church of the Valley (project applicant) anticipates a balanced earthwork; therefore, no soil export or import is anticipated for any of the construction phases.

At this stage of the project design phase, it is anticipated that approximately 100 tons of removed grass will go to a green waste facility; approximately 75 tons of trees & bushes will go to a green waste facility; approximately 1,080 tons of concrete & asphalt will go to a recycling/crushing facility; and approx. 150 tons of trash will go to a county landfill.

### 1.3.8 Project Entitlements

The following entitlements are needed to implement the Proposed Project.

#### Conditional Use Permit

As noted earlier, the zoning for the project site is Etiwanda Specific Plan (SP-E) (Rancho Cucamonga 2012). In the Etiwanda Specific Plan, the project site is designated for Office/Professional (OP) (Rancho Cucamonga 1983). Public assembly uses and facilities, such as those of the Proposed Project, are permitted in the OP zoning designation through City issuance of a Conditional Use Permit (CUP). As proposed, project implementation requires City approval of a CUP (DRC2018-00001).

#### Tree Removal Permit

Project development would include the removal of approximately 50 existing trees onsite in the immediate area of the Proposed Project improvements. Additionally, there are 20 heritage trees, as defined in Subsection 17.16.080.C (Heritage Trees) of the City's Municipal Code, in the immediate area of the Proposed Project improvements. Project development includes removal of 10 (which is included in the 50 noted above) of the 20 heritage trees, with the other 10 to be preserved in place. Project development would require removal of the identified heritage trees based on their locations relative to the proposed campus improvements; health conditions of some of the trees; and the potential for some of the trees to be affected by diseases. In accordance with the provisions of the City's tree preservation ordinance, which is codified in Section 17.16.080 (Tree Removal Permit), the 10 heritage trees identified for removal require City issuance of a tree removal permit. The project applicant submitted a tree removal permit (DRC2018-00843) for removal of the 10 heritage trees. Heritage trees would only be removed after approval of such a permit being issued by the City.

## 1.4 CITY ACTIONS REQUESTED

### 1.4.1 Lead Agency

This Initial Study is intended to serve as the primary environmental document for all future actions associated with the Proposed Project, including all discretionary approvals requested or required to implement the Proposed Project. The City of Rancho Cucamonga is the lead agency under CEQA and has the principal

## 1. Introduction

approval authority over the Proposed Project. As part of the Proposed Project, the following discretionary actions and approvals are required by the City's approval body:

- Adoption of a Mitigated Negative Declaration for CEQA clearance
- Approval of a Conditional Use Permit (DRC2018-00001)
- Approval of a Design Review (DRC2018-00023)
- Approval of a Tree Removal Permit (DRC2018-00843)

The following non-discretionary actions and approvals are also required to implement the Proposed Project:

- Approval of Building Plan Check
- Approval of Building and Grading Permits

### 1.4.2 Responsible Agency

A responsible agency is a public agency other than the lead agency that has responsibility for carrying out or approving a project (CEQA Guidelines § 15381 and Public Resources Code § 21069). As part of the Proposed Project, the following approvals from responsible agencies are required:

- **Rancho Cucamonga Fire Protection District/San Bernardino County Fire Department:** Approval of building plan check for site plan and emergency access.
- **Santa Ana Regional Water Quality Control Board:** Issuance of Construction General Permit under Order No. 2009-009-DWQ and its subsequent revisions under Order No. 2012-0006-DWQ.

## 2. Environmental Checklist

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### 2.1 BACKGROUND

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1. **Project Title:** Christ Church of the Valley Campus Expansion and Improvements

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2. **Lead Agency Name and Address:**

City of Rancho Cucamonga  
10500 Civic Center Drive  
Rancho Cucamonga, CA 91730

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3. **Contact Person and Phone Number:**

Tabé van der Zwaag, Associate Planner  
909.477.2750

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4. **Project Location:** The project site, which has an address of 7576 Etiwanda Avenue, is in the eastern portion of the City of Rancho Cucamonga. The site is generally bounded by Spring Mountain Drive to the south; Etiwanda Avenue to the east; Victoria Park Lane to the west; and Wine Cellar Court and Crestfield Court to the north.

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5. **Project Sponsor's Name and Address:**

Christ's Church of the Valley  
7576 Etiwanda Avenue  
Rancho Cucamonga, CA 91739

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6. **General Plan Designation:** Mixed Use

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7. **Zoning:** Etiwanda Specific Plan and is designated as Office/Professional under the Specific Plan

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8. **Description of Project:** The proposed project includes the construction of a new auditorium building, children's building, and parking area and vehicular access improvements on the existing Etiwanda campus of Christ's Church of the Valley. The proposed buildings and improvements are mainly focused in the western and central portions of the campus. A more detailed description of the Proposed Project is provided in Section 1.3, *Project Description*.

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9. **Surrounding Land Uses and Setting:** The project site is surrounded by single-family residential development.

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10. **Other Public Agencies Whose Approval Is Required:** Santa Ana Regional Water Quality Control Board; Rancho Cucamonga Fire Protection District/San Bernardino County Fire Department

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## 2. Environmental Checklist

### 2.2 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"/> Agriculture / Forestry Resources | <input type="checkbox"/> Air Quality                 |
| <input type="checkbox"/> Biological Resources               | <input type="checkbox"/> Cultural Resources               | <input type="checkbox"/> Geology / Soils             |
| <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards / Hazardous Materials    | <input type="checkbox"/> Hydrology / Water Quality   |
| <input type="checkbox"/> Land Use / Planning                | <input type="checkbox"/> Mineral Resources                | <input type="checkbox"/> Noise                       |
| <input type="checkbox"/> Population / Housing               | <input type="checkbox"/> Public Services                  | <input type="checkbox"/> Recreation                  |
| <input type="checkbox"/> Transportation / Traffic           | <input type="checkbox"/> Tribal Cultural Resources        | <input type="checkbox"/> Utilities / Service Systems |
| <input type="checkbox"/> Mandatory Findings of Significance |   |  |

### 2.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

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

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

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

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

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

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*Signature*

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*Date*

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*Printed Name*

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*For*

## 2. Environmental Checklist

### 2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) **Earlier Analyses Used.** Identify and state where they are available for review.
  - b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) **Mitigation Measures.** For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

## 2. Environmental Checklist

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
- the significance criteria or threshold, if any, used to evaluate each question; and
  - the mitigation measure identified, if any, to reduce the impact to less than significant.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>I. AESTHETICS. Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?			<b>X</b>	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				<b>X</b>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			<b>X</b>	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			<b>X</b>	
<b>II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				<b>X</b>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				<b>X</b>
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))?				<b>X</b>
d) Result in the loss of forest land or conversion of forest land to non-forest use?				<b>X</b>
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?				<b>X</b>



## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>III. AIR QUALITY.</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			<b>X</b>	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			<b>X</b>	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			<b>X</b>	
d) Expose sensitive receptors to substantial pollutant concentrations?			<b>X</b>	
e) Create objectionable odors affecting a substantial number of people?			<b>X</b>	
<b>IV. BIOLOGICAL RESOURCES.</b> Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		<b>X</b>		
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 Wildlife or U.S. Fish and Wildlife Service?				<b>X</b>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				<b>X</b>
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?		<b>X</b>		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			<b>X</b>	
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?				<b>X</b>
<b>V. CULTURAL RESOURCES.</b> Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?			<b>X</b>	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		<b>X</b>		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			<b>X</b>	

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of dedicated cemeteries?			<b>X</b>	
<b>VI. ENERGY.</b> Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			<b>X</b>	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			<b>X</b>	
<b>VII. GEOLOGY AND SOILS.</b> Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			<b>X</b>	
ii) Strong seismic ground shaking?			<b>X</b>	
iii) Seismic-related ground failure, including liquefaction?				<b>X</b>
iv) Landslides?				<b>X</b>
b) Result in substantial soil erosion or the loss of topsoil?			<b>X</b>	
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?			<b>X</b>	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			<b>X</b>	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				<b>X</b>
<b>VIII. GREENHOUSE GAS EMISSIONS.</b> Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			<b>X</b>	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				<b>X</b>
<b>IX. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			<b>X</b>	
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?			<b>X</b>	

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				<b>X</b>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				<b>X</b>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?			<b>X</b>	
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				<b>X</b>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				<b>X</b>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				<b>X</b>
<b>X. HYDROLOGY AND WATER QUALITY . Would the project:</b>				
a) Violate any water quality standards or waste discharge requirements?			<b>X</b>	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			<b>X</b>	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site			<b>X</b>	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			<b>X</b>	
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			<b>X</b>	
f) Otherwise substantially degrade water quality?			<b>X</b>	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				<b>X</b>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				<b>X</b>

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				<b>X</b>
j) Inundation by seiche, tsunami, or mudflow?				<b>X</b>
<b>XI. LAND USE AND PLANNING. Would the project:</b>				
a) Physically divide an established community?				<b>X</b>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				<b>X</b>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				<b>X</b>
<b>XII. MINERAL RESOURCES. Would the project:</b>				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				<b>X</b>
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?				<b>X</b>
<b>XIII. NOISE. Would the project result in:</b>				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		<b>X</b>		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			<b>X</b>	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			<b>X</b>	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		<b>X</b>		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				<b>X</b>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				<b>X</b>
<b>XIV. POPULATION AND HOUSING. Would the project:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				<b>X</b>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				<b>X</b>

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				<b>X</b>
<b>XV. PUBLIC SERVICES.</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			<b>X</b>	
b) Police protection?			<b>X</b>	
c) Schools?				<b>X</b>
d) Parks?				<b>X</b>
e) Other public facilities?				<b>X</b>
<b>XVI. RECREATION.</b>				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				<b>X</b>
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?				<b>X</b>
<b>XVII. TRANSPORTATION/TRAFFIC.</b> Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			<b>X</b>	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				<b>X</b>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				<b>X</b>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				<b>X</b>
e) Result in inadequate emergency access?				<b>X</b>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				<b>X</b>

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>XVIII. TRIBAL CULTURAL RESOURCES.</b> Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				<b>X</b>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		<b>X</b>		
<b>XIX. UTILITIES AND SERVICE SYSTEMS.</b> Would the project:				
a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?			<b>X</b>	
b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			<b>X</b>	
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			<b>X</b>	
d) Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?			<b>X</b>	
e) Result in a determination by the waste water 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?			<b>X</b>	
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			<b>X</b>	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			<b>X</b>	
<b>XX. MANDATORY FINDINGS OF SIGNIFICANCE.</b>				
a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		<b>X</b>		

## 2. Environmental Checklist

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.)			<b>X</b>	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		<b>X</b>		

## 2. Environmental Checklist

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## 3. Environmental Analysis

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Section 2.4 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions in the checklist and identifies mitigation measures, if applicable.

### 3.1 AESTHETICS

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

**Less Than Significant Impact.** Scenic resources and view corridors in Rancho Cucamonga are detailed in the Managing Land Use, Community Design, and Historic Resources Chapter of the City's General Plan. As noted in this chapter, scenic resources afforded from various vantage points throughout the City include the San Gabriel mountains and foothills, long vistas of the City from hillside areas, and other views of special vegetation or permanent open space lands. Other scenic resources recognized by the City include remaining stands of eucalyptus windrows, scattered vineyards and orchards, and natural vegetation in flood control channels and utility corridors. Views of these resources are most prominent from roadways and in certain locations from places of work and residences.

The project site and surrounding vicinity offer scenic vistas of the San Gabriel Mountains—including Cucamonga Peak and Mount San Antonio (aka Mount Baldy)—that are directly north of the City of Rancho Cucamonga. Because of their close proximity and substantial height (up to 10,000 feet above mean sea level), views of these mountains are prominent from many vantage points in the community. However, on and near the project site, these views are fragmented due to existing buildings, structure, trees, and streetlight poles.

As shown in Figure 7, *Conceptual Renderings: Auditorium*, the tallest component of the Proposed Project is the two-story auditorium building, which would be located on a portion of the project site that is currently developed with paved surface parking. Residents to the south would have a direct view of the south elevation of the auditorium building (see Figure 7). The proposed 35-foot-tall auditorium building would further obstruct northward private views of the San Gabriel Mountains from the second stories of homes along Spring Mountain Drive. However, this would only affect approximately eight to nine homes, and the additional visual obstruction would be minimal due to the already fragmented nature of northward scenic views of these mountains. The proposed 26-foot-tall children's building would have a similar effect on other homes along Spring Mountain Drive. However, the Proposed Project would not affect any unobstructed expansive or panoramic views. Private views are also not protected by the City's General Plan or Municipal Code.

Additionally, more complete public vistas of the San Gabriel Mountains from the north-south-oriented Victoria Park Lane and Etiwanda Avenue on either side of the project site would not be affected. The proposed project would not introduce visual obstructions that would affect motorists or passerby traveling north on either of these roadways, as the project site is on the east side of Victoria Park Lane and west side of Etiwanda Avenue and views of the mountains from these roadways are to the north.

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Furthermore, the project site and surrounding vicinity are in a highly-urbanized area of the City and are developed with a mix of residential and commercial uses that do not exhibit any significant visual resources or scenic vistas. Also, other scenic resources such as stands of eucalyptus windrows, scattered vineyards and orchards, and natural vegetation in flood control channels and utility corridors are not present onsite or within proximity of the project site. There are also no designated open space resources onsite or in the vicinity, a designation typically used to determine the value of certain public vistas in order to gauge adverse effects.

Based on the preceding, impacts to scenic vistas would be less than significant and no mitigation measures are necessary.

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

**No Impact.** The project site is in a highly-urbanized area of the City and is not on or near a state-designated scenic highway, as designated on the California Scenic Highway Mapping System of the California Department of Transportation (Caltrans 2011). Additionally, the project site is not visible from the nearest state-designated scenic highway (State Route 138), which is approximately 13 miles to the north in the San Gabriel Mountains. Furthermore, the project site does not contain unique or locally important scenic resources, and there are no rock outcroppings or historic buildings onsite. Therefore, no impact to scenic resources within a state scenic highway would occur and no mitigation measures are necessary.

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

**Less Than Significant Impact.** The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refers to the identification of visual resources and their quality, as well as an overall visual perception of the environment. A project is generally considered to have a significant aesthetic impact if it substantially changes the character or quality of the project site such that the site becomes visually incompatible with or visually unexpected in its surroundings.

Following is a discussion of the potential aesthetic and visual effects resulting from implementation of the Proposed Project's construction and operational phases.

#### Visual Character, Project Construction Phase

Project implementation would result in construction activities that would temporarily change the visual character of the project site and its surroundings. Construction activities would involve demolition, site clearing, grading, building, and site improvements. Construction staging areas, including earth stockpiling, storage of equipment and supplies, and related activities would contribute to a generally "disturbed site," which may be perceived by some as a visual impact.

However, these effects would be typical of any site in the City that undergoes development or redevelopment. These activities may be unsightly during the site preparation and construction phases, but they are not considered significant because they are temporary. Construction fencing would be erected to help shield the construction areas and would also be temporary. Therefore, project-related construction activities would not

### 3. Environmental Analysis

have a significant effect on the existing visual character or quality of the site and its surroundings. Impacts would be less than significant, and no mitigation measures are necessary.

#### Visual Character, Project Operation Phase

As shown in Figure 3, *Aerial Photograph*, Figure 4, *Existing Site Plan*, and Figures 5a and 5b, *Site Photographs*, the project site is developed with the Etiwanda campus of Christ's Church of the Valley, which houses various buildings and structures (one and two stories in height) and their associated hardscape and landscape improvements. As shown in Figure 3, the project site is surrounded by single-family residential development. Buildings immediately adjacent to and surrounding the site include a mix of one- and two-story single-family homes.

Figure 6, *Conceptual Site Plan*, illustrates the overall site design of the campus under the Proposed Project. The project includes the construction of a new two-story auditorium building, one-story children's building, parking area and vehicular access improvements, and various hardscape and landscape improvements. The proposed buildings and improvements are mainly focused in the western and central portions of the campus. Figure 7, *Conceptual Building Elevations: Auditorium*, Figure 8, *Conceptual Building Elevations: Children's Building*, and Figure 9, *Conceptual Renderings: Auditorium*, illustrate the conceptual building elevations and architectural style and elements/features of the proposed buildings.

As shown in Figures 4 through 9, the Proposed Project involves the demolition of smaller onsite buildings and the addition of two larger buildings to the project site. While the proposed buildings would be slightly taller and more visually prominent than existing church buildings, they would be largely consistent with the overall scale and building typologies already onsite, which appear like buildings used for cultural or educational uses. Additionally, the largest of the proposed buildings (the auditorium; see Figure 9) would be considerably set back from the site's northern and southern boundaries, as shown in Figure 6. Trees proposed along these property lines and within the new surface parking areas would buffer and soften views of the auditorium building when viewed from the south, west, and north. Views of the proposed buildings from Etiwanda Avenue would be substantially obscured by existing buildings (the existing temple building and banquet buildings; see Figure 5) and mature landscaping to remain. Also, views of the proposed buildings from Victoria Park Lane would be substantially obscured by the existing block wall and mature landscaping (which is to remain) that border the entire western site boundary.

As shown in Figures 7 through 9, the new buildings are designed as an interpretation of classic California Ranch Style and feature a mix of stucco, split face concrete masonry, stone veneer, and horizontal format wood siding exteriors along with flat profile concrete tile roofs with exposed rafter tails/brackets. In keeping with City standards, the buildings feature multiple materials in a mix of earth-tone colors designed to break up long expanses and accentuate the architectural massing. As shown in Figures 7 through 9, the mixture of colors, textures, and materials of the buildings would help balance the intended permanence of the buildings with the people scale of the buildings and their surroundings, as well as with the people scape of the overall campus. The proposed architectural style of the buildings would also be complementary to and not detract from the visual character or quality of the project site or its surroundings. Further, the building massing and height of

### 3. Environmental Analysis

the proposed buildings would be compatible with those onsite and of the surrounding residential neighborhoods, which consist of one- and two-story residential buildings.

The provisions of Title 17 (Development Code) of the City's Municipal Code, the development and design standards of the Etiwanda Specific Plan (which covers the project site), and the City's development review process would also help ensure that the Proposed Project is designed and implemented in a manner that would not be detrimental to the project site or its surroundings. For example, the Proposed Project would be required to be designed in accordance with the development and design standards outlined in Articles III (Zoning Districts, Allowed Uses, and Development Standards), IV (Site Development Provisions), and VII (Design Standards and Guidelines) of Title 17, including those related to building height and setbacks, walls and screening, and building and site plan design. The new buildings have also been designed to meet the development and design standards established in the Etiwanda Specific Plan. Compliance with the City's development standards would be ensured through the City's development review process.

Overall, development of the Proposed Project would enhance and strengthen the visual character of the project site and its surroundings through new architecture, landscaping, hardscape, and other improvements. The proposed architectural and landscape elements and design would ensure that development of the Proposed Project is not detrimental to the visual character or quality of the surrounding area or uses. Although newer than surrounding uses, the proposed architecture and landscaping would complement and not detract from the visual character of the site or surrounding area.

Based on the preceding, development of the Proposed Project would not substantially degrade the visual character or quality of the project site and its surroundings. Therefore, impacts would be less than significant and no mitigation measures are 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.** Nighttime illumination and glare impacts are the effects of a project's exterior lighting upon adjoining uses and areas. Glare can also be generated by light reflecting off passing cars and large expanses of glazing (i.e., glass windows) or other reflective surfaces. Excessive light and/or glare can impair vision, cause annoyance, affect sleep patterns, and generate safety hazards when experienced by drivers. Following is a discussion of the potential day and nighttime light and glare impacts in the project area as a result of development that would be accommodated under the Proposed Project.

#### **Architectural Treatments and Building Materials**

Urban glare is largely a daytime phenomenon occurring when sunlight is reflected off the surfaces of buildings or objects. Excessive glare not only impedes visibility, but also increases the ambient heat reflectivity in a given area. The Proposed Project includes building materials and architectural treatments that could cause daytime glare, but not to such an extent that they would result in a significant impact. For example, the architectural treatments of the proposed buildings would include style-appropriate architectural building materials, such as stucco walls; split face concrete masonry; stone veneer; wood siding exteriors and columns; glass windows and doors; and concrete tile roofs (see building elevations and perspectives in Figures 8 through 9). However, aside

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from the glass windows and doors, the building materials and architectural treatments are not reflective in nature and would therefore not create substantial day or nighttime glare. They are similar to building materials used on other existing buildings onsite as well as with those of residential structures in the surrounding vicinity.

Additionally, as shown in Figures 7 through 9, the proposed buildings would not include large expanses of glazing (i.e., glass windows and doors). As shown in Figure 6, most glazing on the north and south elevations of the auditorium building are on the first floor. As shown in Figure 7, the proposed children's building has minimal glazing on its northern and southern elevations. The proposed glazing could however increase sources of glare, because they would reflect sunlight during certain times of the day. In addition, vehicles parked onsite would increase the potential for reflected sunlight during certain times of the day. However, glare from these sources is typical of the site and surrounding area and would not increase beyond what is expected for an urban area. Further, glare generated by new glazing would be buffered by existing and proposed trees throughout the site, existing rear fences and walls of surrounding residential properties, and generous setbacks from the proposed buildings to the site's northern and southern boundaries.

Based on the preceding, daytime glare impacts from project-related architectural treatments and building materials would be less than significant and no mitigation measures are necessary.

#### Nighttime Lighting

Lighting for the Proposed Project would consist of building-mounted light fixtures; lighting for pedestrian walkways and common areas; ground-mounted decorative lighting for landscape and architectural features; interior building lighting; lighting for parking areas; and security lighting. Nighttime lighting and glare introduced under the Proposed Project would be visible to the surrounding residential uses from various vantage points, and to a much lesser extent from surrounding roadways.

Although project development would introduce new light sources to the project site and surrounding area, the proposed light sources would be similar to the light sources that already exist on the project site as well as with those of the surrounding residential uses and roadways. Considering the existing sources of lighting onsite and the surrounding vicinity, the amount and intensity of nighttime lighting proposed onsite would not be substantially greater or different than existing lighting.

Additionally, Chapter 17.58 (Outdoor Lighting Standards) is the portion of the Rancho Cucamonga Municipal Code that regulates outdoor lighting. Provisions of the chapter are intended to "prevent glare, light trespass, and light pollution" (Rancho Cucamonga 2018). The City requires that all outdoor lighting be recessed and/or constructed with full downward shielding in order to reduce light and glare impacts. The following is the level of illumination allowed at public, civic, and religious institutions: "Permitted to be fully illuminated during hours of operation. After hours, may be dimmed or turned off such that only lighting essential to security or safety shall be maintained" (Rancho Cucamonga 2018).

All proposed exterior lighting would be designed, arranged, installed, directed, shielded, operated, and maintained in such a manner as to contain direct illumination onsite and prevent light and glare impacts offsite in accordance with the provisions of Chapter 17.58, thereby preventing excess illumination and light spillover onto adjoining land uses and/or roadways. For example, as shown in Figure 10, *Photometric Site Plan*, proposed

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parking lot lighting would generally result in 0 to 0.2 foot-candle of illumination at adjacent residential property lines. Most of these locations would feature 0.1 foot-candle of illumination, which is consistent with the maximum allowed by Chapter 17.58 of the City's Municipal Code.

Furthermore, development of the Proposed Project would be required to comply with California's most current Building Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations, which outlines mandatory provisions for lighting control devices and luminaires. For example, the Proposed Project's lighting sources would be required to be installed in accordance with the provisions of Section 110.9 (Mandatory Requirements for Lighting Control Devices and Systems, Ballasts, and Luminaires).

Compliance with the lighting provisions of the City's Municipal Code and Title 24 would ensure that the Proposed Project does not result in significant light impacts. Compliance with these provisions is ensured through the City's development review and building plan check process.

Based on the preceding, nighttime light and glare impacts would be less than significant and no mitigation measures are necessary.

### 3.2 AGRICULTURE AND FORESTRY RESOURCES

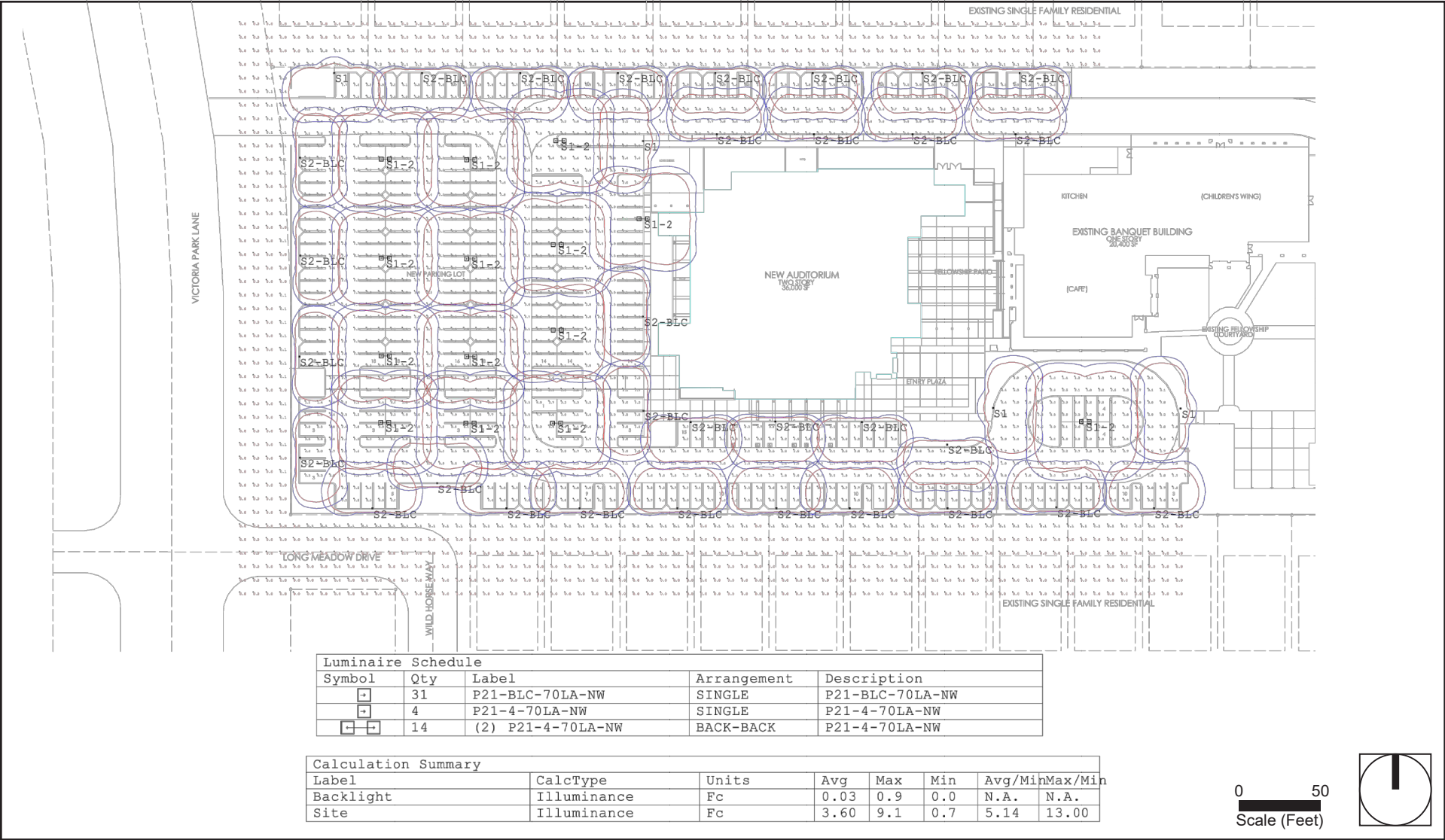
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

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

**No Impact.** The project site is mapped as Urban and Built-Up Land, and not as farmland, on the California Important Farmland Finder maintained by the Division of Land Resource Protection (DLRP 2018). Urban and Built-Up Land is not suitable for grazing or crop production. Additionally, the project site is developed as a church campus, not in agricultural use, and in a built-out urban area of the City. Therefore, project development would not convert mapped farmland to nonagricultural use. No impact would occur and no mitigation measures are necessary.



Figure 10 - Photometric Site Plan



Source: WLC Architects, 2018

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

**No Impact.** The project site is not zoned for agricultural use—the site is zoned Etiwanda Specific Plan and is designated as Office/Professional under the Specific Plan (Rancho Cucamonga 2000). The site's zoning designation does not permit agricultural uses. The project site is also an urbanized area of the City; the site does not contain farmland or other agricultural uses and is not adjacent to or in proximity of such uses. Further, the project site is not subject to a Williamson Act contract<sup>1</sup> (DLRP 2016). Therefore, project implementation would not conflict with zoning for agricultural uses or a Williamson Act contract. Accordingly, no impact would occur and no mitigation measures are necessary.

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

**No Impact.** Forest land is defined as “land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits” (California Public Resources Code § 12220[g]). Timberland is defined as “land...which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees” (California Public Resources Code § 4526).

As shown in Figure 3, *Aerial Photograph*, the project site is in an urbanized area of the City and is surrounded by single-family residential development. Additionally, the project site is not designated or zoned for forest or timber land or used for forestry. As stated above, the site is zoned Etiwanda Specific Plan and is designated as Office/Professional under the Specific Plan (Rancho Cucamonga 2000). Additionally, the vacant land on the western end of the site is disturbed habitat supporting grasses and other plants common to disturbed sites in urban southern California (Cadre 2018). Furthermore, all trees onsite are ornamental trees and are not cultivated for forest resources. Therefore, project development would have no impact on forest land or resources and no mitigation measures are necessary.

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

**No Impact.** See response to Section 3.2.c, above. As substantiated in that section, no impact would occur and no mitigation measures are necessary.

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

**No Impact.** See responses to Section's 3.2.a, b, and c, above. As substantiated in those sections, no impact would occur and no mitigation measures are necessary.

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<sup>1</sup> Williamson Act contracts restrict the use of privately-owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value.

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#### 3.3 AIR QUALITY

This section addresses the impacts of the Proposed Project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix A.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O<sub>3</sub>), carbon monoxide (CO), coarse inhalable particulate matter (PM<sub>10</sub>), fine inhalable particulate matter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (SCAQMD), is designated nonattainment for O<sub>3</sub>, and PM<sub>2.5</sub> under the California and National AAQS, nonattainment for PM<sub>10</sub> under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2017a).

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

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

**Less Than Significant Impact.** A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the air quality management plan (AQMP). It fulfills the CEQA goal of informing decision makers of the environmental efforts of the project under consideration at an early enough stage to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to clean air goals in the AQMP. The most recent adopted comprehensive plan is the 2016 AQMP, adopted on March 3, 2016 (see Appendix A to this Initial Study for a description of the 2016 AQMP).

Regional growth projections are used by SCAQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. The Proposed Project involves the construction of a new auditorium building and the children's building, which would expand the existing church facility. These new buildings would hold church services under the existing program. In addition, some new special events and functions would be held after project implementation, such as large community funerals. However, the proposed land uses are not the type of land uses that would be considered a regionally significant project that would warrant Intergovernmental Review by SCAG under CEQA Guidelines section 15206. Therefore, the Proposed Project would not substantially affect the regional growth projections.

Additionally, the regional emissions generated by project operation would be less than the SCAQMD emissions thresholds for operation (see Table 2, *Maximum Daily Regional Operational Phase Emissions*, below) and SCAQMD would not consider the project a substantial source of air pollutant emissions that would have the potential to

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affect the attainment designations in the SoCAB. Furthermore, the proposed land use is consistent with the City's General Plan land use designation of the project site, Mixed Use, which permits public assembly uses and facilities.

In summary, the Proposed Project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant and no mitigation measures are necessary.

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

**Less Than Significant Impact.** The following describes project-related impacts from short-term construction activities and long-term operation of the Proposed Project.

#### Short-Term Construction-Related Air Quality Impact

Project-related construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust emissions from off-road diesel-powered construction equipment; 2) dust generated from demolition, site preparation, earthmoving, and other construction activities; 3) exhaust emissions from on-road vehicles and 4) off-gas emissions of volatile organic compounds (VOCs) from application of asphalt, paints, and coatings.

Construction activities would occur on the project site over three development phases. Anticipated construction activities include building and asphalt demolition, site preparation, rough and fine grading, utility trenching, building construction, asphalt paving, architectural coating, and finishing/landscaping. It is anticipated that construction planning and activities for Phases 1 and 2 would occur between February 2019 to December 2019, and Phase 3 would occur between April 2020 to December 2021. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. The construction schedule and equipment mix are based on preliminary engineering and are subject to changes during final design and as dictated by field conditions. Results of the construction emission modeling are shown in Table 1.

**Table 1 Maximum Daily Regional Construction Emissions**

Year	Criteria Air Pollutants (lbs/day) <sup>1,2</sup>					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2019	10	15	13	<1	1	1
2020	1	8	7	<1	1	<1
2021	18	8	7	<1	1	<1
Maximum Daily Emissions <sup>3</sup>	18	15	13	<1	1	1
SCAQMD Regional Threshold	75	100	550	150	150	55
Exceeds Regional Threshold?	No	No	No	No	No	No

Source: CalEEMod, version 2016.3.2.25.

Notes: Totals may not equal 100 percent due to rounding.

<sup>1</sup> Based on information provided and CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.

<sup>2</sup> Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

<sup>3</sup> Based on total maximum daily emissions provided in the Regional Construction Emissions Worksheet, page A-55 of Appendix A.

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As shown in Table 1, air pollutant emissions from construction-related activities would be less than their respective SCAQMD regional significance threshold values. Therefore, air quality impacts from project-related construction activities would be less than significant and no mitigation measures are necessary.

#### Long-Term Operation-Related Air Quality Impact

Long-term air pollutant emissions generated by the Proposed Project would be generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), mobile sources from vehicle trips, and energy use (natural gas) associated with the proposed buildings. Project-related criteria air pollutant emissions were modeled using CalEEMod. Existing emissions associated with the existing one-story nursery/office building (which would be demolished under the Proposed Project) were also modeled. It is assumed that maintenance and energy usage associated with this existing building would be independent of users, thus, only area and energy sources are considered. Table 2 identifies criteria air pollutant emissions from the Proposed Project's operation phase.

**Table 2 Maximum Daily Regional Operational Phase Emissions**

Source	Criteria Air Pollutants (lbs/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Existing (Year 2021)</b>						
Area	<1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
<b>Total Emissions<sup>2</sup></b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>	<b>&lt;1</b>
<b>Proposed Project (Year 2021)</b>						
Area	1	<1	<1	0	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile <sup>1</sup>	1	3	5	<1	1	<1
<b>Total Emissions<sup>2</sup></b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>&lt;1</b>	<b>1</b>	<b>&lt;1</b>
<b>Net Change<sup>2</sup></b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>&lt;1</b>	<b>1</b>	<b>&lt;1</b>
SCAQMD Regional Threshold	55	55	550	150	150	55
<b>Exceeds Regional Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod Version 2016.3.2.25. Highest winter or summer emissions are reported. Totals may not equal 100 percent due to rounding.

<sup>1</sup> Mobile emissions are based on year 2021 emission factors, which coincide with the opening year assumed in the traffic impact analysis.

<sup>2</sup> Based on total maximum daily emissions provided in the Regional Operation Emissions Worksheet, page A-72 of Appendix A.

As shown in Table 2, the net change in air pollutant emissions from implementation of the Proposed Project would not exceed the SCAQMD's regional emissions thresholds for operational activities. Overall, long-term operation-related impacts to air quality would be less than significant, and no mitigation measures are necessary.



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- c) **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)?**

**Less Than Significant Impact.** The SoCAB is designated nonattainment for O<sub>3</sub> and PM<sub>2.5</sub> under the California and National AAQS, nonattainment for PM<sub>10</sub> under the California AAQS, and nonattainment for lead under the National AAQS (CARB 2017a). According to SCAQMD methodology, any project that does not exceed or can be mitigated to less than the daily threshold values would not add significantly to a cumulative impact (SCAQMD 1993). As substantiated in Section 3.3.b, above, project-related construction and operational activities would not result in emissions in excess of SCAQMD's significant thresholds. Therefore, the Proposed Project would not result in a cumulatively considerable net increase in criteria pollutants. Impacts would be less than significant and no mitigation measures are necessary.

- d) **Expose sensitive receptors to substantial pollutant concentrations?**

**Less Than Significant Impact.** The Proposed Project could expose sensitive receptors to elevated pollutant concentrations if it would cause or contribute significantly to elevated pollutant concentration levels. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects.

#### Construction

##### *Localized Significance Thresholds*

Localized significance thresholds (LSTs) are based on the California AAQS, which are the most stringent AAQS that have been established to provide a margin of safety in the protection of public health and welfare. They are designated to protect 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 people engaged in strenuous work or exercise. Construction LSTs are based on the size of the project site, distance to the nearest sensitive receptor, and Source Receptor Area (SRA). The nearest residential receptors proximate to the project site are the adjacent single-family residences to the north and south and to the west across Victoria Park Lane and the east across Etiwanda Avenue.

Air pollutant emissions generated by project-related construction activities are anticipated to cause temporary increases in air pollutant concentrations. Table 3 shows the maximum daily construction emissions (in pounds per day) generated during onsite construction activities compared with the SCAQMD's LSTs. Onsite construction emissions consist of fugitive dust emissions and exhaust emissions from operation of off-road construction vehicles. As shown in the table, project-related construction activities would not exceed the SCAQMD screening-level construction LSTs. Therefore, project construction would not have the potential to expose sensitive receptors to substantial pollutants. Impacts would be less than significant and no mitigation measures are necessary.

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**Table 3 Localized Construction Emissions**

Construction Activity	Pollutants(lbs/day) <sup>1,2</sup>			
	NO <sub>x</sub>	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
P1 Building Demolition	4	4	<1	<1
P1 Building Demolition+Haul	4	4	<1	<1
P1 Asphalt Demolition	3	4	<1	<1
P1 Asphalt Demolition+Haul	3	4	<1	<1
P1 Rough Grading	4	5	<1	<1
P1 Utility Trenching	3	3	<1	<1
P1 Fine Grading	4	5	<1	<1
P1 Building Construction	8	6	<1	<1
P1 Building Construction & P2 Asphalt Demolition	11	10	1	1
P1 Building Construction & P2 Asphalt Demolition+Haul	11	10	1	1
P1 Building Construction & P2 Rough Grading	12	11	1	1
P1 Building Construction & P2 Utility Trenching	11	10	1	1
P1 Building Construction & P2 Fine Grading	12	11	1	1
P1 Building Construction & P2 Asphalt Paving	14	13	1	1
P1 Building Construction & P2 Coating	9	8	1	1
P1 Building Construction & P2 Finishing/Landscaping	14	11	1	1
P1 Asphalt Paving	7	6	<1	<1
P1 Architectural Coating	2	2	<1	<1
P1 Finishing/Landscaping	6	5	<1	<1
P3 Asphalt Demolition	3	4	<1	<1
P3 Asphalt Demolition+Haul	3	4	<1	<1
P3 Rough Grading	4	5	<1	<1
P3 Utility Trenching	3	3	<1	<1
P3 Fine Grading	4	5	<1	<1
P3 Building Construction (Year 2020)	7	6	<1	<1
P3 Building Construction (Year 2021)	7	6	<1	<1
P3 Asphalt Paving	6	6	<1	<1
P3 Architectural Coating	2	2	<1	<1
P3 Finishing/Landscaping	5	4	<1	<1
<b>SCAQMD 1-acre or Less LST</b>	<b>118</b>	<b>863</b>	<b>5</b>	<b>4</b>
<b>Exceeds LST?</b>	No	No	No	No

Source: CalEEMod Version 2016.3.2.; SCAQMD 2008, 2011.

Notes: In accordance with SCAQMD methodology, only onsite stationary sources and mobile equipment on the proposed project site are included in the analysis.

LSTs are based on receptors within 82 feet (25 meters) of the proposed project site in SRA 32

P1 = Phase 1; P2 = Phase 2; P3 = Phase 3.

<sup>1</sup> Construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by SCAQMD of construction equipment and phasing for comparable projects.

<sup>2</sup> Includes implementation of fugitive dust control measures required by SCAQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

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#### *Health Risk Assessment*

SCAQMD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The Office of Environmental Health Hazards Assessment (OEHHA) adopted new guidance for the preparation of health risk assessments in March 2015 (OEHHA 2015). OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. For purposes of this analysis, it is anticipated that total duration of actual project-related construction activities over a three-year time span (year 2019 through 2021) would be approximately 23 to 24 months, which would limit the exposure of on- and offsite receptors. SCAQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. In addition, construction activities would not generate exhaust particulate matter emissions from operation of construction equipment that exceed the screening-level LSTs. For these reasons, it is anticipated that construction emissions would not pose a threat to onsite and offsite receptors, and project-related construction health impacts would be less than significant. No mitigation measures are necessary.

#### **Operation**

##### *Localized Significance Thresholds*

Operation of the Proposed Project would not generate substantial quantities of emission from onsite stationary sources. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD include industrial land uses, such as chemical processing and warehousing operations where substantial truck idling could occur onsite. The Proposed Project does not fall within these categories of uses. While project operation would result in the use of standard onsite mechanical equipment such as heating, ventilation, and air conditioning units in addition to occasional use of landscaping equipment for property management, air pollutant emissions generated from these activities would be nominal (see Table 2, *Maximum Daily Regional Operational Phase Emissions*). Therefore, localized air quality impacts related to stationary-source emissions would be less than significant and no mitigation measures are necessary.

##### *Carbon Monoxide Hotspots*

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hotspots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds.

The SoCAB has been designated attainment under both the National and California AAQS for CO. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited—in order to generate a significant CO impact (BAAQMD 2017). The Proposed Project would result in up to approximately 324 peak hour trip (Sundays), which is substantially less than the volumes

### 3. Environmental Analysis

cited above. Additionally, the SoCAB has since been designated as attainment under both the national and California AAQS for CO. Therefore, the Proposed Project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the project site. In summary, localized air quality impacts related to mobile-source emissions would be less than significant and no mitigation measures are necessary.

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

**Less Than Significant Impact.** The proposed project would not result in objectionable odors. The threshold for odor is if a project creates an odor nuisance pursuant to SCAQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The uses proposed by the project do not fall within the aforementioned land uses. Additionally, emissions from construction equipment, such as diesel exhaust and volatile organic compounds from architectural coatings and paving activities, may generate odors. However, these odors would be low in concentration, temporary, and are not expected to affect a substantial number of people. Therefore, odor impacts would be less than significant and no mitigation measures are necessary.

## 3.4 BIOLOGICAL RESOURCES

The information in this section is based partly on the following technical reports, which are included as Appendices B and C to this Initial Study.

- *Biological Resources Technical Report*, Cadre Environmental Inc., March 2018. (Appendix B)
  - *Specimen Tree Preservation, Conservation, and Analysis*, Jim Borer, Certified Arborist #496, March 2, 2018. (Appendix C)
- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

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**Less Than Significant Impact With Mitigation Incorporated.** Sensitive biological resources are habitats<sup>2</sup> or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The California Department of Fish and Wildlife (CDFW), US Fish and Wildlife Service (USFWS), and organizations like the California Native Plant Society (CNPS) maintain watch lists of such resources.

Following is a summary of the findings and conclusions of the Biological Resources Technical Report prepared by Cadre Environmental Inc. (Cadre) for the project site (see Appendix B).

#### Sensitive Species

No sensitive plant species were observed during a field survey conducted by Cadre of the project site. There are 36 sensitive plant species documented as occurring in the project region on the California Natural Diversity Database (CNDDB) maintained by CDFW; no suitable habitat was identified onsite for any of those plant species. An evaluation of habitat suitability onsite for each of those species is included in the Biological Resources Technical Report (see Appendix B).

No sensitive animal species were identified during a field survey conducted by Cadre of the project site. There are 28 sensitive animal species documented as occurring in the project region on the CNDDB; there is no suitable habitat onsite for any of those animal species. Habitat suitability for each of those species is included in the Biological Resources Technical Report (see Appendix B). Burrows suitable for burrowing owl (*Athene cunicularia*) are present on the vacant portion of the project site, which is on the western end of the site (see Figure 3, *Aerial Photograph*). The burrows are occupied by California ground squirrel (*Otospermophilus beecheyi*). No owls or characteristic sign such as white-wash, feathers, tracks, or pellets were detected onsite. The project site is low quality habitat for burrowing owl; however, there is a possibility that burrowing owl could colonize the vacant portion of the site before the commencement of construction activities on this portion of the site. Impacts to burrowing owl, if any are present prior to construction activities, would be potentially significant. To ensure that no direct loss of burrowing owl occurs, mitigation will be carried out prior to initiation of onsite grading activities within the vacant but disturbed portion of the project site. With implementation of Mitigation Measure BIO-1, which requires a pre-construction burrowing owl survey, impacts to burrowing owl would be reduced to a level of less than significant.

#### Mitigation Measure

BIO-1      A preconstruction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 14 days prior to any ground-disturbing activities (including clearing and grading) occurring within the vacant but disturbed portion of the project site, which is on the western end of the site. If ground-disturbing activities are delayed or suspended for more than 14 days after the preconstruction survey, the site shall be resurveyed for owls. A final report of the findings, prepared by a qualified biologist, shall be

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<sup>2</sup> Per the California Department of Fish and Wildlife, habitat is where a given plant or animal species meets its requirements for food, cover, and water in both space and time (CDFW 2015).

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submitted to the City of Rancho Cucamonga prior to the initiation of any ground-disturbing activities that have the potential to disturb any burrowing owls.

If owls are determined to be present within the construction footprint, they shall be captured and relocated. The preconstruction survey and any relocation activity shall be conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (2012). According to CDFW guidelines, mitigation actions shall be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and therefore the time frame shall be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFW guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that: a) the adult birds have not begun egg laying and incubation; or b) the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of these two conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to prevent abandonment of the young.

#### Sensitive Habitats

As shown in Figure 3, *Aerial Photograph*, the project site is in an urbanized area of the City and is surrounded by single-family residential development. The project site is developed and disturbed, and there are no sensitive habitats onsite. No impact to sensitive habitats would occur and no mitigation measures are necessary.

- 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 Wildlife or U.S. Fish and Wildlife Service?**

**No Impact.** Sensitive natural communities are communities that are considered rare in the region by regulatory agencies; known to provide habitat for sensitive animal or plant species; or known to be important wildlife corridors. Riparian habitats are those occurring along the banks of rivers and streams.

As shown in Figure 3, the project site is in an urbanized area of the City and is surrounded by single-family residential development. The project site is developed and disturbed, and no sensitive habitats were identified on- or in the vicinity of the project site (Cadre 2018). The Proposed Project would not result in an impact on any riparian habitat or other sensitive natural community. Therefore, no impact would occur and no mitigation measures are necessary.



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

**No Impact.** Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as streams, swamps, marshes, and bogs.

No wetlands regulated by the US Army Corps of Engineers (Corps), California Department of Fish and Wildlife, or Santa Ana Regional Water Quality Control Board were identified on, adjacent to, or within proximity of the project site. Therefore, no impact would occur and no mitigation measures are necessary.

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

**Less Than Significant Impact With Mitigation Incorporated.** As shown in Figure 3-3, *Aerial Photograph*, the project site is in an urbanized of the City and is surrounded by single-family residential development. The project site and its surroundings are built out and do not provide habitat for the movement of any native resident or migratory fish or wildlife species. Although the project site may provide some habitat for limited wildlife movement and live-in habitat—particularly for reptile and avian species and small to medium mammals that are adapted to urban settings—the project site does not function as a wildlife corridor. Additionally, the site and environs have not been identified or designated as a wildlife corridor.

However, a number of mature trees that occur on the project site (see Figure 3, *Aerial Photograph*, and Figures 5a and 5b, *Site Photographs*) would be removed under the Proposed Project. The trees may provide suitable habitat, including nesting habitat, for migratory birds under the federal Migratory Bird Treaty Act (MBTA) and Section 3513 et seq. of the California Fish and Game Code. Section 3513 provides protection to the birds listed under the MBTA, essentially all native birds. Additionally, Section 3503 of the code makes it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. The MBTA implements the United States' commitment to four treaties with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. It governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. Under the provisions of the MBTA, it is unlawful "by any means or manner to pursue, hunt, take, capture (or) kill" any migratory birds except as permitted by regulations issued by USFWS. The term "take" is defined by USFWS regulation to mean to "pursue, hunt, shoot, wound, kill, trap, capture or collect" any migratory bird or any part, nest or egg of any migratory bird covered by the conventions, or to attempt those activities. Any nest permanently vacated for the season would not warrant protection pursuant to the MBTA. USFWS administers permits to take migratory birds in accordance with the MBTA.

Christ's Church of the Valley (project applicant) would be required to comply with the MBTA by either avoiding site clearing, demolition, or grading activities during the breeding/nesting season (February 16 to August 31) or conducting a site survey for nesting birds prior to commencing such activities during the nesting season, as outlined in Mitigation Measure BIO-2. Adherence to the MBTA regulations and Mitigation Measure BIO-2

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would ensure that if construction activities occurs during the breeding season, appropriate measures would be taken to avoid impacts to nesting birds, if any are encountered. Compliance with the MBTA requirements and Mitigation Measure BIO-2 would be ensured through the City's development review process. With adherence to the MBTA requirements and implementation of Mitigation Measure BIO-2, impacts would be reduced to a level of less than significant.

#### Mitigation Measure

**BIO-2** Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting bird season (February 16 to August 31), a qualified monitoring biologist contracted by Christ's Church of the Valley shall conduct a preconstruction survey(s) to identify any active nests in and adjacent to the project site no more than three days prior to initiation of the action. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. However, if the biologist finds an active nest within or directly adjacent to the action area (within 100 feet) and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest using temporary plastic fencing or other suitable materials, such as barricade tape and traffic cones. The buffer zone shall be determined by the biologist in consultation with applicable resource agencies and in consideration of species sensitivity and existing nest site conditions, and in coordination with the construction contractor. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Only specified activities (if any) approved by the qualified biologist in coordination with the construction contractor shall take place within the buffer zone until the nest is vacated. Activities that may be prohibited within the buffer zone by the biologist may include but not be limited to grading and tree clearing. Once the nest is no longer active and upon final determination by the biologist, the proposed action may proceed within the buffer zone.

The monitoring biologist shall prepare a survey report/memorandum summarizing his/her findings and recommendations of the preconstruction survey. Any active nests observed during the survey shall be mapped on a current aerial photograph, including documentation of GPS coordinates, and included in the survey report/memorandum. The completed survey report/memorandum shall be submitted to the City of Rancho Cucamonga Planning Department prior to the commencement of construction-related activities that have the potential to disturb any active nests during the nesting season.

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

**Less Than Significant Impact.** As shown in Figure 3-3, *Aerial Photograph*, and Figures 5a and 5b, *Site Photographs*, the project site contains a number of mature trees, which include but are not limited to tree species such as American sweetgum, California fan palm, Evergreen ash, and Deodar cedar. Project development would include the removal of approximately 50 existing trees onsite.

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The City has a tree preservation ordinance, which is codified in Section 17.16.080 (Tree Removal Permit) of the City's Municipal Code. The ordinance outlines provisions for the protection of heritage trees in the City. The detailed definition of a heritage tree is provided in Subsection 17.16.080.C (Heritage Trees). The City's tree preservation ordinance states that eucalyptus, palm, oak, sycamore, pine, and other trees growing within the City are a natural aesthetic resource and are worthy of protection. The provisions of Section 17.16.080 apply to all heritage trees on all private property within the City. Because the project site is private property, the provisions of the City's tree preservation apply to the Proposed Project. Some of the trees to be removed meet the definition of a heritage tree; however, they are so identified due to their height and trunk circumference and not their aesthetic or scenic qualities.

As noted above, project development requires the removal of approximately 50 existing trees. The project applicant's certified arborist assessed the existing trees in the immediate area of the Proposed Project improvements. The purpose of the assessment was to determine the presence and health condition of any identified heritage trees, and to determine which trees could be impacted due to project development. The results of the assessment are summarized in the arborist report prepared for the Proposed Project (See Appendix C). As stated in the report, there are 20 heritage trees in the immediate area of the Proposed Project improvements. The report recommended removal of 10 of the 20 heritage trees based on their locations relative to the proposed campus improvements; health conditions of some of the trees; and the potential for some of the trees to be affected by diseases. The trees recommended for removal, by species, are:

- American sweetgum, *Liquidambar styrac*: 6 trees
- California fan palm, *Washingtonia filifera*: 1 tree
- Evergreen ash, *Fraxinus uhdei*: 2 trees
- Deodar cedar, *Cedrus deodora*: 1 tree

In accordance with the provisions of Section 17.16.080 (Tree Removal Permit) of the City's Municipal Code, the 10 heritage trees identified for removal requires City issuance of a tree removal permit. The purpose of a tree removal permit is to provide a City review process for the removal of heritage trees that are considered to be a community resource. As stated in Section 17.16.080.D.2, "No tree removal permit shall be issued for the removal of any heritage tree on any lot associated with a proposal for development, *unless all discretionary approvals have been obtained from the city.*" In accordance with Section 17.16.080, the project applicant submitted a tree removal permit (DRC2018-00843) for removal of the 10 heritage trees identified above. Heritage trees would only be removed after approval of such a permit being issued by the City. Through the City's review process (which includes Planning Commission review and consideration of the tree removal permit), the City would ensure that impacts to identified heritage trees have been adequately analyzed in accordance with the City's established provisions for impacts to heritage trees.

Furthermore, the Proposed Project would provide a greater number of new trees (approximately 100) than currently exist. The Proposed Project's landscape plan would include a variety of new trees, including but not be limited to camphor, myrtle, magnolia, and Brisbane box trees.

Based on the preceding, the Proposed Project would not result in a conflict with the City's tree preservation ordinance. Therefore, impacts would be less than significant and no mitigation measures are necessary.

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

**No Impact.** The project site is in an urbanized area of the City and surrounded by a single-family residential development (see Figure 3, *Aerial Photograph*). The site is not in a habitat conservation plan or natural community conservation plan (USFWS 2017; CDFW 2017). No impact would occur and no mitigation measures are necessary.

### 3.5 CULTURAL RESOURCES

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

**Less Than Significant Impact.** Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered “historically significant” if it meets one of the following criteria:

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

As shown in Figures 3, *Aerial Photograph*, the project site is developed with an existing church campus. Existing buildings onsite include a single-story temple/chapel building that houses the church’s chapel and offices; a single-story nursery/office building; a single-story banquet building; a small one-story storage building; a covered shelter structure; and two temporary portable bungalows.

Historical United States Geological Survey topographic maps show that the project site was once used as an orchard and at one time contained two homes; one residential structure was constructed in the late 19th century and the other around 1941. By 1953, the later structure was removed, and two new structures were onsite: a home and a structure that was likely a barn or garage. All structures were gone by 1966, and the property was no longer used as an orchard. The first of the church’s buildings was constructed sometime between 1969 and 1973 (Cogstone 2018). The onsite buildings are of modern construction and are surrounded by modern, nonnative landscaping.

Implementation of the Proposed Project would involve demolition of two nonhistorical structures: the 15-year-old covered shelter structure and the approximately 30-year old nursery/office building. Buildings less than 45 years old are typically not evaluated for historical significance in cultural resources investigations. The state-recommended threshold under which buildings may be considered historic resources is a construction age of

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50 years (California Code of Regulations, §4852.d.2). Additionally, the existing buildings to be demolished are of modern construction do not exhibit any unique architectural style or features; they are a common building design found throughout southern California.

Furthermore, the existing chapel building, which was likely built between 1969 and 1973 was originally built as a Buddhist temple by Japanese craftsman. As shown in Figure 3, this building sits on the eastern end of the project site, just east of the aforementioned nursery/office building. While it does not appear to be historic in age and is not designated as having semi-landmark status on any of the City's official registers, it is architecturally unique, with Japanese cultural influences extending into the immediate surroundings in the form of a Koi pond and ornamental gardens. The unique qualities of the building and its immediate surroundings were recognized during the project planning stages and a 35-foot avoidance buffer was established around its perimeter, ensuring that the building and setting will not be improved, modified, or impacted by the proposed campus improvements in any way (Cogstone 2018).

Finally, the project site and existing buildings are not identified on any federal, state, or local historic registers—National Register of Historic Places; California State Historical Landmarks and Points of Historical Interest; and City of Rancho Cucamonga local historic resources. As also shown in Figure LU-8 (Historic Resources) of the City's General Plan Managing Land Use, Community Design, and Historic Resources Element, the project site is not listed as a designated historic site or on/abutting a historic transportation route.

Based on the preceding, impacts to historical resources would be less than significant and no mitigation measures are necessary.

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

**Less Than Significant Impact With Mitigation Incorporated.** Archaeological resources are prehistoric or historic evidence of past human activities, including structural ruins and buried resources. As shown in Figure 3, *Aerial Photograph*, the project site is in an urbanized area of the City; most of the site has already been disturbed due to grading and construction activities associated with the existing church campus. The project site is largely flat, and the two proposed buildings would be constructed above ground level, with no subterranean floors or basements. Accordingly, deep ground excavations or disturbances would not be required to implement the Proposed Project.

Because the site has been previously graded and proposed improvements would require minimal additional earth movement, the likelihood that additional archeological resources may be discovered during site clearing and grading activities is considered very low. Additionally, the majority of the project site has already been subject to similar construction and ground-disturbing activities that would occur under the Proposed Project. No archaeological resources were identified during prior development of the project site, and it is unlikely that any such resources would be uncovered or affected during project-related grading and construction activities.

Additionally, as a part of the cultural resources assessment conducted by Cogstone for the project site, Cogstone completed a search for cultural resources records for the site (as well as within a one-mile search radius) at the South Central Coastal Information Center at California State University, Fullerton on March 15, 2018. The

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records search indicated that no prior studies included the project site; however, 48 have been completed outside the project site but within a one-mile radius. No cultural resources have been previously recorded within the project site, while 26 have been previously documented within the one-mile search radius (Cogstone 2018).

However, a pedestrian survey conducted of the project site in 2018 yielded two historical (19th century) artifacts in the vacant portion of the project site: a black ceramic dish sherd and a ferrous metal square nail (Cogstone 2018). Because the project site is situated to the rear of multiple known historical residences and two 19th century artifacts were identified, there is a potential for subsurface archeological deposits to occur onsite. For these reasons, the project site is regarded as moderately sensitive for historical resources. Therefore, the presence of subsurface archaeological resources (if any are encountered) could be affected by ground-disturbing activities associated with grading and construction at the site. Based on the preceding, potential impacts to archeological resources could occur as a result of project-related construction activities.

However, with implementation of Mitigation Measures CUL-1 through CUL-3, impacts to archeological resources would be reduced to a less than significant level. Mitigation Measure CUL-1 requires that the project applicant provide a qualified archaeological monitor to observe all ground-disturbing activity; CUL-2 requires that the qualified archaeologist provide all construction personnel with a Workers' Environmental Awareness Program training; and CUL-3 outlines the necessary steps in the event that previously unidentified cultural resources and/or tribal cultural resources are unearthed during ground-disturbing activities.

#### Mitigation Measures

- CUL-1      **Archaeological Monitoring.** Prior to the issuance of grading permits, and for any subsequent permit involving excavation to a depth of between zero and five feet below the current grade, the project applicant shall provide a qualified archaeological monitor to observe all ground-disturbing activity, including but not limited to grubbing, trenching, boring, and mechanical excavation. All monitoring work shall be performed or supervised by an archaeologist meeting the Secretary of the Interior's Professional Qualifications for Archeology as defined at 36 CFR Part 61, Appendix A.
- CUL-2      **Workers' Environmental Awareness Program Training.** Prior to the issuance of grading permits, a Workers' Environmental Awareness Program training shall be provided by a qualified archaeologist to all construction personnel to ensure that they are aware of sensitivity of the area, and the protocol should cultural and/or tribal cultural resources be identified during ground-disturbing activity. The training shall include a handout that details the standard notification protocols and includes the appropriate notification chain of command and points-of-contact. The handout shall emphasize the need for confidentiality and culturally-appropriate treatment of any cultural or tribal cultural resources.
- CUL-3      **Inadvertent Discoveries.** If previously unidentified cultural resources and/or tribal cultural resources are unearthed during ground-disturbing activities, all work shall immediately be suspended within 100 feet of the discovery and the City of Rancho Cucamonga Building and Safety Services Department shall be immediately contacted. Suspension of ground disturbances in the vicinity of the discovery shall not be lifted until the archaeological monitor

### 3. Environmental Analysis

in coordination with the construction contractor has evaluated the discovery to assess whether it is an archaeological resource and/or tribal cultural resource classified as significant pursuant to the CEQA definition of historical (State CEQA Guidelines 15064.5[a]) and/or unique archeological resource (Public Resources Code 21083.2[g]). If the qualified archaeologist determines that adverse impacts to tribal cultural resources or significant archaeological resources could occur and impacts to the resource cannot be avoided, treatment measures shall be developed and implemented in consultation with the City of Rancho Cucamonga Building and Safety Services Department, the qualified archaeologist, and consulting Native American tribes (when tribal cultural resources are involved). For example, if archaeological remains are recovered, they shall be offered to a repository with a retrievable collection system and an educational and research interest in the materials, such as the San Bernardino County Museum. If no repository is found, the resource(s) shall be considered the property of the City and may be stored, disposed of, transferred, exchanged, or otherwise handled by the City at its discretion. The final recommendations on the treatment and disposition of the deposits shall be developed in accordance with all applicable provisions of California Public Resource Code Section 21083.2 and State CEQA Guidelines Sections 15064.5 and 15126.4. The project applicant shall follow all recommendations made by the archeologist.

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

**Less Than Significant Impact.** Paleontological resources are fossils, that is, the recognizable remains or evidence of past life on earth; including bones, shells, leaves, tracks, burrows, and impressions. The sediments covering the project vicinity are unconsolidated sand and gravels transported by streams and runoff. At the site's surface and immediate subsurface, the sediments are Holocene in age (10,000 years ago the present). Holocene deposits are less than 11,700 years old and are too young to contain the remains of extinct Ice Aged (Pleistocene) animals. Deeper sediments are likely to be Pleistocene in age (1.8 million years ago to 10,000 years ago) (Cogstone 2018).

The Soils Investigation Report prepared for the Proposed Project (see Appendix E) revealed that much of the project site (up to five feet) is medium dense artificial fill classified as silty sand. The natural soil underlying the fill consists of medium dense to dense silty sand. The building site is at the approximate desired grade, and no substantial additional cuts or fills are expected to be necessary to construct the Proposed Project. Therefore, excavation of Holocene materials is not anticipated. Below-surface, fossil-bearing geological units are not anticipated to be encountered.

Additionally, a portion of the project site has already been subject to similar construction and ground-disturbing activities as would occur under the Proposed Project. No known paleontological resources were identified during prior development of the project site, and it is unlikely that any such resources would be uncovered or affected during project-related grading and construction activities.

Furthermore, there are no unique geological features onsite or adjacent to or surrounding the project site. The project site exhibits generally flat topography with overall gentle inclination to the south.



### 3. Environmental Analysis

Based on the preceding, development of the Proposed Project would not result in an impact to paleontological resources or the destruction of any unique geological features. No mitigation measures are necessary.

#### **d) Disturb any human remains, including those interred outside of dedicated cemeteries?**

**Less Than Significant Impact.** There are no known human remains or cemeteries on or near the project site. As shown in Figure 3, *Aerial Photograph*, the project site is in an urbanized area of the City; most of the site has already been disturbed due to grading and construction activities associated with the existing church campus. A majority of the surrounding vicinity has also experienced substantial ground disturbance associated with the development of existing homes, roadways, and other urbanized land uses. The project site is largely flat, and the two proposed buildings would be above ground level, with no subterranean floors or basements. Accordingly, little ground disturbance would be required to implement the Proposed Project. Therefore, the likelihood that human remains may be discovered during site clearing and grading activities is considered extremely low. However, development of the Proposed Project would have the potential to disturb previously undiscovered subsurface human remains, if any exist. For example, the Proposed Project could involve deeper excavation than previously performed in certain areas of the project site, as well as excavation on portions of the site not previously disturbed.

In the unlikely event that human remains are discovered during ground-disturbing activities, California Health and Safety Code Section 7050.5 requires that disturbance of the site shall remain halted until the San Bernardino County Coroner has conducted an investigation into 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 California Public Resources Code. The coroner is required to make a determination within two working days of notification of the discovery of the human remains. If the coroner determines that the remains are not subject to his or her authority or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) so that NAHC can contact the Most Likely Descendant (MLD). The MLD shall be provided access to the discovery and will provide recommendations or preferences for treatment of the remains within 48 hours of accessing the discovery site. Disposition of human remains and any associated grave goods, if encountered, shall be treated in accordance with procedures and requirements set forth in Sections 5097.94 and 5097.98 of the Public Resources Code; Section 7050.5 of the California Health and Safety Code; and CEQA Guidelines Section 15064.5.

Compliance with existing law regarding the discovery of human remains would reduce potential impacts to human remains to less than significant levels. No mitigation measures are necessary.

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### 3.6 ENERGY

#### 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.** Following is a discussion of the potential impacts related to the consumption of energy sources resulting from the construction and operational phases of the Proposed Project.

#### **Construction**

Construction of the Proposed Project would consume energy, in the short-term, through electricity use, construction vehicles and equipment fuel consumption, and bound energy in construction materials (e.g., such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass).

#### *Electricity*

Construction of the Proposed Project would require the use of construction equipment for grading, hauling, and building activities. Electricity use during construction would vary during different phases of construction—most of the construction equipment during grading would be gas powered or diesel powered, and the later construction phases would require electricity-powered equipment, such as interior construction and architectural coatings. The use of electricity would be temporary and would fluctuate according to the phase of construction. The Proposed Project would not result in wasteful or unnecessary electricity demands. Therefore, the Proposed Project would not result in a significant impact related to electricity use during the construction phase. Impacts would be less than significant and no mitigation measures are necessary.

#### *Transportation*

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 (off-road), delivery and haul trucks (on-road), and construction employee passenger vehicles (on-road). Most of the construction equipment during grading would be diesel-powered.

Construction contractors are anticipated to minimize idling of construction equipment during construction as per California Code of Regulations (CCR) Section 2485. This code requires that non-essential idling for all diesel-fueled commercial motor vehicles must not exceed five consecutive minutes at any location. Such required practices would limit wasteful and unnecessary energy consumption. Furthermore, the use of fuel by on-road and off-road vehicles would be temporary and would fluctuate according to the phase of construction. Construction fuel use for the proposed project would cease upon completion of project construction. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or state. Therefore, it is expected that construction fuel consumption associated with the Proposed Project would not be any more inefficient, wasteful, or unnecessary than similar development projects. Impacts would be less than significant and no mitigation measures are necessary.

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#### *Construction Materials*

Construction building materials may include recycled materials and products originating from nearby sources in order to reduce the costs of transportation. With increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. The type of construction is conventional and would be similar to other commercial developments in the City. Substantial reductions in energy inputs for construction materials can be achieved by building with recycled materials, which require substantially less energy to produce than nonrecycled materials. The City's Municipal Code, Chapter 8.19.030 (Construction and Demolition Diversion Requirements) outlines the requirements for diverting construction waste from landfills. This section requires the diversion of 65 percent of construction and demolition waste through recycling, reuse, and diversion programs. The incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes, and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ reasonable energy conservation practices in the interest of minimizing the cost of operation. Impacts would be less than significant and no mitigation measures are necessary.

#### **Operation**

Operation of the proposed project would create additional demands for building electricity and natural gas compared to existing conditions and would result in increased transportation energy use.

#### *Transportation*

During the operational phase, it is anticipated that the Proposed Project would result in an annual increase in project-related Vehicle Miles Traveled (VMT) of 733,129 miles (refer to Transportation Energy Use Calculations in Appendix A, page A-394 for VMT related to church services and page A-411 for VMT related to church events). VMT was estimated by applying the total average trip rate to an average trip length multiplied by 365 days per year. Project-related VMT would come from employee and visitor vehicle trips; delivery and supply trucks; and trips by maintenance and repair crews. Table 4 shows the proposed project's use of energy based on VMT. As shown in the table, the project's transportation sector would consume 34,682 gallons of fuel (gasoline, diesel, and compressed natural gas) and 1,975 kWh of electricity. Total gallons of fuel use were estimated by applying fuel usage data from California Air Resources Board's EMFAC2011 vehicle types to the Proposed Project's overall fleet mix and annual VMT (refer to calculations in Appendix D).

**Table 4 Project Operation-Related Vehicle Fuel/Energy Usage**

Gas		Diesel		CNG		Energy <sup>1</sup>	
VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
652,846	25,130	71,974	8,697	2,351	855	5,958	1,975

Source: CalEEMod 2016.3.2; EMFAC2017

Notes CNG: compressed natural gas; VMT: vehicle miles traveled; kWh: kilowatt-hour

<sup>1</sup> Electricity use from electric vehicles is based on the average electricity consumption available from the U.S. Department of Transportation (USDOT 2017).

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Fuel consumption in passenger vehicles and trucks is regulated by Federal and State laws regarding average corporate fuel economy of vehicles. As vehicles turn over, the overall fuel economy of California's vehicle fleets is improved. Additionally, one of the primary goals of CARB's 2017 Scoping Plan is to provide clean transportation options for California residents. California is home to nearly half of the country's zero-emission vehicles. Alternative fuel producers and oil companies are bringing more low carbon fuels to market than required by the Low Carbon Fuel Standard (LCFS). And, the State has invested in zero-emission vehicles and infrastructure, land use planning, and active transportation options such as walking and biking (CARB 2017). In January 2012, CARB approved the Advanced Clean Cars program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases with requirements for greater numbers of zero electric vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less global warming gases and 75 percent less smog-forming emissions (CARB 2011).

The proposed project would be consistent with the requirements of these energy-related regulations and would not result in wasteful or unnecessary fuel demands. Therefore, the proposed project would not result in a significant impact related to transportation energy during the operational phase. No mitigation measures are necessary.

#### *Building Energy Use*

The new structures would result in an increase in natural gas and electricity consumption during the operational phase. Energy is used for heating, cooling, and ventilation of the building; water heating; equipment; appliances; indoor, outdoor, perimeter, and parking lot lighting; and security systems. Tables 5 and 6 show the annual electricity and natural gas usage of the Proposed Project compared to the existing land use. The Proposed Project would use a net total of 374,576 kilowatt-hours (kWh) of electricity and 1,425,699 kilo-British Thermal Units (kBtu) of natural gas annually.

**Table 5 Electricity Use**

	SQFT	T24 Electricity Rate (kWh/SQFT)	Non-T24 Electricity Rate (kWh/SQFT)	Lighting Electricity (kWh/SQFT)	Electricity (kWh/yr)
Place of Worship	2,990	2.89	5.02	3.62	34,475
Parking Lot	106,400	0	0	0.88	93,632
<b>Existing Use Total</b>	—	—	—	—	<b>128,107</b>
Place of Worship	47,000	2.2	5.02	2.93	477,050
Parking Lot	73,237	0	0	0.35	25,633
Other Asphalt Surfaces	42,253	0	0	0	0
Other Non-Asphalt Surfaces	66,211	0	0	0	0
<b>Proposed Project Total</b>	—	—	—	—	<b>502,683</b>
<b>Net Electricity Use</b>	—	—	—	—	<b>374,576</b>

Source: CalEEMod 2016.3.2.

Notes: kWh: kilowatt-hour

Energy use is divided into categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

### 3. Environmental Analysis

**Table 6 Natural Gas Use**

	SOFT	T24 Natural Gas Rate (kBTU/yr/SOFT)	Non-T24 Natural Gas Rate (kBTU/yr/SOFT)	Natural Gas (kBTU/yr)
Place of Worship	2,990	16.76	17.13	101,331
Parking Lot	106,400	0	0	0
<b>Existing Use Total</b>	—	—	—	<b>101,331</b>
Place of Worship	47,000	15.36	17.13	1,527,030
Parking Lot	73,237	0	0	0
Other Asphalt Surfaces	42,253	0	0	0
Other Non-Asphalt Surfaces	66,211	0	0	0
<b>Proposed Project Total</b>	—	—	—	<b>1,527,030</b>
<b>Net Natural Gas Use</b>	—	—	—	<b>1,425,699</b>

Source: CalEEMod 2016.3.2.

Notes: KBTU: kilo British Thermal Units

Energy use is divided into categories subject to Title 24 requirements (end uses associated with the building envelope, such as the HVAC system, water heating system, and integrated lighting) and those not subject to Title 24 requirements (such as appliances, electronics, and miscellaneous "plug-in" uses).

California's Building Energy Efficiency Standards (Title 24, Part 6, of the California Code of Regulations) are updated on an approximately three-year cycle to incorporate new energy efficiency technologies.<sup>3</sup> The 2019 Building Energy Efficiency Standards were adopted on May 9, 2018, and go into effect for new construction starting January 1, 2020. The 2019 standards focus on four key areas: 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards (CEC 2018b). The Proposed Project would be required to designed and construction in accordance with all applicable nonresidential energy efficiency standards of the 2019 standards. For example, the Proposed Project's lighting sources would be required to be installed in accordance with the provisions of Section 110.9 (Mandatory Requirements for Lighting Control Devices and Systems, Ballasts, and Luminaires). Also, the proposed buildings would comply with the 2019 CALGreen (California Code of Regulations, Title 24, Part 11) standards and all appliances would follow the 2012 Appliance Efficiency Regulations. Project compliance with the 2019 standards and CALGreen would be ensured through the City's building plan check and development review process.

Solid waste from the operational phase will be managed in accordance with the city's efforts to meet Assembly Bill (AB) 939 and Senate Bill (SB) 1016 set forth by the California Integrated Waste Management Board (CIWMB). AB 939 required the reduction of solid waste sent to landfills by 50 percent by 2000, which the City has already met through a series of recycling and re-use programs. Under SB 1016, the CIWMB requires the reduction of solid waste targets to be met through waste generation by weight. The City of Rancho Cucamonga has exceeded the targets and continues to implement programs that would improve waste diversion (Rancho Cucamonga 2010).

<sup>3</sup> The California Energy Code, part 6 of the California Building Standards Code which is title 24 of the California Code of Regulations, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings.

### 3. Environmental Analysis

Based on the preceding, the Proposed Project would be consistent with the requirements of these energy-related regulations and would not result in wasteful or unnecessary electricity demands. Therefore, the Proposed Project would not result in a significant impact related to electricity during the operational phase. No mitigation measures are necessary.

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

**Less Than Significant Impact.** The California Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078 and was amended in 2006 and 2011. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources to 33 percent of total procurement by 2020. Renewable energy sources include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. Executive Order S-14-08, signed in November 2008, expanded the state's renewable portfolios standard (RPS) to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS. SB 350 requires renewable energy resources of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Senate Bill 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Governor Brown signed Senate Bill 100 (SB 100), which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100 the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

The project site is currently being serviced by Southern California Edison (SCE). SCE obtains electricity from conventional and renewable sources. In 2017, 34 percent of SCE's electricity was generated from natural gas; 4 percent from coal; 9 percent from nuclear power; 29 percent from renewable energy sources; 15 percent from large hydroelectric generators; and 9 percent from unspecified sources (SCE 2018). SCE has reached California's 2020 renewable energy goal three years ahead of schedule. The net increase in power demand associated with the Proposed Project is anticipated to be within the service capabilities of SCE and would not impede SCE's ability to implement California's renewable energy goals. Therefore, the Proposed Project would not obstruct a state or local plan for renewable energy. Impacts would be less than significant and no mitigation measures are necessary.

Additionally, as indicated in Section 3.6.a above, the Proposed Project would not obstruct a state or local plan for energy efficiency.

## 3.7 GEOLOGY AND SOILS

The analysis in this section is based partly on the following technical study, which is included as Appendix E to this Initial Study.

- *Soils Investigation*, John R. Byerly, Inc., March 2019.

### 3. Environmental Analysis

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**
  - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**Less Than Significant Impact.** The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. Surface rupture is the most easily avoided seismic hazard. Fault rupture generally occurs within 50 feet of an active fault line and is limited to the immediate area of the fault zone where the fault breaks along the surface. The main purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to prevent construction of buildings used for human occupancy on the surface of active faults, in order to minimize the hazard of surface rupture of a fault to people and habitable buildings. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that the proposed development site is not threatened by surface rupture from future earthquakes.

The project site is not within or near an established Alquist-Priolo Earthquake Fault Zone and is not in a “Zone of Required Investigation”. The nearest such fault zone to the site is approximately 0.6 mile to the north along the Cucamonga Fault (CGS 2015b). Additionally, there are no mapped active faults—that is, a fault that has ruptured during Holocene time (the last 11,700 years)—on or within proximity of the project site. The nearest known active faults to the site are the Cucamonga Fault, approximately 2.5 miles to the north and the Red Hill-Etiwanda Avenue Fault, approximately 1.5 miles to the northwest (CGS 2015a). Due to the distance to the active faults, the potential for surface rupture of a fault onsite is considered very low. Therefore, project development would not subject people or structures to hazards arising from surface rupture of a known active fault. Impacts would be less than significant and no mitigation measures are necessary.

#### ii) **Strong seismic ground shaking?**

**Less Than Significant Impact.** The most significant geologic hazard to the design life of the Proposed Project is the potential for moderate to strong ground shaking resulting from earthquakes generated on the faults in seismically active southern California. As with other areas in southern California, it is anticipated that the project site will likely be subject to strong ground shaking due to earthquakes on nearby faults. As noted above, the active portion of the Cucamonga Fault is approximately 2.5 miles to the north of the site and the Red Hill-Etiwanda Avenue Fault is approximately 1.5 miles to the northwest of the site. These faults, as well as others in the region, are considered capable of producing strong shaking at the project site, thereby exposing people or structures on the site to potential substantial adverse effects, including the risk of loss, injury, or death. The intensity of ground shaking on the project site would depend on the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project site.

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However, the project site is not at a greater risk of seismic activity or impacts than other sites in southern California. Seismic shaking is a risk throughout southern California. Additionally, the state regulates development in California through a variety of tools that reduce hazards from earthquakes and other geologic hazards. The California Building Code (CBC; California Code of Regulations, Title 24, Part 2), adopted by reference in Chapter 15.12 (Building Code) of the Rancho Cucamonga Municipal Code, contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site. Project development would be required to adhere to the provisions of the CBC, which are enforced by the City's Building and Safety Services Department during the building plan check and development review process. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce hazards from strong seismic ground shaking.

Furthermore, incorporation of the recommended design parameters from the soils investigation report prepared for the Proposed Project (see Appendix E) would also reduce hazards from strong seismic ground shaking. The City would impose the recommended design parameters as a condition of approval, and compliance would be ensured through the City's building plan check and development review process.

In summary, compliance with the provisions of the CBC and implementation of the recommended design parameters outlined in the soil investigation report would reduce impacts resulting from strong seismic ground shaking. Therefore, impacts would be less than significant and no mitigation measures are necessary.

#### **iii) Seismic-related ground failure, including liquefaction?**

**No Impact.** Liquefaction refers to loose, saturated sand or silt deposits that behave as a liquid and lose their load-supporting capability when strongly shaken. Loose granular soils and silts that are saturated by relatively shallow groundwater are susceptible to liquefaction.

The soil investigation prepared for the Proposed Project concluded that liquefaction in site soils is very unlikely due to the fact that free groundwater was not encountered in any of the soil borings on site (up to a depth of 46.5 feet). The depth to groundwater in the area is known to be more than 200 feet below ground surface. Due to the great depth to historical high groundwater, the potential for liquefaction is very low (Byerly 2018). Additionally, per Figure PS-3 (Geotechnical Hazards) of the City's General Plan Public Health and Safety Element, the project site is not in an area susceptible to liquefaction.

Furthermore, project site grading, design, and construction would conform with the recommended design parameters of the soil investigation report (see Appendix E). The City would impose the recommended design parameters as a condition of approval, and compliance would be ensured through the City's building plan check and development review process.

Therefore, no impact would occur and no mitigation measures are necessary.



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#### iv) Landslides?

**No Impact.** Landslides are the downslope movement of geologic materials. Slope failures in the form of landslides are common during strong seismic shaking in areas of steep hills. Landslides are not expected to occur at the project site, since the site is relatively flat and not within a landslide hazard area as identified by the California Geologic Survey (CGS 2015b), which are areas having potential for seismic slope instability. Additionally, per Figure PS-3 (Geotechnical Hazards) of the City's General Plan Public Health and Safety Element, the project site is not in an area susceptible to landslides. Therefore, geologic hazards associated with landslides are not anticipated at the site. No impact would occur and no mitigation measures are necessary.

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

**Less Than Significant Impact.** Erosion is the movement of rock and soil from place to place and is a natural process. Common agents of erosion in the project region include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earth-moving activities if erosion control measures are not used.

Following is a discussion of the potential erosion impacts resulting from the Proposed Project's construction and operational phases.

#### Construction Phase

Project development would involve excavation, grading, and construction activities that would disturb soil and leave exposed soil on the ground surface. Common means of soil erosion from construction sites include water, wind, and being tracked offsite by vehicles. These activities could result in soil erosion. However, development on the project site is subject to local and state codes and requirements for erosion control and grading during construction. For example, project development is required to comply with standard regulations, including South Coast Air Quality Management District Rules 402 and 403, which would reduce construction erosion impacts. Rule 403 requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emissions source. Rule 402 requires dust suppression techniques be implemented to prevent dust and soil erosion from creating a nuisance offsite. For example, as outlined in Table 1 of Rule 403 (Best Available Control Measures), control measures to reduce erosion during grading and construction activities include stabilizing backfilling materials when not actively handling, stabilizing soils during clearing and grubbing activities, and stabilizing soils during and after cut-and-fill activities.

Additionally, the Construction General Permit (CGP) issued by the State Water Resources Control Board, effective July 17, 2012, regulates construction activities to minimize water pollution, including sediment risk from construction activities to receiving waters. Project development would be subject to the National Pollution Discharge Elimination System (NPDES) permitting regulations, including the development and implementation of a Stormwater Pollution Prevention Plan (SWPPP), which is further discussed in Section 3.10, *Hydrology and Water Quality*. The Proposed Project's construction contractor would be required to prepare and implement a SWPPP and associated best management practices (BMPs) in compliance with the CGP

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during grading and construction. For example, as outlined in Section 3.10, types of BMPs that are incorporated in SWPPPs and would help minimize impacts from soil erosion include:

- **Erosion controls:** cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind. Erosion control BMPs include mulch, soil binders, and mats.
- **Sediment controls:** Filter out soil particles that have been detached and transported in water. Sediment control BMPs include barriers, and cleaning measures such as street sweeping.
- **Tracking controls:** Tracking control BMPs minimize the tracking of soil offsite by vehicles; for instance, stabilizing construction roadways and entrances/exits.

Adherence to the BMPs in the SWPPP and adherence with local and state codes and requirements for erosion control and grading during construction would reduce, prevent, or minimize soil erosion from project-related grading and construction activities. Therefore, soil erosion impacts from project-related grading and construction activities would be less than significant and no mitigation measures are necessary.

#### Operation Phase

The project site is in an urbanized area of the City and is generally flat. No major slopes or bluffs are on or adjacent to the site. After project completion, the redeveloped portion of the project site would be developed with church facilities uses, access and circulation improvements, and landscape improvements and would not contain exposed or bare soil. The proposed plants would be water conserving and have deep root systems that enable soil stabilization and minimize erosion. Upon project completion, the potential for soil erosion or the loss of topsoil would be expected to be extremely low.

Additionally, project development would be required to comply with the provisions of Chapter 6.0 (Development and Subdivision Regulations) of the City's Development Code (Title 17 of the City's Municipal Code). For example, Division 6.05 (Landscaping) outlines landscape development standards applicable to development projects City-wide, including those related to grading design and erosion. Compliance with the City's development standards and regulations would be ensured through the City's development review and building plan check process.

Therefore, soil erosion impacts from the Proposed Project's operation phase would be less than significant and no mitigation measures are necessary.

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

**Less Than Significant Impact.** Hazards from liquefaction and lateral spreading are addressed above in Section 3.7.a.iii, and landslide hazards are addressed above in Section 3.7.a.iv. As concluded in these sections, no impacts would occur and no mitigation measures are necessary.

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#### Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load. The soil investigation report prepared for the Proposed Project outlines a number of design parameters, including the recommendation to remove existing artificial fill (see Appendix E). To ensure uniform foundation support, the natural soil would be overexcavated to a depth of at least 24 inches below the bottom of footings. Where the natural soil exposed in the bottom of overexcavation exhibits a relative compaction of less than 85 percent, the natural soil should be further excavated. The soil exposed in the approved overexcavation bottom would be scarified to a depth of at least 12 inches. The scarified soil would be moisture conditioned to near optimum moisture content and compacted to a relative compaction of at least 90 percent. The soil investigation report notes that buildings will be safely supported by shallow spread and wall footings if the site is prepared as recommended.

Project site grading, design, and construction would conform with the design parameters of the soil investigation report. The City would impose the recommended design parameters as a condition of approval and compliance would be ensured through the City's building plan check and development review process. Therefore, impacts would be less than significant and no mitigation measures are necessary.

#### Ground Subsidence

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence. The project site is over the Chino Groundwater Basin, but not over a portion of the basin where substantial ground subsidence has been identified (USGS 2018). Additionally, project development would be implemented in accordance with the recommended design parameters of the soil investigation report, which includes removal of all existing artificial fill soils and replacing the removed soil with engineered fill. With implementation of the design parameters of the soil investigation report, which would be imposed by the City as a condition of approval and ensured through the City's building plan check and development review process, project development would not subject people or structures to substantial hazards arising from ground subsidence. Therefore, impacts would be less than significant and no mitigation measures are necessary.

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

**Less Than Significant Impact.** Expansive soils shrink or swell as the moisture content decreases or increases; the shrinking or swelling can shift, crack, or break structures built on such soils. The soils underlying the site exhibit very low expansion potential (Byerly 2018). Therefore, impacts related to expansive soils would be less than significant and no mitigation measures are necessary.

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

**No Impact.** The proposed project would include construction of sewer laterals to existing sewers in surrounding roadways. The project would not involve the use of septic tanks or other alternative wastewater disposal systems. Therefore, no impact would occur and no mitigation measures are necessary.

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## 3.8 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and ozone (O<sub>3</sub>)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related GHG emissions. Information on manufacture of cement, steel, and other “life cycle” emissions that would occur as a result of the project are not applicable and are not included in this analysis. A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix A to this Initial Study.

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

**Less Than Significant Impact.** Global climate change is not confined to a particulate project area and is generally accepted as the result of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emission on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact.

The Proposed Project would generate GHG emissions from vehicle trips generated by the project, energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating), area sources (e.g., equipment used on-site, consumer products, coatings), water/wastewater generation, and waste disposal. Annual GHG emissions were calculated for construction and operation of the project. Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for GHG emissions from the construction phase of the project. Operation emissions associated with the Proposed Project account for emissions generated from the typical daily operations and from special events anticipated throughout the year that would be held in the proposed auditorium. Anticipated events include up to five community funerals and up to four other special events. These events are anticipated to host up to 1,000 attendees each. Special events are anticipated to generate additional vehicle trips, water demand, and solid waste generation annually from typical daily operations. Project-related GHG emissions are shown in Table 7. Existing emissions are associated with the existing one-story nursery/office building that would be demolished to accommodate the new proposed children's building. It is assumed that overall users would not change, and that building energy usage and maintenance are not dependent on users. Therefore, only emissions from energy and area sources are quantified for the existing one-story nursery/office building to be demolished. As shown in the table, the Proposed Project at buildout would generate a net of 617 metric tons of carbon dioxide-equivalent (MTCO<sub>2</sub>e) emissions per year, which would not exceed the SCAQMD's bright-line threshold of 3,000 MTCO<sub>2</sub>e per year. Therefore, the Proposed Project's cumulative contribution to GHG emissions would be less than significant and no mitigation measures are necessary.

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**Table 7 Project-Related GHG Emissions**

Source	MTCO <sub>2</sub> e/year <sup>1</sup>	Percent of Project Total
<b>Existing</b>		
Area	<1	<1%
Energy <sup>1</sup>	46	100%
<b>Total Emissions<sup>3</sup></b>	<b>46</b>	<b>100%</b>
<b>Proposed Project</b>		
Area	<1	2%
Energy <sup>1</sup>	243	25%
Mobile	368	61%
Waste	31	4%
Water	13	2%
Amortized Construction Emissions <sup>2</sup>	8	6%
<b>Total Emissions<sup>3</sup></b>	<b>664</b>	<b>100%</b>
<b>Net Change<sup>3</sup></b>	<b>617</b>	<b>NA</b>
SCAQMD's Bright-Line Threshold	3,000	NA
<b>Exceeds Bright-Line Threshold</b>	<b>No</b>	<b>NA</b>

Source: CalEEMod Version 2016.3.2.25.

MTCO<sub>2</sub>e: metric tons of carbon dioxide-equivalent

Note: Percent changes from each source may not total to 100 percent due to rounding.

<sup>1</sup> Assumes implementation of the 2016 California Green Building Standards Code (CALGreen) and 2016 Building Energy Efficiency Standards.

<sup>2</sup> Construction emissions are amortized over a 30-year project lifetime per recommended SCAQMD methodology.

<sup>3</sup> Based on GHG emissions provided in the GHG Emissions Inventory Worksheet, page A-74 of Appendix A.

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

**No Impact.** Applicable plans adopted for the purpose of reducing GHG emissions include the California Air Resources Board's (CARB) Scoping Plan and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

#### CARB Scoping Plan

CARB's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by Assembly Bill (AB) 32, which is to return to 1990 emission levels by year 2020. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Since adoption of the 2008 Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard (LCFS), California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy (CAFE) standards, and other early action measures as necessary to ensure the state is on target to achieve the

### 3. Environmental Analysis

GHG emissions reduction goals of AB 32. CARB recently adopted Final 2017 Climate Change Scoping Plan Update on December 24, 2017, to address the new 2030 interim target to achieve a 40 percent reduction below 1990 levels by 2030, established by SB 32 (CARB 2017c).

While measures in the Scoping Plan apply to state agencies and not the Proposed Project, the project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Also, new buildings, like those constructed as a part of the Proposed Project, are required to comply with the 2016 Building Energy Efficiency Standards and 2016 California Green Building Code (CALGreen). Furthermore, as noted in Section 1.4.5, *Green Building and Sustainability*, some of the green building practices/features that would be incorporated into the Proposed Project include:

- Piped for future electric vehicle charging stations
- Bicycle parking provided
- Heat island reduction via hardscape planting
- Reflective roof coatings
- High performance building envelope insulation
- Dual, insulated glazing
- Local material sourcing
- High efficiency HVAC systems with energy management controls
- High efficiency plumbing fixtures

Therefore, the Proposed Project would be consistent with the CARB Scoping Plan. No impact would occur and no mitigation measures are necessary.

#### **SCAG's Regional Transportation Plan/Sustainable Communities Strategy**

In addition to AB 32, the California legislature passed Senate Bill (SB) 375 to connect regional transportation planning to land use decisions made at a local level. SB 375 requires the metropolitan planning organizations to prepare a Sustainable Communities Strategy (SCS) in their regional transportation plans to achieve the per capita GHG reduction targets. For the SCAG region, the 2016 RTP/SCS was adopted in April 2016 (SCAG 2016). The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers.

The Proposed Project is consistent with the underlying General Plan land use and zoning designations of the project site, which permits the development of public assembly uses and facilities. The Proposed Project would involve the construction of a new auditorium building and children's building that would expand the existing facilities onsite. Some of the existing services and programs would be relocated to these buildings upon their completion. Therefore, the Proposed Project would not interfere with SCAG's ability to implement the regional strategies in the 2016 RTP/SCS. No impact would occur and no mitigation measures are necessary.

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## 3.9 HAZARDS AND HAZARDOUS MATERIALS

The analysis in this section is based partly on the following technical study, which is included as Appendix F to this Initial Study:

- *Comprehensive Asbestos, XRF-Lead and Hazmat Survey*, A-Tech Consulting, Inc., August 17, 2018.

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

**Less Than Significant Impact.** The term “hazardous material” can be defined in different ways. For purposes of this environmental document, the definition of “hazardous material” is the one outlined in the California Health and Safety Code, Section 25501:

Hazardous materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous waste” is a subset of hazardous materials, and the definition is essentially the same as in the California Health and Safety Code, Section 25117, and in the California Code of Regulations, Title 22, Section 66261.2:

Hazardous wastes are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous materials can be categorized as hazardous nonradioactive chemical materials, radioactive materials, and biohazardous materials (infectious agents such as microorganisms, bacteria, molds, parasites, viruses, and medical waste).

Exposure of the public or the environment to hazardous materials could occur through but not limited to the following means: improper handling or use of hazardous materials or waste, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; and/or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Following is a discussion of the Proposed Project’s potential to create a significant hazard to the public or the environment through the routine use, storage, transport, or disposal of hazardous materials during the operational and construction phases.

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#### Project Operation

The activities of the Proposed Project do not involve the use of unusually hazardous materials that could impact surrounding land uses. Project operation would involve the use of small amounts of hazardous materials, such as cleansers, paints, degreasers, adhesive, sealers, fertilizers, and pesticides for cleaning and maintenance purposes. Additionally, church facilities are not associated with uses that use, generate, store, or transport large quantities of hazardous materials; such uses generally include manufacturing, industrial, medical (e.g., hospital), and other similar uses.

Furthermore, the use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the US Environmental Protection Agency, US Department of Transportation, California Division of Occupational Safety and Health, San Bernardino County Division of Environmental Health Services (DEHS), and San Bernardino County Fire Department (SBCFD).<sup>4</sup> Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. The Proposed Project would also be operated with strict adherence to all emergency response plan requirements set forth by DEHS and SBCFD.

Therefore, substantial hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during long-term operation of the Proposed Project would not occur. Impacts would be less than significant and no mitigation measures are necessary.

#### Project Construction

Project-related construction activities would involve the use of larger amounts of hazardous materials than would project operation. Construction activities would involve use of hazardous materials including cleansers and degreasers; fluids used in routine maintenance and operation of construction equipment, such as oil and lubricants; fertilizers; pesticides; and architectural coatings including paints. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature and would cease upon completion of the Proposed Project's construction phase. Project construction workers would also be trained in safe handling and hazardous materials use.

Due to the age of the existing single-story nursery/office building (approximately 30 years old), demolition of the buildings may involve handling lead-based paint (LBP) and asbestos-containing materials, (ACM) if encountered. Based on the potential for the presence of ACMs and LBP, A-Tech Consulting, Inc. conducted a comprehensive asbestos, lead and hazmat survey of this building (see Appendix F). Based on the survey, no building materials tested positive for the presence of lead (including LBP) at or above 1.0 mg/cm<sup>2</sup>. The US Department of Housing and Urban Development definition of LBP is equal to or greater than 1.0 mg/cm<sup>2</sup>.

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<sup>4</sup> The Hazardous Materials Division of the San Bernardino County Fire Department is the Certified Unified Program Agency (CUPA) for most of San Bernardino County including the City of Rancho Cucamonga; the CUPA administers and makes consistent enforcement of several state and federal regulations governing hazardous materials and hazardous waste.



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All readings below this regulatory definition are considered negative. Therefore, no LBP is present in the building. Also, ACMs were not present in any of the building materials analyzed.

Additionally, as with project operation, the use, storage, transport, and disposal of construction-related hazardous materials would be required to conform to existing laws and regulations. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility. Furthermore, strict adherence to all emergency response plan requirements set forth by DEHS and SBFGD would be required through the duration of the project construction phase.

Finally, the Rancho Cucamonga Fire Protection District has a hazardous materials team consisting of highly trained Hazardous Material Specialists supported by certified operational first responders. The hazmat team responds out of Fire Station 173 (at 12270 Firehouse Court in Rancho Cucamonga, approximately 1.6 miles to the northwest) to incidents reported to involve potentially dangerous spills or releases of various hazardous materials. The hazmat/fire team participates in a joint powers authority with four other surrounding agencies, including cooperative assistance from the Ontario International Airport Fire Department, that offer additional staffing or equipment as needed in the event of an incident.

Based on the preceding, hazards to the public or the environment arising from the routine use of hazardous materials during project construction would be less than significant and no mitigation measures are necessary.

**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.** Following is a discussion of the potential hazards impacts that could arise through the accidental release of hazardous materials from the Proposed Project's construction and operational phases, as well from existing site materials onsite.

#### **Hazardous Materials Associated with Project Construction and Operation**

See response to Section 3.9.a., above. As concluded in this section, hazards to the public or the environment arising from the routine use of hazardous materials during project operation and construction phases would be less than significant and no mitigation measures are necessary. Additionally, the Proposed Project consists of the development of church facility, which would not generate air toxics requiring an SCAMQD permit.

#### **Hazardous Materials Onsite**

As shown in Figure 3, *Aerial Photograph*, the project site is developed with the Etiwanda campus of Christ's Church of the Valley, which houses various buildings and structures (one and two stories in height) and their associated hardscape and landscape improvements. Development of the Proposed Project includes demolition

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of a covered shelter structure and single-story nursery/office building and various hardscape improvements (site features to be demolished and removed are shown in Figure 3 and Figures 5a and 5b, *Site Photographs*). Neither the buildings or related site improvements to be demolished are associated with or contain hazardous materials.

As noted in Section 3.9.a, above, based on the survey conducted of the building to be demolished, no building materials tested positive for the presence of lead (including LBP) at or above 1.0 mg/cm<sup>2</sup>. The US Department of Housing and Urban Development definition of LBP is equal to or greater than 1.0 mg/cm<sup>2</sup>. All readings below this regulatory definition are considered negative. Therefore, no LBP is present in the building. Also, ACMs were not present in any of the building materials analyzed.

Additionally, any site materials demolished (e.g., asphalt, concrete) would either be reused onsite for development of the Proposed Project's site improvements (e.g., drive aisles, walkways), or hauled offsite to the appropriate disposal or recycling facility and in accordance with all applicable laws and regulations associated with the transport and disposal of hazardous and nonhazardous materials, referenced above in Section 3.9.a. In the event of a hazardous materials spill of greater amount or toxicity than onsite church personnel could safely contain and clean up, assistance would be requested from the SBCFD hazmat team at Station 173.

Furthermore, prior development activity and disturbances of the project site did not find any hazardous materials onsite (including in site soils) or result in the creation of any hazardous materials due to past residential and/or agricultural use of the site.

Based on the preceding, it is unlikely that development of the Proposed Project would cause the release of hazardous materials into the environment. Therefore, impacts would be less than significant and no mitigation measures are necessary.

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

**No Impact.** There are no schools within one-quarter mile of the project site. Therefore, no impact would occur and no mitigation measures are necessary.

**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.** California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities subject to corrective action; hazardous waste discharges for which the State Water Quality Control Board has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. The following five databases were reviewed for hazardous material site listings onsite or within 0.25 mile of the project site:

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- GeoTracker, State Water Resources Control Board
- EnviroStor, Department of Toxic Substances Control
- EnviroMapper, US Environmental Protection Agency
- EJScreen, US Environmental Protection Agency
- Solid Waste Information System, California Department of Resource Recovery and Recycling

No hazardous materials sites were listed on the project site or within 0.25 mile of the project site. Therefore, no impacts to the public or to the environment would occur as a result of the Proposed Project and no mitigation measures are necessary.

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

**Less Than Significant Impact.** The nearest public-use airport to the project site is Ontario International Airport (ONT) approximately 5.4 miles to the southwest. The Airport Land Use Compatibility Plan for ONT, adopted by the City of Ontario in 2011, sets forth safety zones where land uses are regulated to minimize air crash hazards to people on the ground. The project site is outside of such safety zones (Ontario 2011). Additionally, the project site is not in an area where heights of structures are regulated by the Federal Aviation Administration to prevent obstructions to air navigation to and from ONT (Ontario 2011). Furthermore, the approach and departure routes for fixed-wing aircraft to and from ONT do not pass over the project site; approach routes are from the east and west, passing south of the site. Therefore, project development would not result in an airport-related hazard for residents or workers on or near the project site. Impacts would be less than significant and no mitigation measures are necessary.

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

**No Impact.** There are no private airstrips or heliports in proximity of the project site (Airnav 2017). Therefore, no impact would occur and no mitigation measures are necessary.

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

**No Impact.** The Rancho Cucamonga Fire Protection District (RCFPD) administers the emergency management program for the City of Rancho Cucamonga. The City also approved a local hazard mitigation plan in 2013. Further, RCFPD has a Hazardous Materials Team consisting of highly trained Hazardous Material Specialists supported by certified operational first responders. The Haz Mat Team responds out of Fire Station 173 (at 12270 Firehouse Court in Rancho Cucamonga, approximately 1.6 miles to the northwest) to incidents reported to involve potentially dangerous spills or releases of various hazardous materials. The Haz-Mat/Fire Team participates in a Joint Powers Authority (JPA) with four other surrounding agencies including cooperative assistance from the Ontario International Airport Fire Department. This JPA offers additional staffing or equipment as needed in the event of an incident.

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The project involves onsite expansion and improvements of an existing church facility and would have no impact on emergency response or evacuation plans. During the construction and operation phases, the Proposed Project would not interfere with any of the daily operations of the RCFPD or Rancho Cucamonga Police Department, which support emergency planning and response efforts of Rancho Cucamonga. All construction activities would be required to be performed per the City's and RCFPD's standards and regulations. The Proposed Project would be required to provide the necessary on- and offsite access and circulation for emergency vehicles and services during the construction and operation phases.

The Proposed Project would also be required to go through the City's development review and permitting process and would be required to incorporate all applicable design and safety standards and regulations in the CBC and RCFPD's Fire Code to ensure that project development does not interfere with the provision of local emergency services (provision of adequate access roads to accommodate emergency response vehicles, adequate numbers/locations of fire hydrants, etc.).

Based on the preceding, implementation of the Proposed Project (both the construction and operational phases) would not impair implementation of or physically interfere with emergency response or evacuation plans. Therefore, no impact would occur and no mitigation measures are necessary.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

**No Impact.** A wildland fire hazard area is typically characterized by areas with limited access, rugged terrain, limited water supply, and combustible vegetation. As shown in Figure 3, *Aerial Photograph*, the project site is in a highly-urbanized area of the City and is surrounded by a single-family residential development. The project site is developed, has good access, and is served by adequate water infrastructure. There is no combustible wildland vegetation on or near the site. Additionally, the project site is not in or near a Fire Hazard Severity Zone mapped by the California Department of Forestry and Fire Protection (CAL FIRE 2008). Furthermore, per Figure PS-1 (Fire Hazard Severity Zones) of the City's General Plan Public Health and Safety Element, the project site is not in a fire hazard severity zone. Therefore, project development would not introduce people or structures to substantial hazards from wildland fires. No impact would occur and no mitigation measures are necessary.

#### 3.10 HYDROLOGY AND WATER QUALITY

The analysis in this section is based partly on the following technical study, which is included as Appendix G to this Initial Study:

- *Hydrology Report*, Valued Engineering, Inc., March 2019.

**a) Violate any water quality standards or waste discharge requirements?**

**Less Than Significant Impact.** The City of Rancho Cucamonga, including the project site, is located in the Cucamonga Creek Watershed, which is part of the larger Santa Ana River Watershed. The Santa Ana River

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Watershed covers 2,650 square miles in parts of San Bernardino, Orange, Los Angeles, and Riverside Counties. The Santa Ana River flows southwesterly from the ridgeline of the San Bernardino Mountains for over 100 miles toward the Pacific Ocean. The Santa Ana River crosses into Orange County and ultimately discharges flows into the Pacific Ocean at Huntington Beach.

Water quality in Rancho Cucamonga is regulated by the Santa Ana Regional Water Quality Control Board and its Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), which contains water quality standards and identifies beneficial uses (wildlife habitat, agricultural supply, fishing, etc.) for receiving waters along with water quality criteria and standards necessary to support these uses consistent with federal and state water quality laws. Downstream receiving waters of the project site's urban runoff (stormwater and non-stormwater discharges) include Deer Creek, Cucamonga Creek (Reach 1), Mill Creek (Prado Area), Chino Creek (Reach 1A), Santa Ana River (Reach 2), Santa Ana River (Reach 1), and eventually Pacific Ocean.

Impacts to water quality of receiving waters generally range over three different phases of a development project:

- During the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest.
- Following construction and before the establishment of ground cover, when the erosion potential may remain relatively high.
- Following project completion, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

Following is a discussion of the potential water quality impacts resulting from urban runoff that would be generated during the construction and operational phases of the Proposed Project.

#### Construction

Construction-related runoff pollutants are typically generated from waste and hazardous materials handling or storage areas, outdoor work areas, material storage areas, and general maintenance areas (e.g., vehicle or equipment fueling and maintenance, including washing). The Proposed Project's construction phase may cause deterioration in the quality of downstream receiving waters if construction-related sediments or pollutants wash into the existing storm drain system and facilities in the area.

Construction-related activities that are primarily responsible for sediment releases are related to exposing previously stabilized soils to potential mobilization by rainfall/runoff and wind. Such activities include removing vegetation from the site, grading the site, and trenching for infrastructure improvements. Environmental factors that affect erosion include topographic, soil, and rainfall characteristics. Non-sediment-related pollutants that are also of concern during construction relate to non-stormwater flows and generally include construction materials (e.g., paint and stucco); chemicals, liquid products, and petroleum products used in building construction or the maintenance of heavy equipment; and concrete and related cutting or curing residues. Construction-related activities of the Proposed Project would generate pollutants that could adversely

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affect the water quality of downstream receiving waters if appropriate and effective stormwater and non-stormwater management measures are not used to keep pollutants out of and remove pollutants from urban runoff.

Construction projects of one acre or more are regulated under the Statewide General Construction Permit, Order No. 2012-0006-DWQ, issued by the State Water Resources Control Board in 2012. Projects obtain coverage by developing and implementing a SWPPP estimating sediment risk from construction activities to receiving waters, and specifying BMPs that would be used by the project to minimize pollution of stormwater. Categories of BMPs used in SWPPPs are described in Table 8.

**Table 8 Construction Best Management Practices**

Category	Purpose	Examples
Erosion Controls and Wind Erosion Controls	Cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind	Mulch, geotextiles, mats, hydroseeding, earth dikes, swales
Sediment Controls	Filter out soil particles that have been detached and transported in water.	Barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basin; cleaning measures such as street sweeping
Tracking Controls	Minimize the tracking of soil offsite by vehicles	Stabilized construction roadways and construction entrances/exits; entrance/outlet tire wash.
Non-Storm Water Management Controls	Prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Conduct various construction operations, including paving, grinding, and concrete curing and finishing, in ways that minimize non-stormwater discharges and contamination of any such discharges.	BMPs specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; concrete curing; concrete finishing.
Waste Management and Controls (i.e., good housekeeping practices)	Management of materials and wastes to avoid contamination of stormwater.	Spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes.

Source: CASQA 2015.

The Proposed Project's construction contractor would be required to prepare and implement a SWPPP and associated BMPs in compliance with the CGP during grading and construction. The SWPPP would specify BMPs, such as those outlined in Table 8, that the construction contractor would implement to protect water quality by eliminating and/or minimizing stormwater pollution prior to and during grading and construction and show the placement of those BMPs. Additional construction BMPs that would be incorporated into the Proposed Project's SWPPP and implemented during the construction phase include but are not limited to:

- Perimeter control with silt fences and perimeter sandbags and/or gravel bags.
- Stabilized construction exit with rumble strip(s)/plate(s).
- Installation of storm drain inlet protection on affected onsite drains and within roadways.
- Installation of silt fences around stockpile and covering of stockpiles.

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- Use of secondary containment around barrels, containers and storage materials that may impact water quality.
- Stabilization of disturbed areas where construction ceases for a determined period of time (e.g., one week) with erosion controls.
- Installation of temporary sanitary facilities and dumpsters.

Adherence to the BMPs in the SWPPP would reduce, prevent, minimize, and/or treat pollutants and prevent degradation of downstream receiving waters. BMPs identified in the SWPPP would reduce or avoid contamination of stormwater with sediment and other pollutants such as trash and debris; oil, grease, fuels, and other toxic chemicals; paint, concrete, asphalt, bituminous<sup>5</sup> materials, etc.; and nutrients.

Based on the preceding, water quality and waste-discharge impacts from grading and construction activities of the Proposed Project would be less than significant and no mitigation measures are necessary.

#### Project Operation

Operational-related activities of the Proposed Project (e.g., runoff from parking areas, solid waste storage areas, and landscaped areas) would generate pollutants that could adversely affect the water quality of downstream receiving waters if effective measures are not used to keep pollutants out of and remove pollutants from urban runoff.

Standards governing discharges to stormwater from project operation are set forth in the Municipal Stormwater (MS4) Permit for the part of San Bernardino County in the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB), Order No. R8-2010-0036 issued by the RWQCB in 2010. The County of San Bernardino Areawide Stormwater Program issued a Technical Guidance Document (TGD) on developing water quality management plans for projects and selecting BMPs for a project, including low-impact development (LID) BMPs, alternatives to LID BMPs in case LID BMPs are impractical on a site, and source control BMPs.

LID is defined in the TGD as a stormwater management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site predevelopment site hydrology by using site design techniques that store, infiltrate, evapotranspire, biofilter, or detain runoff close to its source. Source control BMPs reduce the potential for pollutants to enter runoff and are classified in two categories—structural and nonstructural. Structural source control BMPs have a physical or structural component, such as inlet trash racks, trash bin covers, and an efficient irrigation system, to prevent pollutants from contacting stormwater runoff. Nonstructural source control BMPs are procedures or practices used in project operation, such as stormwater training or trash management and litter control practices.

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<sup>5</sup> Bituminous = resembling or containing bitumen; bitumen = any of various viscous or solid impure mixtures of hydrocarbons that occur naturally in asphalt, tar, mineral waxes, etc.; used as a road surfacing and roofing material.

### 3. Environmental Analysis

The Proposed Project is a priority project in the category of significant redevelopment projects, which are defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the permitting jurisdiction. Priority projects are required to infiltrate stormwater to the maximum extent practicable and to use biotreatment and harvest and BMPs for the remainder of the design capture volume—that is, approximately the stormwater volume from a 24-hour, 85th-percentile storm.

The Proposed Project would comply with requirements set forth in the MS4 Permit and TGD. Project development would include preparation and implementation of a Water Quality Management Plan (WQMP) report specifying LID and source control BMPs to be employed by the project. As a part of the Proposed Project and per the City's initial requirements for development projects, the applicant prepared a preliminary WQMP exhibit for City review. BMPs identified in the exhibit include landscape islands and underground storage chambers, which would capture and treat site runoff. The City provided initial approval of the proposed BMPs, which will among others, be included in the WQMP report to be submitted by the project applicant. The information provided in the WQMP would provide sufficient detail to identify the major LID BMPs and other anticipated water quality BMPs and features that would be implemented as a part of the Proposed Project and would prevent impacts to the quality of receiving waters. The combination of BMPs identified in the WQMP would address all identified pollutants of the Proposed Project. Preparation and submittal of the WQMP and implementation of all identified BMPs would be ensured through the City's development review and building plan check process.

Additionally, project development would be required to comply with the City's Storm Water and Urban Runoff Management and Discharge Control Ordinance (Section 19.20 of the City's Municipal Code), which prohibits the discharge of specific pollutants into the storm water; regulates connections to the storm drain system; and requires development projects to implement permanent BMPs on individual sites to reduce pollutants in the stormwater. Project development would also be required to comply with the provisions of Chapter 6.0 (Development and Subdivision Regulations) of the City's Development Code (Title 17 of the City's Municipal Code). For example, Division 6.05 (Landscaping) outlines landscape development standards applicable to development projects City-wide, including those related to grading design and stormwater management. Compliance with the City's development standards and regulations would be ensured through the City's development review and building plan check process.

Therefore, no significant water quality and waste-discharge impacts from operation activities of the Proposed Project are anticipated to occur and no mitigation measures are necessary.

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

**Less Than Significant Impact.** The project site is over the Chino Subbasin of the Upper Santa Ana Groundwater Basin (DWR 2017). The Cucamonga Valley Water District (CVWD) provides water to the site. Groundwater accounts for approximately 45 percent of CVWD water supplies (CVWD 2016). As noted below



### 3. Environmental Analysis

in Section 3.19.b, based on water demand estimates for the existing church complex and Proposed Project provided in Table 23, a net increase of approximately 9,932 gpd (or approximately 11 afy) over water use for the existing complex would occur under project development. CVWD estimates that water demands in its service area will increase from about 60,500 acre-feet per year (afy), or approximately 54 million gallons per day (mgd) in 2020 to about 65,700 afy or 58.6 mgd in 2035 (CVWD 2016). CVWD forecasts that it will have sufficient water supplies to meet water demands in its service area. Estimates of future population are based on existing population density and the amount of buildable area in CVWD's service area (CVWD 2016). Therefore, development of the project site would have been accounted for in CVWD's estimates of future water demands. Project water demands would not substantially deplete groundwater supplies.

Additionally, project-related construction activities would involve grading and excavation, which has the potential to intersect groundwater and require construction dewatering. However, soil borings conducted on onsite up to a depth of 46.5 feet did not encounter groundwater (Beyrly 2018). No excavation onsite would intersect the groundwater at this level. Additionally, the project site is not located in or near a groundwater recharge area/facility, nor does it represent a source of groundwater recharge. Therefore, the Proposed Project would not substantially interfere with groundwater supplies or recharge and impacts would be less than significant. No mitigation measures are necessary.

Impacts to groundwater supplies are further discussed in Section 3.19.d, below.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.**

**Less Than Significant Impact.** Erosion and siltation impacts potentially resulting from alteration of the drainage pattern due to the Proposed Project would, for the most part, occur during the project's construction phase, which would include site preparation and grading activities. Environmental factors that affect erosion include topographic, soil, and wind and rainfall characteristics. Siltation is most often caused by soil erosion or sediment spill. Following is a discussion of the potential erosion and siltation impacts that could occur during the construction and operational phases of the Proposed Project.

#### Project Construction

As discussed above in Section 3.10.a, the project construction contractor would be required to prepare and implement a SWPPP pursuant to the CGP during grading and construction. The SWPPP would specify erosion- and sediment-control BMPs that the project construction contractor would implement prior to and during grading and construction to minimize erosion and siltation impacts on- and offsite. Erosion-control BMPs are designed to prevent erosion, whereas sediment controls are designed to trap or filter sediment once it has been mobilized. BMPs that would be implemented during the Proposed Project's construction phase are discussed in detail in Section 3.10.a, above. For example, BMPs would include but are not limited to: installation of perimeter silt fences, installation of silt fences around stockpile and covering of stockpiles, and stabilization of disturbed areas where construction ceases for a determined period of time (e.g., one week) with erosion controls.

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Adherence to the BMPs in the SWPPP would reduce, prevent, or minimize soil erosion from project-related grading and construction activities. The construction-phase BMPs would also ensure effective control of not only sediment discharge, but also of pollutants associated with sediments (e.g., nutrients, heavy metals, and certain pesticides). Therefore, project-related construction activities would not result in substantial erosion or siltation on- or offsite. Construction-related impacts would be less than significant and no mitigation measures are necessary.

#### Project Operation

As shown in Figure 3, *Aerial Photograph*, the project site is currently developed with a church use and its associated surface parking. The project site is relatively flat and mostly developed; the western end of the site consists of bare or exposed soil. Under the Proposed Project, there would be no bare or disturbed soil onsite at project completion that would be vulnerable to erosion or siltation. All areas would either be buildings, paved, or landscaped. Under proposed conditions, stormwater runoff would also be conveyed similar to existing conditions, continuing to flow generally south.

Additionally, the Proposed Project would not substantially alter the existing drainage pattern of the site area and would not alter the course of a stream or a river. The project would implement a WQMP and abide by the requirements of the MS4 permit and the TGD. For example, project design and operation would include implementation of BMPs specified in the WQMP, which would minimize runoff and soil erosion and siltation into stormwater and thus minimize sedimentation downstream.

Furthermore, project development would be required to comply with the provisions of Chapter 6.0 (Development and Subdivision Regulations) of the City's Development Code (Title 17 of the City's Municipal Code). For example, Division 6.05 (Landscaping) outlines landscape development standards applicable to development projects City-wide, including those related to grading design and erosion. Compliance with the City's development standards and regulations would be ensured through the City's development review and building plan check process.

Therefore, development of the Proposed Project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or offsite. Operation-related impacts would be less than significant and no mitigation measures are necessary.

**d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?**

Less Than Significant Impact. Under existing conditions, the eastern portion of the existing site area flows from the northeast to the southwest and discharges to a low point at the southwest corner of the property. The western, undeveloped portion of the site area drains from north to south and is collected in an existing corrugated metal pipe storm drain. The flow from the eastern portion is also collected in the existing storm drain structure. The collected stormwater is discharged into the city storm drain system in Long Meadow Drive.

### 3. Environmental Analysis

Project implementation is not anticipated to substantially change the drainage pattern onsite or substantially increase the rate or amount of runoff. Under proposed conditions, runoff from the overall Project Site would be conveyed similar to existing conditions, continuing to flow southwesterly via new onsite drainage collection and treatment systems. The Proposed Project was designed to comply with the City of Rancho Cucamonga's criteria stating that postdevelopment flows shall not exceed 80 percent of predevelopment flows. The sites stormwater would be mitigated by using gutters to concentrate the flow and drop inlets to capture and move effluent into the underground storm chambers and six-inch, above-ground infiltration basins. Landscaping would be designed along the property and right-of-way lines to ensure a buffer for the stormwater. These landscaping buffers would be graded to slope away from the property lines to ensure that the stormwater is captured and treated onsite. An overflow outlet pipe connects to an existing storm drain pipe that exits the property in Long Meadow Drive to the public storm drain system. The 100-year storm event was used for the proposed onsite storage chambers and infiltration basins design. As substantiated in the hydrology report prepared for the Proposed Project (see Appendix G), the proposed drainage features would accommodate the net increase in runoff from the site from a 100-year storm event.

Therefore, postdevelopment runoff from the project site would be adequately handled by the Proposed Project's drainage system and would not exceed the capacity of existing or planned stormwater drainage systems or substantially alter the existing drainage pattern of the project site or area in a manner that would result in flooding on- or offsite. Therefore, project impacts would be less than significant and no mitigation measures are necessary.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?**

**Less Than Significant Impact.** The following describes potential impacts related to storm drainage systems and runoff.

#### Capacity of Stormwater Drainage Systems

Project impacts on the capacity of storm drainage systems would be less than significant, as substantiated in Section 3.10.d, above. No mitigation measures are necessary.

#### Polluted Runoff

Project stormwater pollution impacts would be less than significant, as substantiated in Section 3.10.a, above. No mitigation measures are necessary.

**f) Otherwise substantially degrade water quality?**

**Less Than Significant Impact.** Project development would not substantially degrade water quality, as substantiated above in Section 3.10.a, above. Impacts would be less than significant and no mitigation measures are necessary.

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

**No Impact.** The project site is not in a 100-year flood hazard zone (FEMA 2017). Additionally, the Proposed Project does not involve development of housing. No impact would occur and no mitigation measures are necessary.

**h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

**No Impact.** The project site is outside of 100-year flood zones and would not place any structures in a 100-year flood zone. No impact would occur and no mitigation measures are necessary.

**i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

**No Impact.** Loss of life and damage to structures, roads, and utilities may result from a dam or reservoir failure. The project site is not located in the inundation area of nearby dams (Cal OES 2016). Furthermore, the project site is not in an area mapped as protected from 100-year floods by levees (FEMA 2017). Project development would not result in flood hazards arising from dam or levee failure. No impact would occur and no mitigation measures are necessary.

**j) Inundation by seiche, tsunami, or mudflow?**

**No Impact.** The following describes potential impacts to people and structures from seiches, tsunamis, and mudflows.

#### Seiche

A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water.

There are no water storage facilities or enclosed water bodies on or within the vicinity of the project site that could pose a flood hazard to the site due to a seiche or failure of an aboveground reservoir. Therefore, no impact from a seiche would occur and no mitigation measures are necessary.

Potential inundation impacts due to a dam failure are discussed in Section 3.10.i, above.

#### Tsunami

A tsunami is an ocean wave caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is at an elevation of approximately 1,270 feet above mean sea level and is not at risk of flooding due to tsunami. Additionally, the project site is not in tsunami inundation zones mapped by the California Geological Survey (CGS 2017). Therefore, project development would not place people or structures at risk of flooding due to a tsunami. No impact would occur and no mitigation measures are necessary.

### 3. Environmental Analysis

#### Mudflow

A mudflow is a landslide composed of saturated rock debris and soil with a consistency of wet cement. The project site and surrounding area are in an urbanized area and are relatively level. No major slopes or bluffs are on or adjacent to the site that could generate a mudflow. Therefore, no impact from a mudflow would occur and no mitigation measures are necessary.

### 3.11 LAND USE AND PLANNING

#### a) Physically divide an established community?

**No Impact.** The Proposed Project involves additions and improvements to an existing church campus that is surrounded by existing single-family residential development (see Figure 3, *Aerial Photograph*). The Proposed Project would not introduce a physical barrier that would separate land uses that are not already separated. Connections between residential uses via Victoria Park Land and Etiwanda Avenue (e.g., between homes north and south of the project site) would remain. Except for a new driveway accessing the western portion of the project site, the project would not physically change the neighborhood's street pattern or otherwise impede movement through the neighborhood.

Additionally, while there is established residential surrounding the project site, development of the Proposed Project would not physically divide these communities in any way because the project would be developed within the confines of the project site and would not introduce roadways or other infrastructure improvements that would bisect or transect the residential communities. Furthermore, the proposed project would not introduce a new land use that would disrupt existing land use patterns.

Therefore, no impact would occur and no mitigation measures are necessary.

#### b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

**No Impact.** Adopted land use regulations applicable to the project site include the City's General Plan, Title 17 (Development Code) of the City's Municipal Code, and Etiwanda Specific Plan. Following is an analysis of the Proposed Project's consistency with these land use regulations.

#### General Plan Consistency

The project is designated for Mixed Use under the City of Rancho Cucamonga General Plan (Rancho Cucamonga 2010). This designation is intended to combine "complementary commercial, office, residential, and community uses in areas with easy access to transit." Development and operation of the new church-related buildings onsite and continued operation of church-related activities on the project site under the Proposed Project would not conflict with this designation.

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The City also enforces numerous goals, policies, and regulations related to the purpose of avoiding or mitigating an environmental effect. However, the Proposed Project would not affect any existing environmental resources, including but not limited to natural habitat, forest, farmland, or riparian areas. The Proposed Project would represent an expansion of a land use already operating on the project site. A majority of the project site is already developed with church uses, and the surrounding vicinity is already developed with urbanized (largely residential) land uses. The Proposed Project would not represent a change in land use patterns or an inconsistency with adopted land use plans. Additionally, project development does not include or require any amendments to the City's General Plan.

Therefore, implementation of the Proposed Project would not conflict with the City's General Plan. No land use impact related to General Plan consistency would occur and no mitigation measures are necessary.

#### Zoning Consistency

The zoning for the project site is Etiwanda Specific Plan (SP-E) (Rancho Cucamonga 2012). In the Etiwanda Specific Plan, the project site is designated for Office/Professional (OP) (Rancho Cucamonga 1983). Public assembly uses and facilities, such as those of the Proposed Project, are permitted in the OP zoning designation through City issuance of a Conditional Use Permit (CUP). Through the City's review process (which includes Planning Commission review and consideration of the CUP), the City would ensure that approval of the CUP would not conflict with any of the City's applicable land use plan, policies, or regulations that have been adopted for the purpose of avoiding or mitigating an environmental effect.

Additionally, development of the Proposed Project would not require the approval of a development code amendment or zone change; nor would it require a variance or any adjustments from the City's zoning standards, which help ensure that the development projects in the City are designed and implemented in a manner that is not detrimental to the project site or its surroundings. The Proposed Project has been designed and would be developed in accordance with the applicable development standards of Title 17 (Development Code) of the City's Municipal Code and the development and design standards of the Etiwanda Specific Plan, which covers development the project site. For example, the Proposed Project has been designed in accordance with the development and design standards outlined in Articles III (Zoning Districts, Allowed Uses, and Development Standards), IV (Site Development Provisions), and VII (Design Standards and Guidelines) of Title 17, including those related to building height and setbacks, walls, and screening, and building and site plan design. The new buildings have also been designed to meet the development and design standards established in the Etiwanda Specific Plan. Compliance with the City's development and design standards would be ensured through the City's development review process.

Therefore, implementation of the Proposed Project would not conflict with the City's Development Code or Etiwanda Specific Plan. No land use impact related to zoning consistency would occur and no mitigation measures are necessary.

#### c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

**No Impact.** See response to Section 3.4.f., above. As substantiated in that section, no impact would occur and no mitigation measures are necessary.

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#### 3.12 MINERAL RESOURCES

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

**No Impact.** The project site is mapped in an urban area, and not in a mineral resource zone, by the California Geological Survey (CGS 2007). Approximately 80 percent of the project site is developed; the remaining (vacant) portion is surrounded by residential and church uses incompatible with mining. Mining would also not be a permitted use under the zoning designation of the project site. Further, no mineral resource areas that would be of value to the region and residents of the state exist on or near the project site. Project development would not cause a loss of availability of a mineral resource valuable to the region. Therefore, no impact to mineral resources would occur and no mitigation measures are necessary.

**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.** Several mineral resource sectors, that is, areas with known mineral resources of regional or statewide significance, are identified in the City of Rancho Cucamonga General Plan (Rancho Cucamonga 2010). The project site is not in such a sector, and no locally important mineral resource recovery sites are on or near the project site. The City's General Plan identifies one active mining operation in the City—a rock crushing plant approximately three miles north of the project site. Project development would not cause a loss of availability of a mining site identified in the City's General Plan. Therefore, no impact would occur and no mitigation measures are necessary.

#### 3.13 NOISE

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, or sleep. Additional information on noise and vibration fundamentals and modeling are contained in Appendix H.

##### 3.13.1 Existing Noise Environment

The project site is in a predominantly residential area. The noise environment surrounding the project site is influenced primarily by roadway sources, including Etiwanda Avenue, Victoria Park Lane, and Interstate 15 (I-15). Noise from nearby residential uses (e.g., property maintenance) may also contribute to the total noise environment intermittently in the project vicinity.

The City includes a noise section in its General Plan Public Health and Safety Element (Rancho Cucamonga 2010). This element discusses noise measurements in terms of roadway noise and provides noise contour maps for the City. The noise contour map shows the project site and nearest surrounding receptors exposed to noise

## 3. Environmental Analysis

levels between 55 and 60 dBA CNEL. According to the element, future noise levels are not anticipated to increase substantially, except along Haven Avenue, Milliken Avenue, and Foothill Boulevard.

### 3.13.2 Sensitive Receptors

As shown in Figure 3, *Aerial Photograph*, the project site is surrounded by residential uses, with residences on Wine Cellar Court, Crestfield Court, and Spring Mountain Drive immediately adjacent to the north and south.

#### a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**Less Than Significant Impact With Mitigation Incorporated.**

#### Applicable Standards

To limit population exposure to physically and/or psychologically damaging, as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. Following are state and local regulations that are applicable to the proposed project.

##### *State Regulations*

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a general plan that includes a noise element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the noise element is to "limit the exposure of the community to excessive noise levels."

##### *Local Regulations*

##### ***City of Rancho Cucamonga General Plan Public Health and Safety Element***

The noise section of the City's General Plan Public Health and Safety Element provides goals and policies to protect local citizens from the harmful effects of excessive exposure to noise. The General Plan Goal PS-13 is intended to minimize the impacts of excessive noise levels throughout the community and adopt appropriate noise level requirements for all land uses. This goal considers the compatibility of proposed land uses with a noise environment; the City's General Plan also provides a noise and land use compatibility table to assess the compatibility of a given land use type (shown in Table 9). Goal PS-13 also requires that acceptable noise levels are maintained near residences, schools, health care facilities, religious institutions, and other noise-sensitive uses. Goal PS-14 is intended to minimize the impacts of transportation-related noise.

The compatibility criteria provided by the City's General Plan, reproduced as Table 9, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.



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**Table 9 Community Noise and Land Use Compatibility**

Land Uses	CNEL (dBA)					
	55	60	65	70	75	80
Residential-Low Density Single Unit, Duplex, Mobile Homes						
Residential- Multiple Unit, Mixed Use						
Lodging: Hotels						
Institutional: Schools, Libraries, Community Centers, Religious Institutions, Hospitals, Nursing Homes						
Auditoriums, Concert Halls, Amphitheaters						
Sports Arena, Outdoor Spectator Sports						
Playground, Neighborhood Parks						
Outdoor Recreation (Commercial and Public)						
Office, Retail and Commercial						
Industrial, Manufacturing, Utilities, Agricultural						

**Explanatory Notes**

	Normally Acceptable: 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 Unacceptable: 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 with needed noise insulation features included in the design. Outdoor areas must be shielded.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction but with closed windows and fresh air supply systems or air conditioning will normally suffice. Outdoor environment will seem noisy.		Clearly Unacceptable: New construction or development should generally not be undertaken. Construction costs to make the indoor environment acceptable would be prohibitive and the outdoor noise environment would not be usable.

Source: Rancho Cucamonga General Plan Public Health and Safety Element, 2009.

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As discussed above in “Existing Noise Environment,” the proposed project site and surrounding receptors are generally in the range of 55 to 60 dBA CNEL. The surrounding residential uses are currently exposed to a noise environment designated as “Normally Acceptable.” Assuming the proposed project would be categorized as a school or auditorium land use, the proposed project would be exposed to a noise environment designated as “Normally Acceptable” or “Conditionally Acceptable.”

However, in accordance with the recent Supreme Court decision regarding the assessment of the environment’s impacts on proposed projects (*CBLA v BAAQMD*, issued December 17, 2015), it is no longer the purview of the CEQA process to evaluate the impact of existing (or future) environmental conditions on a project. For noise, the application of this ruling means that the analysis of traffic, rail, and long-term stationary effects at the project site is no longer part of CEQA evaluation. Therefore, exterior noise effects from nearby offsite sources on the project or receptors is no longer a topic for impact evaluation under CEQA, and no statement of impact significance is germane.

#### *City of Rancho Cucamonga Municipal Code*

In order to control unnecessary, excessive, and annoying noise and vibration, the City provides noise standards in Section 17.66.050 (Noise Standards) of the City’s Municipal Code. The following noise limits apply to noise generation associated with the proposed project.

#### *Noise Standards*

Section 17.66.050 provides exterior and interior noise limits for residential and commercial land uses. Users and uses of a site are not permitted to create any noise that would exceed the applicable exterior noise level when measured at the property line of the adjacent land use. Additionally, users and uses of a site are not permitted to create any noise that would exceed the applicable interior noise level when measured within a neighboring home. Applicable exterior and interior noise limits are shown in Table 10.

**Table 10 Noise Standards**

Land Use	Exterior/Interior	Maximum Allowable Noise Level (dBA)	
		7:00 AM–10:00 PM	10:00 PM–7:00 AM
Residential	Exterior	65	60
Residential	Interior	50	45
Commercial	Exterior	70	65

Source: Rancho Cucamonga Municipal Code, Section 17.66.050, *Noise Standards*.

Notes: Interior noise level must be measured with windows and doors shut.

If the intruding noise is continuous and cannot reasonably be discontinued or stopped for a time period where the ambient noise level can be determined, each of the noise limits above shall be reduced 5 dB for noise consisting of impulse or simple tone noise.

If the measurement location is a boundary between two zones, the lower noise standard shall apply.

The following adjustments are applicable to the baseline standards outlined in Table 10:

No person at any location within the City shall create any noise that exceeds the baseline noise standards in terms of the average equivalent noise level (Leq) or exceeds the adjusted baseline standards shown below.

- Baseline standard for a cumulative period of more than 15 minutes in any hour (L<sub>25</sub>)

### 3. Environmental Analysis

- Baseline standard plus 5 dB for a cumulative period of more than 10 minutes in any hour ( $L_{17}$ )
- Baseline standard plus 14 dB for a cumulative period of more than 5 minutes in any hour ( $L_5$ )
- Baseline standard plus 15 dB for any period of time ( $L_{max}$ )

#### *Exemptions*

Section 17.66.050 of the City's Municipal Code exempts certain activities from the provisions of the noise ordinance. Per this section, the following activities are exempt:

- Noise sources associated with any mechanical device, apparatus, or equipment used, related to, or connected with emergency machinery, vehicle, work, or warning bell, provided the sounding of any bell or alarm on any building or motor vehicle terminates its operation within 30 minutes of being activated.
- Noise sources associated with the maintenance of real property, provided said activities take place between the hours of 7:00 AM and 8:00 PM on any day.

#### *Construction Noise Standards*

Municipal Code Section 17.66.050 contains standards and limits that deal with construction noise. Details of these criterion and the related impacts are discussed below in Section 3.13.d.

### Operational Noise Impacts

A significant stationary-source noise impact would occur if the activities or equipment at the project site produce noise levels at nearby sensitive receptors in excess of local standards.

With respect to projected-related increases, noise impacts can be broken down into three categories. The first is "audible" impacts, which refer to increases in noise level that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 dB or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dB. The last category includes changes in noise level of less than 1 dB that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dB or more) are considered potentially significant. Note that a doubling of traffic flows (e.g., 10,000 vehicles per day to 20,000 per day) would be needed to create a 3 dB increase in traffic-generated noise levels. An increase of 3 dB is often used as a threshold for a substantial increase.

#### *Project-Related Stationary Noise*

The Proposed Project includes the construction of a new auditorium building and children's building. The addition of these new buildings could introduce new stationary noise sources to the community, including mechanical equipment and property maintenance.

The exterior mechanical or HVAC equipment associated with the new facilities are expected to be similar to the equipment at surrounding commercial and residential uses, as well as to the equipment of existing buildings on the church campus. The sound reference levels for common central air conditioning units could be up to

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65 dBA at one meter (sound pressure level). Future central air conditioning units associated with any of the new buildings would be at least 60 feet (approximately 18 meters) from the nearest receptor. At this distance, the sound pressure level associated with a common central air conditioning unit would be reduced to approximately 41 dBA. Therefore, the noise level associated with future central air conditioning units would be well below the applicable municipal code noise limits for any of the surrounding receptors.

Noise from intermittent property maintenance may also contribute to the total noise environment within the direct vicinity of the project site. As mentioned above, noise sources associated with the maintenance of real property is exempted from the provisions of the Rancho Cucamonga Municipal Code, provided said activities take place between the hours of 7:00 AM and 8:00 PM, any day.

In addition, outdoor space would be used occasionally for events such as movie nights, vacation bible school, and open mic night. From time to time portions of the campus will be used for various ministry events. Some of these events may include overnight youth events (indoors), small concerts (indoors), and holiday events and festivals (indoor and outdoor). At this stage of the project, specific information regarding the public address (PA) system and speakers proposed for use and schedule is not available. Community noise exposure resulting from events such as indoor concerts or outdoor open mic night is a function of the type of PA system, orientation of the speakers and overall gain output (or amplification). While professional rock concerts can produce noise levels of 110 dBA or higher closest to the speaker system, this would not be the case for church events. Based on the experience of PlaceWorks staff, interior noise levels during typical amplified events can range as high as 95 dBA Leq. Assuming that the auditorium would provide at least 25 dBA of noise reduction, exterior noise levels could be as high as 70 dBA Leq at the nearest residences at a distance of approximately 60 feet from the auditorium. This would potential exceed the City's residential daytime (7:00 AM to 10:00 PM) standard of 65 dBA Leq. Outdoor movie and open mic night events would also have the potential to exceed the City's standard. This would be a potentially significant impact.

However, implementation of Mitigation Measure NOI-1 would reduce project-related operational noise impacts to the surrounding residences to a level of less than significant. Specifically, implementation of Mitigation Measure NOI-1 would reduce audible noise from outdoor events (movie nights, vacation bible school, and open mic night) and small indoor concerts to a level at or below the City's permitted residential daytime noise standard of 65 dBA Leq.

#### *Project-Related Traffic Noise*

The peak hour traffic volumes along roadways in the project area were provided for the Proposed Project. To determine the permanent traffic noise level increase, the Existing Plus Project peak hour traffic volumes were compared to the Existing traffic volumes. The permanent noise level increase was estimated to be less than 1 dBA. Since the permanent noise level increase due to project-generated traffic increase at the surrounding noise-sensitive receptors would be less than 1 dBA, the proposed project would not cause a substantial permanent noise level increase at the surrounding noise-sensitive receptors. Therefore, project-related traffic noise impacts would be less than significant and no mitigation measures are necessary.

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#### Mitigation Measure

- NOI-1      As required by the City of Rancho Cucamonga's Municipal Code, operational noise from amplified indoor concerts or outdoor movie nights and open mic nights shall not exceed the noise standards contained in Section 17.66.050, including performance standard of 65 dBA Leq between the hours of 7:00 AM to 10:00 PM at the nearest residential property line. To ensure compliance with the City's Municipal Code performance standards, Christ's Church of the Valley shall:
- Conclude all amplified speech, music, or movie nights by 10:00 PM. Where feasible, conclude such events by 7:00 PM to minimize community noise exposure during the sensitive evening hours at nearby residences.
  - Limit these types of events to the weekend, where practical and feasible.
  - Keep all doors and windows closed during indoor concerts at all times.
  - Limit bass tones to the degree feasible, as these low frequency tones propagate and carry the furthest.
  - For outdoor events, orient the speaker system away from nearby residences.
  - Develop a communications and outreach plan for nearby residences. Provide advance notification and the proposed schedule for planned upcoming events.
  - Once operational, Christ's Church of the Valley shall retain a qualified acoustical consultant to monitor noise levels at the adjacent residential property line during at least one indoor small concert performance and one outdoor movie or open mic night. A report shall be submitted to the City of Rancho Cucamonga Planning Department for review and approval detailing the findings and any additional noise recommendations or requirements.

**b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact.**

#### Vibration Standards

Rancho Cucamonga Municipal Code Section 17.66.070 (Vibration) provides limits for vibration generation within the City. This section states that no vibration shall be produced that is discernible without the aid of instruments; or that exceeds 0.002 gravity (G) peak acceleration at up to 50 hertz (Hz); or that exceeds 0.001 G peak acceleration when greater than 50 Hz at the property line of a receiving land use. Single-impulse periodic vibrations occurring at an average interval greater than five minutes shall not induce accelerations exceeding 0.01 G.

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The City's Municipal Code also states that uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity or endanger the comfort, repose, health, or peace of residents whose property abuts the property line of the parcel. Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels.

However, this section exempts vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) from the provisions of the municipal code. Regardless of this exemption, expected vibration levels due to project-related construction activities will be analyzed to document vibration affects associated with the proposed development. In lieu of the gravity (G) metric provided by the municipal code, the following analysis will be based off the vibration guidelines provided by the Federal Transit Administration (FTA). Vibration impacts are quantified in terms of architectural damage due to vibration (typically expressed in peak particle velocity [PPV] in inches/second) (FTA 2006).

#### Vibration during Operations

Operation of the Proposed Project would not generate substantial levels of vibration because there are no notable sources of vibrational energy associated with the project. Therefore, project operation would not result in significant groundborne vibration impacts. Impacts would be less than significant and no mitigation measures are necessary.

#### Vibration during Construction

Construction activities generate varying degrees of ground vibration, depending on the construction procedures, construction equipment used, and proximity to vibration-sensitive uses. The generation of vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight damage at the highest levels. Table 11 lists reference vibration levels for different types of commonly used construction equipment.

**Table 11      Vibration Source Levels for Common Construction Equipment**

Equipment	Peak Particle Velocity (in/sec) at 25 feet
Vibratory Roller	0.210
Small Bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large Bulldozer	0.089

Source: Federal Transit Administration, 2006

Proposed construction activities would include grading, which would use equipment such as loaders. Paving activities may also generate high levels of construction vibration and would use equipment such as pavers and rollers. Some of these equipment types may generate substantial levels of vibration at close distances. Using the vibration source level of construction equipment provided in Table 11 and the construction vibration assessment guidelines published by the FTA, the vibration impacts associated with the Proposed Project were assessed in terms of potential architectural damage due to vibration.

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#### *Vibration-Induced Structural/Architectural Damage*

The term “architectural damage” is defined as minor surface cracks (in plaster, drywall, tile, or stucco) or the sticking of doors and windows. This is below the severity of “structural damage,” which denotes compromising structural soundness or threatening the basic integrity of the building shell. Building damage is typically not a concern for most projects, with the occasional exception of blasting and pile driving during construction (FTA 2006). No blasting, pile driving, or hard rock ripping/crushing activities will be required during project construction. Since vibration-induced architectural damage could result from an instantaneous vibration event, distances are measured from the receptor façade to the nearest location of potential construction activities.

Construction truck movements can be a localized source of vibration to nearby receptors. Caltrans has studied the effects of propagation of vehicle vibration on sensitive land uses and notes that “heavy trucks, and quite frequently buses, generate the highest earthborn vibrations of normal traffic.” Caltrans further notes that the highest traffic-generated vibrations are along freeways and state routes. Their study finds that “vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 0.08 inches per second, with the worst combinations of heavy trucks and poor roadway conditions (while such trucks were moving at freeway speeds). This level coincides with the maximum recommended safe level for ruins and ancient monuments (and historic buildings)” (Caltrans 2013).

Table 12 shows the vibration levels from typical earth-moving construction equipment at the nearest receptors. For reference, a PPV of 0.20 inches/second is used as the limit for “non-engineered timber and masonry buildings” (which would apply to the surrounding structures) (FTA 2006). Small construction equipment generates vibration levels less than 0.1 PPV in/sec at 25 feet away.

**Table 12 Architectural Damage Vibration Levels from Construction Equipment**

Equipment	Peak Particle Velocity in inches per second
	Residences to north and south
	(40 feet)
Vibratory Roller <sup>1</sup>	0.104
Large Bulldozer	0.044
Loaded Trucks	0.038
Jackhammer	0.017
Small Bulldozer	0.001

Source: FTA 2006.

Note: Distances are from the nearest portion of potential construction activity to the nearest receptor building within each land use type.

<sup>1</sup> This analysis shows a “vibratory roller,” which may be more vibration-intensive than the roller used during the paving phase.

As shown in Table 12, construction-generated vibration levels at the nearest receptors would be less than the vibration damage criteria for “non-engineered timber and masonry buildings,” per FTA guidelines (FTA 2006). Therefore, impacts related to architectural damage due to construction vibration would not be significant. Impacts would be less than significant and no mitigation measures are necessary.

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**c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant Impact.** As presented in Section 3.13.a, project-generated operational noise from traffic, stationary noise sources (i.e., mechanical systems), and operational activities would not result in a substantial permanent increase in ambient noise levels. Therefore, these on-going activities would generate less than significant noise impacts. No mitigation measures are necessary.

**d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

**Less Than Significant Impact With Mitigation Incorporated.**

#### **Construction Noise Standards**

Section 17.66.050 of the City's Municipal Code exempts certain noise-generating activities from the provisions of the City's noise ordinance. Noise impacts associated with the construction, repair, remodeling, or grading of any real property are exempt from the provisions of the municipal code, provided said activities do not take place between the hours of 8:00 PM and 7:00 AM on weekdays and Saturdays, or at any time on Sunday or a national holiday, and provided noise levels do not exceed the noise standard of 65 dBA when measured at the adjacent property line.

#### **Impact Analysis**

The total duration for project construction would be approximately two years. In terms of the proposed construction activities, the site preparation, rough grading, and site paving activities are expected to generate the highest noise levels since they involve the largest and most powerful equipment. Construction equipment for the proposed project would include equipment such as graders, excavators, paving equipment, forklifts, rollers, and a crane.

Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris and soil haul and (2) stationary-source noise from use of construction equipment.

#### *Construction Vehicles*

The transport of workers and materials to and from the construction site would incrementally increase noise levels along site access roadways. Individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA (L<sub>max</sub>) at 50 feet from the vehicle, but these occurrences would generally be infrequent and short lived. Therefore, noise impacts from construction vehicles would be less than significant and no mitigation measures are necessary.

#### *Construction Equipment*

Noise generated by onsite construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each stage of construction



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involves different kinds of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest several pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable.

The noise produced at each construction stage is determined by combining the  $L_{eq}$  contributions from each piece of equipment used at a given time, while accounting for the ongoing time-variations of noise emissions (commonly referred to as the usage factor). Heavy equipment, such as a dozer or a loader, can have maximum, short-duration noise levels in excess of 80 to 85 dBA at 50 feet. However, overall noise emissions vary considerably, depending on the specific activity being performed at any given moment. Noise attenuation due to distance, the number and type of equipment, and the load and power requirements to accomplish tasks at each construction phase would result in different noise levels from construction activities at a given receptor. Since noise from construction equipment is intermittent and diminishes at a rate of at least 6 dB per doubling of distance (conservatively ignoring other attenuation effects from air absorption, ground effects, and/or shielding/scattering effects), the average noise levels at noise-sensitive receptors could vary considerably, because mobile construction equipment would move around the site with different loads and power requirements. Noise levels from project-related construction activities were calculated from the simultaneous use of all applicable construction equipment at spatially averaged distances (i.e., from the center of the general construction site) to the property line of the nearest receptors. Although construction may occur across the entire development areas, the area around the center of construction activities best represents the potential average construction-related noise levels at the various sensitive receptors.

Using information provided by Christ's Church of the Valley (project applicant), the expected construction equipment mix was estimated and categorized by construction activity using the FHWA Roadway Construction Noise Model. The utility trenching phase overlaps with the rough grading phase, and the site paving phase overlaps with the building construction phase; combined noise levels for these overlapping phases are represented below. The associated, aggregate sound levels—grouped by construction activity—are summarized in Table 13.

**Table 13 Project-Related Construction Noise, Energy-Average ( $L_{eq}$ ) Sound Levels, dBA**

Construction Activity Phase	Sound Level at Various Distances from Construction Activities, dBA $L_{eq}$
	Residences to north and south (150 feet)
Demolition	70
Grading	69
Trenching	70
Building Construction	65
Paving	68

Construction activities would increase noise levels at and near the proposed area of improvements. The highest expected construction-related noise levels—up to approximately 70 dBA  $L_{eq}$ —would occur at the residential receptors to the north and south during the demolition phase, which would exceed the City's threshold of 65 dBA. As discussed above, the existing ambient noise environment around the project site is in the range of 55

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to 60 dBA CNEL. In general, Leq values can be estimated as 2 dB less than a respective CNEL value (Caltrans 2013). Therefore, project construction is expected to increase the ambient noise environment in the range of 12 to 17 dBA in terms of the nearest sensitive receptors (residences to the north and south), depending on equipment location, power level, and activity duration. Provided that construction activities would comply with the hours stated in the Municipal Code, they would occur during the least noise-sensitive portions of the day. With implementation of Mitigation Measure NOI-2, including the provision of a temporary noise barrier, project-related construction noise would be reduced by at least 10 dBA. Therefore, with mitigation, construction noise levels would be reduced to 60 dBA Leq or less, which is below the City's threshold of 65 dBA and impacts to the surrounding residences would be less than significant.

#### Mitigation Measure

NOI-2: As required by the City of Rancho Cucamonga's Municipal Code, construction activities shall take place only between the hours of 7:00 AM and 8:00 PM on weekdays and Saturdays, and not on Sundays or a national holiday. In addition, the following practices shall be observed and implemented:

- Erect a temporary noise barrier/curtain between the construction zone and all adjacent residences. The temporary sound barrier shall have a minimum height of 12 feet and be free of gaps and holes. The barrier can be (a) a 3/4-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density of at least 2 pounds per square foot.
- Limit noise-producing signals, including horns, whistles, alarms, and bells, to safety warning purposes only;
- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment;
- Unnecessary idling of internal combustion engines should be strictly prohibited;
- Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors;
- Utilize "quiet" air compressors and other stationary noise sources where technology exists;
- Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction;
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone

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number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

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

**No Impact.** The Ontario International Airport (ONT) is approximately five miles southwest of the project site. However, according to the City's General Plan Public Health and Safety Element, no airport noise contours over 60 dBA CNEL extend into Rancho Cucamonga. The project site is outside of the 60 CNEL noise contours for ONT (LAWA 2016). Project development would not expose people onsite to excessive airport-related noise levels. Noise impacts from a public use airport would be less than significant and no mitigation measures are necessary.

- f) **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The San Antonio Regional Hospital Heliport is a private heliport that is located over six miles to the southwest of the project site (Airnav 2018). While operations at this private aircraft facility may, at times, be audible at the site, the relatively limited and sporadic use of the heliport for emergencies or other limited uses, coupled with the distances between it and the project site, would result in negligible amounts of community noise in the project area. Therefore, development of the project would not expose people onsite to excessive noise levels from aircraft approaching or departing the heliport. No impact would occur and no mitigation measures are necessary.

### 3.14 POPULATION AND HOUSING

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

**No Impact.** The Proposed Project does not propose new homes or businesses; the project involves expansion of and various improvements to an existing church campus. Therefore, the Proposed Project would not directly or indirectly induce population growth in the area. Institutions such as churches are developed in response to population growth in an area and do not cause population growth. The existing church campus is also provided with adequate road access and utilities, and project development would not require extension of roadways or utilities. Therefore, impacts to population and housing would be less than significant and no mitigation measures are necessary.

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

**No Impact.** No housing exists on the project site, which is currently developed with a church campus (see Figure 3, *Aerial Photograph*). Therefore, project development would not displace housing or people. No impact would occur and no mitigation measures are necessary.

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**c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

**No Impact.** See response to Section 3.14.b, above. As substantiated in that section, no impact would occur and no mitigation measures are necessary.

#### 3.15 PUBLIC SERVICES

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

**a) Fire protection?**

**Less Than Significant Impact.** The City of The Rancho Cucamonga Fire Protection District (RCFPD) provides fire protection and emergency services to the entire City (including the project site) from seven fire stations. The nearest fire station to the project site is Fire Station 173 at 12270 Firehouse Court in Rancho Cucamonga, approximately 1.6 miles to the northwest. RCFPD also has mutual aid agreements with all of the other fire departments in San Bernardino County, including the San Bernardino County Fire Department.

Project implementation would result in a slight increase in calls for fire protection and emergency medical service. However, considering the existing firefighting resources available in and near the City, project impacts on fire protection and emergency services (including response times) are not expected to occur. Additionally, in the event of an emergency at the project site that required more resources than Fire Station 173 could provide, RCFPD would direct resources to the site from other RCFPD stations nearby and, if needed, would request assistance from other nearby fire departments.

The City also involves RCFPD in the development review process in order to ensure that the necessary fire prevention and emergency response features are incorporated into development projects. All site and building improvements proposed as a part of the project would be subject to review and approval by RCFPD prior to building permit and certificate of occupancy issuance.

Furthermore, development of the Proposed Project is required to comply with the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City of Rancho Cucamonga and RCFPD, which impose design standards and requirements that seek to minimize and mitigate fire risk. Compliance with these codes and standards is ensured through the City's and RCFPD's development review and building permit process.

Based on the preceding, the Proposed Project would not adversely affect RCFPD's ability to provide adequate service and would not require new or expanded fire facilities that could result in adverse environmental impacts. Therefore, impacts would be less than significant and no mitigation measures are necessary.

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#### b) Police protection?

**Less Than Significant Impact.** The San Bernardino County Sheriff's Department (Sheriff) provides police protection services to the City from its police station at 10510 Civic Center Drive in Rancho Cucamonga, which is approximately 5 miles southwest of the project site. Project implementation would result in a slight increase in calls for police protection service. However, considering the existing police resources available in and near the City, project impacts on police services (including response times) are not expected to occur. Additionally, in the event of an emergency at the project site that required more resources than station at 10510 Civic Center Drive could provide, the Sheriff would direct resources to the site from other Sheriff stations nearby and, if needed, would request assistance from other nearby police departments. Therefore, the Proposed Project would not adversely affect the Sheriff's ability to provide adequate service and would not require new or expanded police facilities that could result in adverse environmental impacts. Impacts would be less than significant and no mitigation measures are necessary.

#### c) Schools?

**No Impact.** The increase in the student generation and the need for new or the expansion of existing school facilities is tied to population growth. No residential development is proposed as a part of the project, and project development is not expected to generate an increase in the student population in the area. Therefore, no impacts to schools would occur and no mitigation measures are necessary.

#### d) Parks?

**No Impact.** See response to Section 3.16.a, below. As substantiated in that section, no impacts would occur and no mitigation measures are necessary.

#### e) Other public facilities?

**No Impact.** The need for new or the expansion of existing library services and facilities is tied to population growth. No residential development is proposed as a part of the project, and project development is not expected to generate a need for new or additional library services or facilities. Therefore, no impacts to libraries would occur and no mitigation measures are necessary.

### 3.16 RECREATION

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

**No Impact.** The increase in the use of existing parks and recreational facilities and the need for new or the construction or expansion of existing recreational facilities is tied to population growth. No residential development is proposed as a part of the project; therefore, no population growth or increase in the use of existing parks or other recreational facilities would occur. Therefore, no impact on parks and recreational facilities would occur and no mitigation measures are necessary.

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- 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 Proposed Project does not involve the development of recreational facilities; and project development would not require construction of new or expanded recreational facilities (see Section 3.16.a, above). Therefore, no impact would occur and no mitigation measures are necessary.

#### 3.17 TRANSPORTATION AND TRAFFIC

The analysis in this section is based partly on the following technical study, which is included as Appendix I to this Initial Study.

- *Traffic Impact Analysis*, PlaceWorks, May 2019.

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

**Less Than Significant Impact.**

#### Existing Conditions

##### *Roadways*

Study area roadways are described below and mapped on Figure 11, *Roadway Network and Study Intersections*.

- **Interstate 15:** Interstate 15 (I-15) within study area is an eight-lane freeway with on-ramps and off-ramps at Base Line Road and Foothill Boulevard.
- **Etiwanda Avenue:** This north-south roadway is classified as a Secondary Roadway in the study area according to the City of Rancho Cucamonga's 2010 General Plan. It contains two lanes in each direction with a two-way median left turn lane, no street parking, a Class II bicycle lane on the east (northbound) side of the street, and paved sidewalks. The posted speed limit is 45 mph. This roadway is also listed as a truck route.
- **Victoria Park Lane:** This north-south roadway is listed as a Secondary Roadway in the City of Rancho Cucamonga's General Plan. It contains two approach lanes in each direction, raised medians, paved sidewalks, and bike lanes. The speed limit ranges from 35 mph to 45 mph.
- **Base Line Road:** This east-west roadway is defined as a major divided arterial in the City of Rancho Cucamonga's 2010 General Plan. It contains three lanes in each direction, Class II bicycle lanes, raised medians, paved sidewalks, and left-turn storage lanes. This roadway is also listed as a truck route.

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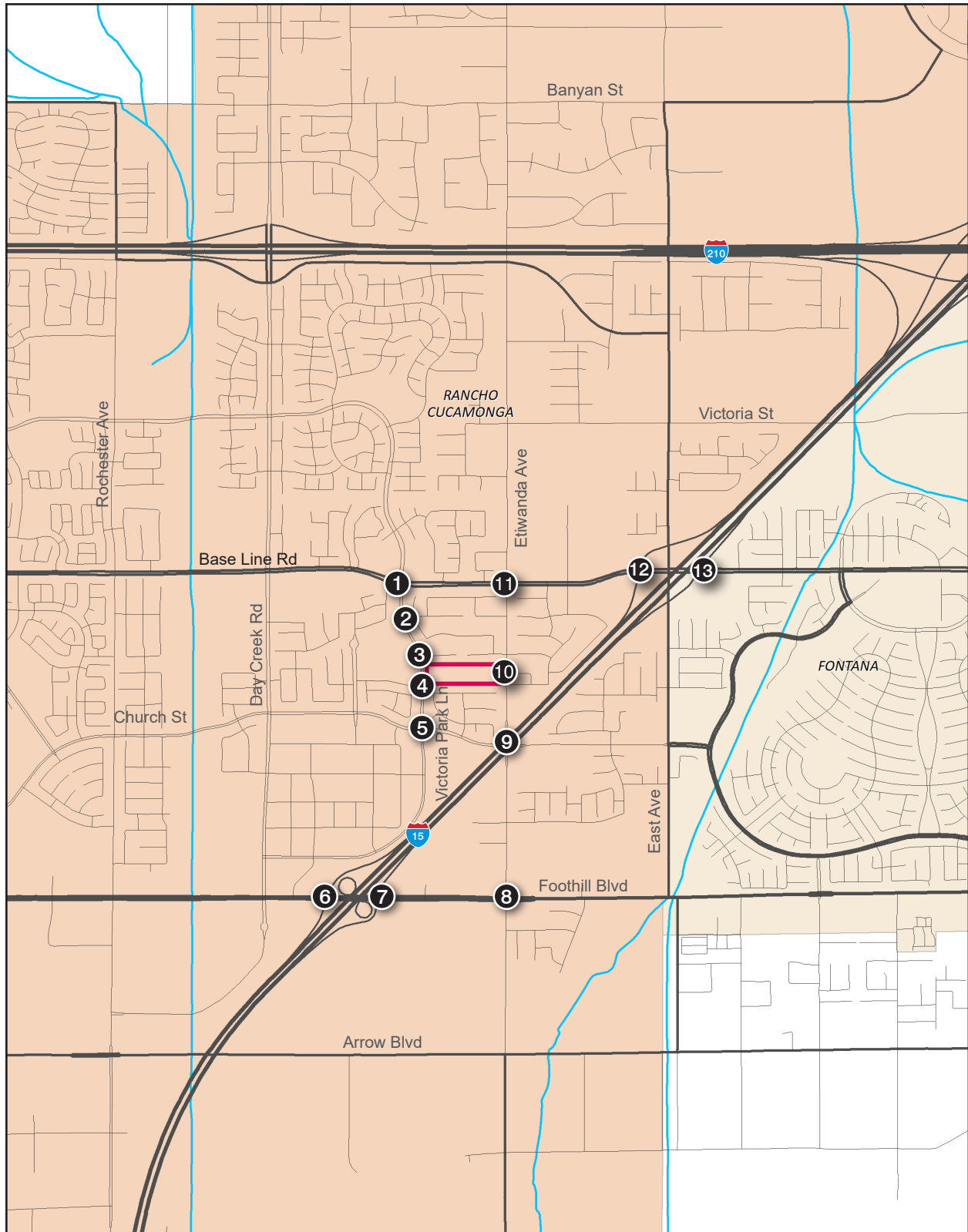
- **Foothill Boulevard:** This east-west roadway is classified as a major divided arterial and truck route according to the City of Rancho Cucamonga's 2010 General Plan. It contains three approach lanes in each direction, paved sidewalks, bike lanes, and raised medians.
- **Church Street/ Miller Avenue:** This roadway is classified as a modified Secondary Roadway in the vicinity of the study area, with two lanes in each direction. There are left-turn storage lanes, paved sidewalks, and bike lanes west of Etiwanda Avenue. There is a raised median in Church Street between Victoria Park Lane and Etiwanda Avenue, a striped median west of Victoria Park Lane, and a two-way median turn lane east of Etiwanda Avenue. The posted speed limit here is 40 mph.
- **Long Meadows Drive:** This east-west two-lane roadway has paved sidewalks, on-street parking, and a speed limit of 25 mph.
- **Wine Cellar Court:** This roadway is a two-lane cul-de-sac with paved sidewalks, street parking, and residential homes. The speed limit here is 25 mph.

#### *Intersections*

Twelve existing study area intersections, all in the City of Rancho Cucamonga, were analyzed as part of the traffic impact analysis prepared for the Proposed Project. Ten of the intersections are signalized, and two (indicated below) are controlled by cross-street stops.

- Victoria Park Lane at Base Line Road
- Victoria Park Lane at Wine Cellar Court (cross-street stop)
- Victoria Park Lane at Long Meadow Drive
- Victoria Park Lane at Church Street
- I-15 Southbound Off-Ramps at Foothill Boulevard
- I-15 Northbound On-Ramps at Foothill Boulevard
- Etiwanda Avenue at Foothill Boulevard
- Etiwanda Avenue at Church Street/Miller Avenue
- Etiwanda Avenue at Existing Project Driveway (cross-street stop)
- Etiwanda Avenue at Base Line Road
- I-15 Southbound Off-Ramps at Base Line Road
- I-15 Northbound On-Ramps at Base Line Road

Figure 11 - Roadway Network and Study Intersections



Note: Unincorporated county areas are shown in white.

— Project Boundary



# Study Intersections (13)

0 2,000  
Scale (Feet)



Source: ESRI, 2018



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#### *Public Transit*

Omnitrans operates public transit bus routes in the City of Rancho Cucamonga. Routes 66 and 67 are the closest routes to the project site and operate seven days a week. Route 66 runs east-west along Foothill Boulevard between the City of Fontana and the City of Montclair; the closest bus stop is roughly  $\frac{3}{4}$  mile from the project site at Foothill and Etiwanda and has paved sidewalks. Route 67 runs east-west along Base Line Road between the City of Fontana and Rancho Cucamonga; the nearest bus stops are at Base Line at Victoria Park Lane and Base Line at Etiwanda Avenue. Each bus stop is approximately  $\frac{1}{4}$  mile from the project site and has paved sidewalks.

#### *Sidewalks*

Paved sidewalks are present on all roadways studied.

#### *Bicycle Facilities*

There are bicycle lanes on segments of Etiwanda Avenue, Victoria Park Lane, Foothill Boulevard, Base Line Road, and Church Street/Miller Avenue in the study area.

#### **Methodology**

The methodology used to assess the operation of a signalized intersection during the traffic peak hours on a Sunday is based on the 2010 Highway Capacity Manual (HCM 2010). The peak hours selected for analysis are the highest volumes that occur in four consecutive 15-minute periods from 9:00 AM to 1:00 PM on a Sunday.

Roadway capacity is generally limited by the ability to move vehicles through intersections. A level of service (LOS) is a standard performance measurement to describe the operating characteristics of a street system in terms of the average delay in seconds experienced by motorists at an intersection or roadway segment. Service levels range from A through F, which relate to traffic conditions from best (uncongested, free-flowing conditions) to worst (total breakdown with stop-and-go operation).

#### *Threshold of Significance*

##### *City of Rancho Cucamonga*

The City of Rancho Cucamonga established a minimum of LOS D or better (lower) for local intersections. Deficient local intersections are those found to operate at LOS E or F. Intersections under this category would require mitigation to improve the LOS to satisfactory levels, that is, to LOS D or better. The Proposed Project would have a significant impact at a study area intersection if it would cause the level of service to deteriorate from satisfactory LOS D to unsatisfactory LOS E or F.

For unsignalized intersections, an impact would occur if the intersection meets the Manual of Traffic Control Devices warrants for installation of a traffic signal.

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#### *San Bernardino County Congestion Management Plan*

The San Bernardino County Transportation Authority states in the 2016 Congestion Management Plan (CMP) update that all CMP segments should operate at LOS E or better. The project would have a significant impact at a study area CMP facility if it would cause the level of service to deteriorate from satisfactory LOS to unsatisfactory LOS. If a facility is already operating at unsatisfactory LOS and the project would cause an increase in delay, it is considered a significant cumulative impact. Interstate 15 is the only CMP facility in the study area.

#### *Caltrans*

Caltrans route concept for I-15 states that in accordance with the San Bernardino CMP, the I-15 route concept is LOS "E" for the urbanized portions of the route. The rationale for maintaining LOS "E" in the urbanized areas of I-15 is to achieve a reasonable balance between desired levels of mobility, forecast travel demand, urban development, and constrained financial transportation resources.

#### Existing Traffic Conditions

All 12 existing study area intersections are operating at acceptable LOS D or better during Sunday peak hour, as shown in Table 14.

**Table 14 Existing Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	22.6	C
2. Victoria Park Lane at Wine Cellar Court	Stop	8.8	A
3. Victoria Park Lane at Proposed Project Driveway	—	—	—
4. Victoria Park Lane at Long Meadow Drive	Signal	3.4	A
5. Victoria Park Lane at Church Street	Signal	20.9	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	10.7	B
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	24.1	C
8. Etiwanda Avenue at Foothill Boulevard	Signal	32.1	C
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	15.2	B
10. Etiwanda Avenue at Existing Project Driveway	Stop	19.0	C
11. Etiwanda Avenue at Base Line Road	Signal	20.6	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	8.4	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	8.1	A

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets provided in Appendix I. Intersection 3 would be implemented with the project.

### 3. Environmental Analysis

#### Project Traffic

##### *Trip Generation*

The project trip generation was calculated based on rates in the ITE Trip Generation Manual (10th edition) for Land Use 560, "Church." On weekdays, the project would generate only 6 trips for the AM peak hour and 18 trips during the PM peak hour. On Sunday, there would be 324 trips in the project peak hour and 726 daily trips (see Table 15).

**Table 15 Project Trip Generation**

Land Use	Unit	Trip Generation <sup>1</sup>									Sunday Daily
		AM Peak Hour			PM Peak Hour			Sunday Peak Hour of Generator			
		In	Out	Total	In	Out	Total	In	Out	Total	
Church	Seats	0.01	0.01	0.02	0.01	0.02	0.03	0.26	0.28	0.54	1.21
Project Trip Generation	600	3	3	6	7	11	18	159	165	324	726

Source: PlaceWorks 2019.

<sup>1</sup> Trip generation rates for land use code 560 (Church), per the ITE Trip Generation Manual, 10th edition.

Traffic counts were taken at the church's existing access driveway at Etiwanda Avenue on two weekdays and on a Sunday during typical church services at the current seating capacity of 600. To verify the ITE trip generation estimates with existing church operations, church traffic on Sunday was compared to traffic volumes using ITE trip generation estimates for a 600-seat church. The existing church trips are comparable to the estimates using ITE rates, as shown in Table 16. Although the ITE estimates are slightly lower during weekday peak hours, the Sunday estimates are slightly higher. For the purpose of this analysis, the ITE trip rates are utilized. As shown in Table 16, the Proposed Project is estimated to generate 726 daily trips on Sundays, with 324 trips in the Sunday peak hour.

**Table 16 Project Trip Generation Comparison**

Source	Trip Generation <sup>1</sup>									Sunday Daily
	AM Peak Hour			PM Peak Hour			Sunday Peak Hour of Generator			
	In	Out	Total	In	Out	Total	In	Out	Total	
ITE Estimates	3	3	6	7	11	18	159	165	324	726
Weekday Driveway Counts <sup>2</sup>	4	7	11	15	14	29	—	—	—	—
Difference Weekday <sup>3</sup>	-1	-4	-5	-8	-3	-11	—	—	—	—
Sunday Driveway Counts	—	—	—	—	—	—	130	141	271	747
Difference Sunday	—	—	—	—	—	—	29	24	53	-21

Source: PlaceWorks 2019.

<sup>1</sup> Trip generation per ITE rates as shown in Table 15.

<sup>2</sup> Weekday counts are the average of the counts taken on Wednesday and Thursday.

<sup>3</sup> Difference is derived by subtracting the counts from the ITE estimates.

### 3. Environmental Analysis

On weekdays the project would generate 6 trips in the AM peak hour and 18 trips in the PM peak hour. The number of weekday peak hour trips on Etiwanda Avenue is 978 in the AM peak hour and 1,128 in the PM peak hour. On Victoria Park Lane, the number of weekday peak hour trips is 368 in the AM peak hour and 466 in the PM peak hour. Because the number of project weekday peak hour trips is a small fraction of the existing traffic (less than 0.5 percent) and would be dispersed via two access driveways, project traffic on weekdays would not cause a traffic impact to the circulation system.

This analysis focuses on traffic impacts that occur in the Sunday peak hour when the church generates much higher traffic volumes. The church peak traffic on Sunday occurred between 9:30 and 10:30 AM. The peak hour traffic on study roadways generally occurred between noon and 2 PM. The project peak traffic does not coincide with the traffic peak hour on the circulation network. This analysis conservatively assumes that the peak church traffic overlaps with the peak traffic on study roadways and intersections.

#### *Trip Distribution*

The traffic that would be generated by the Proposed Project was geographically distributed onto the street network by evaluating the layout of the study area roadway network and reviewing the land uses in the area. The trip distribution was also prepared with feedback from City staff. Figures 6 and 7 in the traffic report (see Appendix I) show the anticipated trip distribution for the project for inbound and outbound trips, respectively.

#### *Modal Split and Trip Assignment*

The trip distribution percentages are applied to the project trip generation to determine the traffic volumes assigned to each intersection.

### Existing Plus Project Traffic Conditions

Existing Plus Project traffic conditions are shown in Table 17. As shown in the table, all study intersections would continue to operate at acceptable LOS D or better during the Sunday peak hour for the Existing Plus Project traffic conditions. Therefore, impacts to the roadway system would be less than significant.

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**Table 17 Existing Plus Project Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	23.7	C
2. Victoria Park Lane at Wine Cellar Court	Stop	8.9	A
3. Victoria Park Lane at Proposed Project Driveway	Stop	9.0	A
4. Victoria Park Lane at Long Meadow Drive	Signal	3.4	A
5. Victoria Park Lane at Church Street	Signal	21.2	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	10.7	B
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	25.4	C
8. Etiwanda Avenue at Foothill Boulevard	Signal	33.4	C
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	15.3	B
10. Etiwanda Avenue at Existing Project Driveway	Stop	32.6	D
11. Etiwanda Avenue at Base Line Road	Signal	20.5	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	8.5	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	8.2	A

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets in Appendix I. Intersection 3 would be implemented with the project.

#### Future Traffic Conditions

Traffic conditions have been estimated for two future years, project opening year 2021 and horizon year 2035. Opening year traffic forecasts for 2021 were based on three years of ambient growth at a conservative annual growth rate of 2 percent per year. Forecasts for the horizon year 2035 traffic conditions were based on projected population, employment, and overall number of trip ends for the City's General Plan horizon year conditions. The City of Rancho Cucamonga General Plan states that the projected population growth in the City over the 20-year period from 2010 to 2030 is 0.3 percent, and the projected employment growth is 35 percent. The San Bernardino County Transportation Authority estimates that the number of trips in Rancho Cucamonga will grow by 28.7 percent between 2004 and 2030, a period of 26 years, for an average annual growth rate in this period of 1 percent.

Cumulative projects are closely related past, present, and reasonably foreseeable probable future projects. These projects include both projects in the City of Rancho Cucamonga and Fontana. The list of cumulative projects, a location map, and associated trip generation are in traffic report (see Appendix I). The cumulative projects were screened to calculate the cumulative traffic volumes that would directly add measurable traffic to the area street system versus cumulative traffic that would be added as ambient growth. Based on a review of the circulation system, the trip generation, location, and land use type, the highlighted cumulative projects shown in Figure 12, *Cumulative Developments Location Map*, would have the potential for directly adding measurable traffic to the area street system.

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Table 18 shows that the cumulative projects assumed in this traffic analysis are estimated to generate 2,757 trip-ends per day during a typical Sunday, with approximately 397 vehicle trips during Sunday peak hour.

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**Table 18 Cumulative Projects Trip Generations**

No.	Project Name	Project Type	Land Use	ITE Code	Unit Amount	Unit	Trip Generation			
							Daily	Sunday Peak Hour		
								In	Out	Total
A	DRC2015-00797	Industrial	Warehousing	150	339	TSF	20	7	7	14
B	DRC2017-00084	Industrial	Warehousing	150	57	TSF	3	1	1	2
C	DRC2017-00141 (Industry building + access support building)	Industrial	Warehousing	150	48	TSF	3	1	1	2
D	SUBTT00021	Residential	Single Family Housing	210	14	DU	120	6	6	12
E	SUBTT18012	Residential	Single Family Housing	210	9	DU	77	4	4	8
F	SUBTT18936	Residential	Single Family Housing	210	16	DU	137	7	7	14
G	SUBTT19945	Residential	Single Family Housing	210	193	DU	1212	65	64	129
H	SUBTT19995	Residential	Single Family Housing	210	16	DU	137	7	7	14
I	SUBTT20151	Residential	Single Family Housing	210	4	DU	34	2	1	3
J	Design Review No. 15-007	Industrial	Warehousing	150	2669	TSF	160	53	54	107
K	Design Review No. 17-002	Residential	Multifamily Housing (Low Rise)	220	136	DU	854	45	46	91
Total Trips							2,757	199	198	397

Source: PlaceWorks 2019.

Notes: Cumulative projects trip rates and maps in the TIA (see Appendix I)

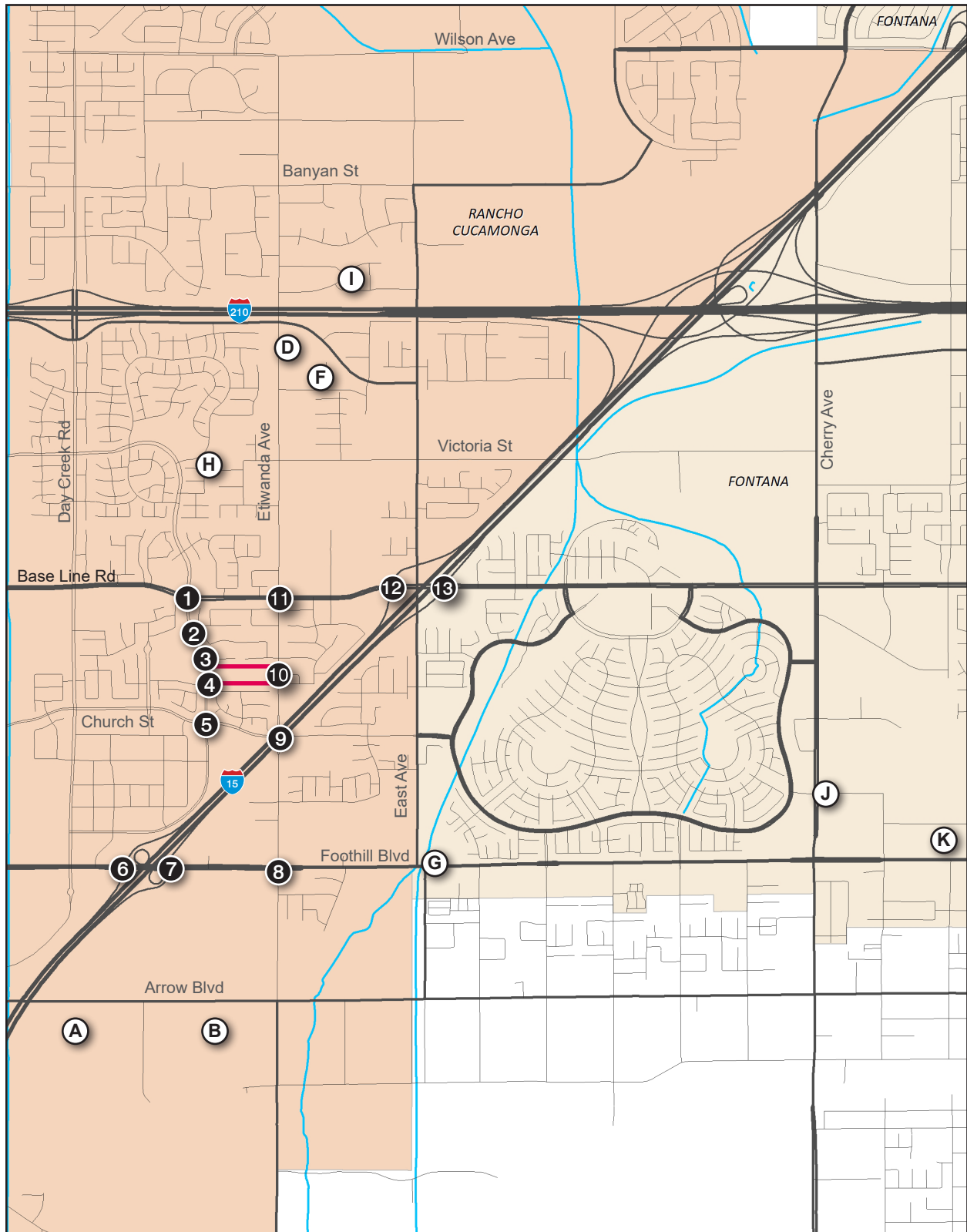
DU= dwelling units; TSF=thousand square feet



### 3. Environmental Analysis

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Figure 12 - Cumulative Developments Location Map



Note: Unincorporated county areas are shown in white.

— Project Boundary

# Study Intersections (13)

0 3,000  
Scale (Feet)

A Development Locations (9)

Source: ESRI, 2018



PlaceWorks

### 3. Environmental Analysis

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### 3. Environmental Analysis

#### *Opening Year 2021 No Project Traffic Conditions*

Opening Year 2021 No Project traffic conditions were estimated using the method described above under *Future Traffic Conditions*. As shown in Table 19, all study area intersections would continue to operate at acceptable LOS D or better during the Sundry peak hour for the Opening Year 2021 No Project traffic conditions.

**Table 19 Opening Year 2021 No Project Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	22.7	C
2. Victoria Park Lane at Wine Cellar Court	Stop	8.8	A
3. Victoria Park Lane at Proposed Project Driveway	—	—	—
4. Victoria Park Lane at Long Meadow Drive	Signal	3.4	A
5. Victoria Park Lane at Church Street	Signal	21.0	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	11.2	B
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	25.3	C
8. Etiwanda Avenue at Foothill Boulevard	Signal	33.7	C
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	15.2	B
10. Etiwanda Avenue at Existing Project Driveway	Stop	23.0	C
11. Etiwanda Avenue at Base Line Road	Signal	20.4	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	8.5	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	8.4	A

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets in Appendix I. Intersection 3 would be implemented with the project.

#### *Opening Year 2021 With Project Traffic Conditions*

To assess future traffic conditions with the cumulative projects at the project's opening year, project traffic is added to the Opening Year 2021 No Project conditions discussed above. The intersection operations for this scenario have been calculated and are listed in Table 20, below. As shown in this table, all study area intersections would continue to operate at acceptable LOS D or better during the Sunday peak hour for Opening Year 2021 With Project traffic conditions, except for intersection #10, Etiwanda Avenue at Existing Project Driveway. The high delays at this intersection would result from added egress church traffic. Northbound and southbound traffic on Etiwanda Avenue does not stop at the intersection. The delays would occur in the church driveways onsite and would not result in substantial traffic in the northbound and southbound lanes of Etiwanda Avenue. Therefore, impacts to the roadway system would be less than significant.

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**Table 20 Opening Year 2021 With Project Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	23.8	C
2. Victoria Park Lane at Wine Cellar Court	Stop	8.9	A
3. Victoria Park Lane at Proposed Project Driveway	—	9.1	A
4. Victoria Park Lane at Long Meadow Drive	Signal	3.4	A
5. Victoria Park Lane at Church Street	Signal	21.1	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	11.2	B
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	25.8	C
8. Etiwanda Avenue at Foothill Boulevard	Signal	34.5	C
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	15.4	B
10. Etiwanda Avenue at Existing Project Driveway	Stop	<b>36.0</b>	<b>E</b>
11. Etiwanda Avenue at Base Line Road	Signal	20.6	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	8.5	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	8.4	A

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets in the TIA included as Appendix I to this Initial Study. Intersection 3 would be implemented with the project.

**Bold**=deficient operations

#### *Horizon Year 2035 No Project Traffic Conditions*

Horizon Year 2035 No Project traffic conditions were estimated using the method described above under *Future Traffic Conditions*. All study area intersections would operate at acceptable LOS D or better during the Sunday peak hour for Horizon Year 2035 No Project traffic conditions, as shown in Table 21.

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**Table 21 Horizon Year 2035 No Project Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	25.6	C
2. Victoria Park Lane at Wine Cellar Court	Stop	9.0	A
3. Victoria Park Lane at Proposed Project Driveway	—	—	—
4. Victoria Park Lane at Long Meadow Drive	Signal	3.7	A
5. Victoria Park Lane at Church Street	Signal	22.5	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	33.1	C
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	48.4	D
8. Etiwanda Avenue at Foothill Boulevard	Signal	51.0	D
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	20.5	C
10. Etiwanda Avenue at Existing Project Driveway	Stop	21.5	C
11. Etiwanda Avenue at Base Line Road	Signal	23.6	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	9.1	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	12.3	B

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets in the TIA included as Appendix I to this Initial Study. Intersection 3 would be implemented with the project.

#### *Horizon Year 2035 With Project Traffic Conditions*

Horizon Year 2035 With Project traffic conditions were assessed by adding project traffic to estimated Horizon Year 2035 No Project traffic conditions. As shown in see Table 22, all study area intersections would continue to operate at acceptable LOS D or better during the Sunday peak hour for Horizon Year 2035 With Project traffic conditions, except for intersection #10, Etiwanda Avenue at Existing Project Driveway. The delay at intersection #10 would occur in the church driveways onsite and would not result in substantial traffic in the northbound and southbound lanes of Etiwanda Avenue. Therefore, impacts to the roadway system would be less than significant.

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**Table 22 Horizon Year 2035 With Project Sunday Peak Hour Intersection Levels of Service**

Intersection	Traffic Control	Delay (sec/veh)	LOS
1. Victoria Park Lane at Base Line Road	Signal	27.0	C
2. Victoria Park Lane at Wine Cellar Court	Stop	9.1	A
3. Victoria Park Lane at Proposed Project Driveway	—	9.3	A
4. Victoria Park Lane at Long Meadow Drive	Signal	3.7	A
5. Victoria Park Lane at Church Street	Signal	22.8	C
6. I-15 Southbound Off-Ramps at Foothill Boulevard	Signal	33.1	C
7. I-15 Northbound On-Ramps at Foothill Boulevard	Signal	49.3	D
8. Etiwanda Avenue at Foothill Boulevard	Signal	51.9	D
9. Etiwanda Avenue at Church Street/Miller Avenue	Signal	20.9	C
10. Etiwanda Avenue at Existing Project Driveway	Stop	<b>36.1</b>	<b>E</b>
11. Etiwanda Avenue at Base Line Road	Signal	24.8	C
12. I-15 Southbound Off-Ramps at Base Line Road	Signal	9.1	A
13. I-15 Northbound On-Ramps at Base Line Road	Signal	12.5	B

Source: PlaceWorks 2019.

Notes: LOS calculation worksheets in the TIA included as Appendix I to this Initial Study. Intersection 3 would be implemented with the project.

**Bold**=deficient operations

#### Site Access and Internal Circulation

Site access would be provided via two driveways (see Figure 3, *Site Plan*). Primary vehicular access to the project site will continue to be via the existing full-access driveway (all turning movements permitted) off Etiwanda Avenue, with the addition of a new ingress/egress driveway on Victoria Park Lane.

Weekday AM and PM peak hours generate little church traffic, as most amount of traffic occurs during Sunday services. On Sundays the project would generate 726 daily trips. On Sunday mornings the project would generate 324 trips (159 inbound and 165 outbound) in the peak hour.

As demonstrative below, no significant impacts would occur and no mitigation measures are necessary.

#### *Existing Site Access Driveway and Queues*

As shown in Figure 6, *Conceptual Site Plan*, the primary vehicular access for the project site will continue to be via the existing full-access driveway off Etiwanda Avenue. However, improvements to the internal drive aisle throat that connects to this driveway would be implemented under the Proposed Project. Under existing conditions, the drive aisle throat that connects to the driveway provides for two lanes in each direction (see Figure 4, *Existing Site Plan*). The current design creates vehicular back-ups and conflicts onsite during church services and other special events and functions, as vehicles exiting the site only have one travel lane at their

### 3. Environmental Analysis

disposal. For vehicles wanting to exit the site and make a right turn onto Etiwanda Avenue, in many instances these vehicles get stacked onsite when another vehicle (or vehicles) ahead of them is wanting to exit the site and turn left onto Etiwanda Avenue. Under the proposed condition (see Figure 6), the width of the drive aisle throat would be widened to provide dedicated left and right turn lanes out of the site, as well as a modified and slightly skewed/angled entry lane into the site for vehicles entering the site.

At the existing driveway the traffic volumes would increase with the Proposed Project. The queues would occur onsite at the church driveway egressing the site to Etiwanda Avenue. The queues would be contained within the church site and would not cause substantial delays and queues on Etiwanda Avenue. Additionally, vehicle queuing onsite would be improved under the Proposed Project due to the aforementioned improvements to the drive aisle throat of this driveway. No queues for the northbound left-turn movement for vehicles on Etiwanda Avenue were identified.

#### *Proposed Site Access Driveway and Queues*

The proposed ingress/egress driveway off Victoria Park Lane would be constructed in the northwestern end of the site. A raised median on Victoria Park Lane would restrict turns to and from the proposed driveway to right turns only (right in/right out). The proposed driveway is anticipated to operate at LOS A. Given the relatively low northbound traffic of 170 vehicles per hour on Victoria Park Lane, it is not anticipated that ingress and egress traffic from the project access would result in queues and delays for traffic on Victoria Park Lane.

Additionally, at intersections and project driveways, a substantially clear line of sight must be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Sight distance is the continuous length of roadway visible to the driver. Based on a site visit and a review of aerial photography, there are no restrictions blocking the view from the project access driveway and northbound traffic on Victoria Park Lane Road, and sufficient sight distance would be provided.

#### **Impacts to Bicycle and Pedestrian Facilities and Public Transit**

Project construction would involve construction equipment and trucks crossing the sidewalk along the west side of Etiwanda Avenue. The project construction contractor would use standard safety measures—such as fencing and flag persons—to ensure that such crossings did not pose a substantial hazard to pedestrians on that sidewalk. There is no bicycle lane on the west side of Etiwanda Avenue along the church frontage. Additionally, the nearest bus stops to the project site are on Base Line Road approximately 0.25 mile from the site—project development would not impact public transit service or facilities. In summary, no impact to bicycle or pedestrian facilities would occur as a result of project development and no mitigation measures are necessary.

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

**No Impact.** The congestion management program in effect in San Bernardino County was issued by the County Transportation Authority in 2016. All freeways and selected arterial roadways in the County are designated elements of the CMP Roadway System. The only CMP roadway in the study area is I-15. No impacts to ramps to and from I-15 were identified in the traffic impact analysis. No mitigation measures are necessary.



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

**No Impact.** The nearest public-use airport to the project site is Ontario International Airport (ONT) approximately 5.4 miles to the southwest. Project development would not result in an increase in air traffic levels. The project site is not in an area where heights of structures are regulated by the Federal Aviation Administration to prevent obstructions to air navigation to and from ONT (Ontario 2011). Additionally, the approach and departure routes for fixed-wing aircraft to and from ONT do not pass over the project site; approach routes are from the east and west, passing south of the site. Project development would not cause any changes in or require relocation of air traffic patterns to or from ONT. Therefore, no impact would occur and no mitigation measures are necessary.

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

**No Impact.** As shown in Figure 6, *Conceptual Site Plan*, the primary vehicular access for the project site will continue to be via the full-access driveway (all turning movements permitted) off Etiwanda Avenue. As noted above, improvements to this driveway would include widening of the drive aisle throat to provide dedicated left and right turn lanes out of the site, as well as a modified and slightly skewed/angled entry lane into the site for vehicles entering the site. Additionally, a new restricted driveway (right in/right out turns only) would be constructed as an offsite improvement (within City right-of-way), extending west to Victoria Park Lane from the northwest corner of the project site. In order to construct this new driveway, existing landscape and hardscape improvements within the City's right-of-way would be removed/demolished and a portion of the existing block wall would be demolished. Furthermore, a new and redesigned vehicular circulation system would be provided in the western and central portions of the site (see Figures 4, *Existing Site Plan*, and 6, *Conceptual Site Plan*).

The City and RCFPD have adopted roadway design standards that preclude the construction of any unsafe roadway, circulation, or access design features. The design of the proposed internal drive aisles, access driveways, and other circulation improvements would be required to adhere to the City's standard engineering plans and RCFPDs design standards, which are imposed on project developments by the City and RCFPD during the building plan check and development review process. Compliance with these established design standards would ensure that hazards due to design features would not occur and that the placement of the access and circulation improvements would not create a conflict for motorists, pedestrians, or bicyclists traveling within or around the project site.

As also discussed above, at intersections and project driveways, a substantially clear line of sight must be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Sight distance is the continuous length of roadway visible to the driver. Based on a site visit and a review of aerial photography, there are no restrictions blocking the view from the project access driveway and northbound traffic on Victoria Park Lane Road, and sufficient sight distance would be provided. Also, the proposed intersection of the project access driveway with Victoria Park Lane would be perpendicular and would not create design hazards.

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Furthermore, the Proposed Project would provide a network of low-speed internal drive aisles that would be safe and walkable for pedestrians, while maintaining an efficient circulation system for vehicles. The Proposed Project would also not include incompatible uses such as farm equipment on area roadways.

Therefore, no impact resulting from hazards due to design features or incompatible uses would occur as a result of the Proposed Project and no mitigation measures are necessary.

#### **e) Result in inadequate emergency access?**

**No Impact.** As outlined above, the Proposed Project would introduce various on- and offsite vehicular access and circulation improvements. To address fire access needs, the improvements would be required to be designed in accordance with all applicable RCFPD design standards for emergency access (e.g., minimum lane width and turning radius). For example, internal drive aisles would be designed to meet the minimum width requirements of RCFPD to allow the passing of emergency vehicles.

Additionally, the Proposed Project would be required to incorporate all applicable design and safety requirements as set forth in the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of the City and RCFPD. Compliance with these provisions and standards is ensured through the City's and RCFPD's development review and building plan check process.

Furthermore, during the development review and building plan check process, the City would coordinate with RCFPD and the Sheriff to ensure that the necessary fire prevention and emergency response features are incorporated into the Proposed Project and that adequate circulation and access are provided within the access and circulation components of the Proposed Project. All site and building improvements proposed as a part of the project would be subject to review and approval by the City and RCFPD.

Implementation of the Proposed Project would also not require major road closures or otherwise impact the functionality of Etiwanda Avenue and Victoria Park Lane as public safety access routes. However, some minor improvements would be required within the street rights-of-way, which would require temporary closure of small portions of these roads. For example, some construction would occur within the public right-of-way of Victoria Park Lane in order to construct the new driveway. Any minor road closures would be temporary and would only be necessary during the construction activities associated with these improvements. All proposed road closures would also be subject to review and approval by the City. Upon completion of the roadway improvements, all road conditions would be restored to normal.

Therefore, no impacts to emergency access would occur as a result of the Proposed Project and no mitigation measures are necessary.

#### **f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

**No Impact.** No impact would occur, as substantiated above in Section 3.17.a, above.

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#### 3.18 TRIBAL CULTURAL RESOURCES

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

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

**No Impact.** As shown in Figures 3, *Aerial Photograph*, the project site is developed with an existing church campus. Existing buildings onsite include a single-story temple/chapel building that houses the church's chapel and offices; a single-story nursery/office building; a single-story banquet building; a small one-story storage building; a covered shelter structure; and two temporary portable bungalows. The onsite buildings are of modern construction and are surrounded by modern, nonnative landscaping.

Implementation of the Proposed Project would involve demolition of two nonhistorical structures: the 15-year-old covered shelter structure and the approximately 30-year old nursery/office building. Buildings less than 45 years old are typically not evaluated for historical significance in cultural resources investigations. The state-recommended threshold under which buildings may be considered historic resources is a construction age of 50 years (California Code of Regulations, §4852.d.2). Additionally, the existing buildings to be demolished are of modern construction do not exhibit any unique architectural style or features; they are a common building design found throughout southern California.

Furthermore, the project site and existing buildings are not identified on any federal, state, or local historic registers—National Register of Historic Places; California State Historical Landmarks and Points of Historical Interest; and City of Rancho Cucamonga local historic resources. Also, as shown in Figure LU-8 (Historic Resources) of the City's General Plan Managing Land Use, Community Design, and Historic Resources Element, the project site is not listed as a designated historic site or on/abutting a historic transportation route.

Therefore, no impact to historical resources in relation to tribal history would occur and no mitigation measures are necessary.

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

**Less Than Significant Impact With Mitigation Incorporated.** Conducting consultation early in the CEQA process allows tribal governments, public 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. The intent of the consultations is to provide an opportunity for interested Native American contacts to work together with the lead agency (in this

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case, the City of Rancho Cucamonga) during the project planning process to identify and protect tribal cultural resources.

#### Pre-Tribal Consultation Results

A Sacred Lands File search request was submitted to the Native American Heritage Commission (NAHC) on March 12, 2018, yielding negative results for known sacred lands within the project area. NAHC responded on March 13, 2018, and indicated that the project site is not identified in the agency's Sacred Lands File. NAHC did however, note that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in the area.

Additionally, as a part of the cultural resources assessment conducted by Cogstone for the project site, Cogstone completed a search for cultural resources records for the site (as well as within a one-mile search radius) at the South Central Coastal Information Center at California State University, Fullerton on March 15, 2018. The records search indicated that no prior studies included the project site; however, 48 have been completed outside the project site but within a one-mile radius. No cultural resources have been previously recorded within the project site, while 26 have been previously documented within the one-mile search radius (Cogstone 2018).

Furthermore, a pedestrian survey conducted of the project site in 2018 yielded two historical (19th century) artifacts in the vacant portion of the project site: a black ceramic dish sherd and a ferrous metal square nail (Cogstone 2018). Because the project site is situated to the rear of multiple known historical residences and two 19th century artifacts were identified, there is a potential for subsurface archeological deposits to occur onsite. For these reasons, the project site is regarded as moderately sensitive for historical resources. Therefore, the presence of subsurface archaeological resources (if any are encountered) could be affected by ground-disturbing activities associated with grading and construction at the site. Based on the preceding, potential impacts to archeological resources could occur as a result of project-related construction activities. However, with implementation of Mitigation Measures CUL-1 through CUL-3, impacts to archeological resources would be reduced to a less than significant level.

#### Tribal Consultation Results

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts to tribal cultural resources, as defined in Public Resources Code Section 21074. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA 2018).

As part of the AB 52 process, Native American tribes must submit a written request to the relevant lead agency (in this case, the City of Rancho Cucamonga) if it wishes to be notified of projects within its traditionally and culturally affiliated area. The lead agency must provide written, formal notification to the tribes that have requested it within 14 days of determining that a project application is complete or deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receipt of the notification if it wishes to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the request for consultation. Consultation concludes when either 1): the parties agree to mitigation

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measures to avoid a significant effect, if one exists, on a tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. AB 52 also addresses confidentiality during tribal consultation per Public Resources Code Section 21082.3(c).

To date, six tribes (Soboba Band of Luiseno Indians; Gabrieleño Band of Mission Indians – Kizh Nation; San Manuel Band of Mission Indians; San Gabriel Band of Mission Indians; Morongo Band of Mission Indians; and Torres Martinez Desert Cahuilla Indians) have requested to be included on the City's AB 52 consultation list, which is a list of tribes the City maintains for consultation purposes for the purpose of mitigating potential impacts to tribal cultural resources under CEQA. A letter was sent to each of the tribes on October 16, 2018, which requested comments and responses from the tribes. The 30-day noticing requirement under AB 52 was completed on November 15, 2018. One tribe responded to the City's AB 52 consultation letter: Gabrieleño Band of Mission Indians - Kizh Nation. Following is a summary and the results of the City's consultation efforts with the tribe.

As stated above, NAHC noted that the absence of specific site information in the Sacred Lands File does not indicate the absence of tribal cultural resources in the area. Additionally, although the records search conducted by Cogstone at the South Central Coastal Information Center determined that there are no previously recorded cultural resources associated with the project site, the search showed that there are 26 resources within a one-mile search radius of the project site. Furthermore, the Gabrieleño Band of Mission Indians - Kizh Nation (Kizh Nation) stated that they are the direct lineal descendants of the project area and that the project site is within their ancestral tribal territory.

Therefore, while unlikely, there is a potential to encounter buried prehistoric deposits (including tribal cultural resources) on the project site. The presence of subsurface tribal cultural resources on the site remains possible and could be affected by project-related, ground-disturbing activities associated with grading and construction at the project site (depending on the depth of excavation activities). It is possible that subsurface disturbance may uncover undiscovered tribal cultural resources at the site. Impacts to tribal cultural resources are potentially significant.

To enable the Kizh Nation with the ability to protect and preserve their tribal cultural resources and to reduce potential impacts to such resources (if encountered), mitigation is required. With implementation of Mitigation Measure TCR-1, which is based on input the City received from the Kizh Nation during the consultation efforts, impacts related to tribal cultural resources would be reduced to a level of less than significant.

#### Mitigation Measures

TCR-1	The project applicant shall retain and compensate for the services of a qualified professional tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) Tribal Government and is listed under the Native American Heritage Commission's tribal contact list for the area of the project site. The tribal monitor/consultant shall only be present onsite during the construction phases that involve ground-disturbing activities, which are defined by the Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The tribal
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monitor/consultant will complete daily monitoring logs that provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall cease when the project site grading and excavation activities are completed, or when the tribal representatives and monitor/consultant have indicated that the site has a low potential for impacting tribal cultural resources. Proof of the project applicant's retention of the tribal monitor/consultant shall be provided to the City of Rancho Cucamonga Planning Department prior to the issuance of permits for construction phases that involve ground-disturbing activities.

In addition, the project applicant shall follow/implement the following measures during the project's construction phases that involve ground-disturbing activities.

- **Unanticipated Discovery of Tribal Cultural and Archaeological Resources:** Upon discovery of archaeological resources (if any), construction activities in the immediate vicinity of the find shall cease until the find can be assessed. Any archaeological resources unearthed during construction activities shall be evaluated by a qualified archaeologist and tribal monitor/consultant. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) shall coordinate with the project applicant regarding treatment and curation of these resources. Typically, the Kizh Nation will request reburial or preservation for educational purposes. Work may continue on other portions of the project site while evaluation and, if necessary, mitigation takes place for the find (CEQA Guidelines Section 15064.5 [f]). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, shall be made available. The treatment plan established for the resources (if any are found) shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.
- **Unanticipated Discovery of Human Remains and Associated Funerary Objects:** Native American human remains are defined in Public Resources Code (PRC) 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. 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 (NAHC) and the provisions of PRC 5097.98 shall be followed.
- **Resource Assessment and Continuation of Work Protocol:** Upon discovery of any human remains, the tribal and/or archaeological monitor/consultant shall immediately divert work at a minimum of 50 feet and place an exclusion zone around the burial. The

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monitor/consultant shall then notify the Kizh Nation, lead archaeologist, and construction manager, who shall then contact the coroner. Work shall continue to be diverted from the burial area while the coroner determines whether the remains are Native American. The discovery shall be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner shall notify NAHC as mandated by state law who will then appoint a Most Likely Descendent.

- **Kizh-Gabrieleño Procedures for Burials and Funerary Remains:** If the Kizh Nation is designated as the Most Likely Descendent, the following treatment measures shall be implemented. To the Kizh Nation, the term “human remains” encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains are also considered as associated funerary objects. All such remains shall be treated in the same manner as bone fragments that remain intact.
- *Treatment Measures:* Prior to the continuation of ground-disturbing activities, the project applicant, in coordination with the Kizh Nation and construction manager, shall arrange a designated location within the footprint of the project site for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside of construction-related working hours. The Kizh Nation shall make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials be removed. The Kizh Nation shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be undertaken, which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Kizh Nation for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure complete recovery of all material. If the discovery of human remains includes four or more burials, the location shall be considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities shall be submitted to the Kizh Nation and NAHC. The Kizh Nation shall not authorize any scientific study or the utilization of any invasive diagnostics on human remains.

Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container onsite, if

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possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated and protected in perpetuity between the Kizh Nation, project application and construction manager. There shall be no publicity regarding any cultural materials recovered.

- *Professional Standards:* Archaeological and Native American monitoring and excavation during construction shall be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel shall meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The qualified archaeologist shall ensure that all other personnel are appropriately trained and qualified.

#### 3.19 UTILITIES AND SERVICE SYSTEMS

The analysis in this section is based partly on the following technical study, which is included as Appendix G to this Initial Study:

- *Hydrology Report*, Valued Engineering, Inc., March 2019.

##### **a) Exceed waste water treatment requirements of the applicable Regional Water Quality Control Board?**

**Less Than Significant Impact.** The Cucamonga Valley Water District (CVWD) provides wastewater collection services to Rancho Cucamonga (including the project site), while the Inland Empire Utility Agency (IEUA) is responsible for the treatment and disposal of domestic, commercial, and industrial wastewater generated by people living and working in Rancho Cucamonga. CVWD's sewers convey wastewater to two of IEUA's wastewater treatment facilities: Regional Plant No. 1 (RP-1) in Ontario and Regional Plant No. 4 (RP-4) in Rancho Cucamonga. These wastewater treatment facilities provide a mix of advanced primary and secondary treatment.

IEUA is required by federal and state law to meet applicable standards of treatment plant discharge requirements. Specifically, IEUA's wastewater treatment system is subject to a National Pollution Discharge Elimination System (NPDES) permit issued by the Santa Ana Regional Water Quality Control Board. The NPDES permit regulates the amount and type of pollutants that the system can discharge into receiving waters. IEUA's wastewater treatment system is operating in compliance with and would continue to operate subject to state waste discharge requirements and federal NPDES permit requirements, as set forth in the NPDES permit.

Additionally, the Proposed Project consists of development and does not propose any industrial or commercial land uses that could require special treatment. Furthermore, as discussed in greater depth below in Section 3.19(b), project-generated effluent can be accommodated with the available capacity of the IEUA system;



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therefore, project development would not require an expansion of capacity that may result in exceedance of the existing waste discharge requirements.

Therefore, the additional wastewater (quantity and type) that would be generated by the Proposed Project and treated by IEUA would not impede IEUA's ability to continue to meet its wastewater treatment requirements. Impacts on IEUA's wastewater treatment requirements would be less than significant and no mitigation measures are necessary.

**b) Require or result in the construction of new water or waste water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less Than Significant Impact.** Following is a discussion of the Proposed Project's potential impacts on water and wastewater treatment facilities.

#### Water Treatment Facilities

CVWD provides water services to the project site. CVWD water supplies consist of groundwater, local surface water, imported water from the State Water Project purchased from IEUA, and recycled water (CVWD 2016). Groundwater is treated at three CVWD treatment facilities. Imported water is treated at the F. E. Weymouth Treatment Plant in the City of La Verne in Los Angeles County; that facility has capacity of 520 million gallons per day (mgd) (MWD 2018). CVWD estimates that water demands in its service area will increase from approximately 60,500 afy (54 mgd) in 2020 to approximately 65,700 afy (58.6 mgd) in 2035 (CVWD 2016).

Water demand estimates for the existing church complex and Proposed Project are included in Table 23. As shown in this table, a net increase of approximately 9,932 gpd (or approximately 11 afy) over water use for the existing complex would occur under project development. As shown in Table 23, CVWD estimates that it will have sufficient water supplies to meet Proposed Project water demands. Additionally, the amount of increase in water demand of 11 afy would be marginal and only represent a small fraction of CVWD's water supply.

**Table 23 Water Demands, Existing Complex and Proposed Project**

Scenario	Square Feet	Demand, gallons per day per square feet		
		Indoor Use	Outdoor Use	Total
Water Demands				
Existing Church Complex	28,600	0.086	0.134	6,292
Proposed Project	73,400	0.086	0.134	16,148
Proposed Annual Funerals and Special Events	36,000 <sup>1</sup>	0.086	NA <sup>2</sup>	76 <sup>3</sup>
Net increase				9,932

Source: CalEEMod 2017. Place of worship indoor and outdoor water use rates used.

<sup>1</sup> Only the square footage of the banquet hall is considered for funerals and special events.

<sup>2</sup> Special events are assumed to only generate an additional demand on indoor water use with no outdoor water demand.

<sup>3</sup> Since this generation rate is only associated with 9 days in a year the total amount of water generated by special events is 27,864 gal/year. This number is averaged over 365 days per year to give a daily generation rate of 76 gpd.

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Additionally, based on the water treatment capacities of CVWD's treatment facilities, there is sufficient water treatment capacity in the region for project water demand. Therefore, project development would not require the construction of new or expanded water treatment facilities. No significant impacts would occur and no mitigation measures are necessary.

#### Wastewater Treatment Facilities

As noted above, CVWD provides wastewater collection services to Rancho Cucamonga (including the project site) and IEUA is responsible for the treatment and disposal of domestic, commercial, and industrial wastewater at its wastewater treatment facilities. CVWD's Wastewater collection from the project site is provided through existing CVWD infrastructure and other facilities located in roadways adjacent to the project site. Project generated-wastewater would be collected by CVWD's sewers and conveyed to IEUA's Regional Plant No. 1 (RP-1) in Ontario and Regional Plant No. 4 (RP-4) in Rancho Cucamonga. Combined, these wastewater treatment facilities have total capacity of 58 mgd and total average wastewater influent flows of approximately 32 mgd (IEUA 2017); the remaining combined influent flow capacity of these plants is approximately 26 mgd.

In addition to increasing the square footage of the existing church campus under the Proposed Project, the proposed auditorium would result in up to five funerals and four special events per year, with each event lasting one day. These would all be new events compared to what typically occurs at the church facility now. The large community funerals and special events would result in 1,000 attendees for each event.

The existing church complex consists of a one-story, 5,300-square-foot temple building, a one-story, 20,400-square-foot banquet building, and a 2,900-square-foot nursery/office building. Wastewater generation at the existing complex is estimated to be 2,460 gpd. As shown in Table 24, the estimated net increase in wastewater generation due to the Proposed Project is estimated at 3,928 gpd.

**Table 24 Wastewater Generation, Existing Complex and Proposed Project**

Table 2-1 Wastewater Generation, Existing Complex and Proposed Project			
Scenario	Square Feet	Generation, gallons per day	
		Per square foot	Total
Wastewater Generation			
Existing Church Complex	28,600	0.086	2,460
Proposed Project	73,400	0.086	6,312
Proposed Annual Funerals and Special Events	36,000 <sup>1</sup>	0.086	76 <sup>2</sup>
Net Increase			3,928

Source: CalEEMod 2017. Place of worship indoor water use rate used for wastewater generation rate.

<sup>1</sup> Only the square footage of the banquet hall is considered for funerals and special events.

<sup>2</sup> Since this generation rate is only associated with 9 days in a year the total amount of wastewater generated by special events is 27,864 gal/year. This number is averaged over 365 days per year to give a daily generation rate of 76 gpd.

The amount of wastewater that would be generated by the Proposed Project is much less than 1 percent of OCSO's total remaining daily treatment capacity of Reclamation Plant No. 1 and Treatment Plant No. 2. Additionally, based on the water treatment capacities of IEUA's treatment plants, there is sufficient wastewater treatment capacity in the region for project wastewater generation.

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Therefore, project development would not require the construction of new or expanded wastewater treatment facilities. No significant impacts would occur and no mitigation measures are necessary.

**c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

**Less Than Significant Impact.** See response to Section 3.10.a, above. As substantiated in that section, impacts would be less than significant and no mitigation measures are necessary.

**d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?**

**Less Than Significant Impact.** CVWD has adequate water supplies to meet project water demands, as substantiated above in Section 3.19.b.

Additionally, as noted in Section 1.3.6, Green Building and Sustainability, the Proposed Project would be designed to include a number of green building practices/features that would help reduce water usage and demand, including drought tolerant planting with drip irrigation and high efficiency plumbing fixtures. Other green building practices/features would be considered by the City as the Proposed Project is refined during the design and construction phase.

The Proposed Project's landscaping would also be required to be installed and maintained in compliance with the water-efficient landscape requirements outlined in Section 17.82.020 (State Model Water Efficient Landscape Ordinance) of the City's Municipal Code, as well as with the provisions of Chapter 17.56 (Landscaping Standards), which sets landscaping standards for various purposes, including to conserve water.

Furthermore, Section 4.20.030 of the CVWD Municipal Code contains water use efficiency practices that all CVWD customers must follow. These include, but are not limited to, hoses with shutoff nozzles for car washing; hosing of paved areas for health and safety purposes only and at no more than five gallons per minute; recirculating systems for fountains; restaurant water upon request; repair of leaks; sprinklers without runoff, overspray, or excessive irrigation; hotel guest option for linen laundry; and industrial audits.

Finally, development of the Proposed Project would be required to comply with the provisions of CALGreen, which contains requirements for indoor water use reduction and site irrigation conservation. Specifically, project development would be required to adhere to mandatory residential measures outlined in Division 4.3 (Water Efficiency and Conservation) of CALGreen, including those of Sections 4.303 (Indoor Water Use) and 4.304 (Outdoor Water Use).

Based on the preceding, there are adequate water supplies to meet the water demands of the Proposed Project and project development would not require CVWD to obtain new or expanded water supplies. Therefore, impacts on water supplies due to project development would be less than significant and no mitigation measures are necessary.

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- e) **Result in a determination by the waste water 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.** As substantiated above in Section 3.19.a, there is existing wastewater treatment capacity in the region for estimated project wastewater generation. Project development would not require construction of new or expanded wastewater treatment facilities. Therefore, impacts would be less than significant and no mitigation measures are necessary.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?**

**Less Than Significant Impact.** In 2016, approximately 96 percent of the solid waste landfilled from Rancho Cucamonga was disposed of at two facilities: the Badlands Sanitary Landfill near Moreno Valley in Riverside County; and the El Sobrante Landfill near Corona in Riverside County (CalRecycle 2018a). Capacity and disposal data for the two landfills are shown in Table 25; the landfills have a combined residual capacity of over 9,400 tons per day.

**Table 25 Landfill Capacity**

Landfill and Nearest City	Current Remaining Capacity	Maximum Daily Disposal Capacity (tons)	Average Daily Disposal, 2017 (tons) <sup>1</sup>	Residual Daily Disposal Capacity (tons)	Estimated Close Date
Badlands Sanitary Landfill Moreno Valley	15,748,799 cubic yards [11,811,599 tons]	4,800	2,603	2,197	2022
El Sobrante Landfill Corona	145,530,000 tons	16,054	8,843	7,211	2045
<b>Total</b>	<b>157,341,599 tons</b>	<b>20,854</b>	<b>11,446</b>	<b>9,408</b>	<b>NA</b>

Source: CalRecycle 2018b, 2018c, 2018d.

<sup>1</sup> Average daily disposal is calculated based on 300 operating days per year. Each of the two facilities is open six days per week, Monday through Saturday, except certain holidays.

The Proposed Project is estimated to generate a net increase of about 320 pounds of solid waste per day, as shown in Table 26.

**Table 26 Solid Waste Generation, Existing Complex and Proposed Project**

Scenario	Square Feet	Solid Waste Generation, pounds per day	
		Per square foot	Total
Current Project	28,600	0.007	200
Redeveloped Project	73,400	0.007	514
Proposed Annual Funerals and Special Events	36,000 <sup>1</sup>	0.007	6 <sup>2</sup>
Net increase			<b>320</b>

Source: CalRecycle 2018e. Rate for public/institutional.

<sup>1</sup> Only the square footage of the banquet hall is considered for funerals and special events.

<sup>2</sup> Since this generation rate is only associated with 9 days in a year the total amount of solid waste generated by special events is 2,268 lbs/year. This number is averaged over 365 days per year to give a daily generation rate of 6 lbs/day.

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As demonstrated in Table 25, there is adequate landfill capacity in the region for the Proposed Project's forecast solid waste disposal, and project development would not require additional landfill capacity at any of the three landfills serving the City. Additionally, the total amount of solid waste expected to be generated under the Proposed Project would be minimal compared to the total permitted daily maximum solid waste tonnage per day of the two landfills serving the City.

Additionally, bins for both solid waste and recycling exist on the church campus. The provision of recycling bins would help reduce the amount of solid waste that would need to be transported to the landfills serving the Proposed Project.

Furthermore, development of the Proposed Project would be required to comply with the provisions of CALGreen, which outlines requirements for construction waste reduction, material selection, and natural resource conservation. For example, Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of CALGreen requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

Based on the preceding, impacts on landfill capacity would be less than significant and no mitigation measures are necessary.

#### **g) Comply with federal, state, and local statutes and regulations related to solid waste?**

**No Impact.** See response to section 3.19.f, above.

Additionally, the following federal, state, and local laws and regulations govern solid waste disposal.

#### **Federal**

- USEPA administers the Resource Conservation and Recovery Act of 1976 and the Solid Waste Disposal Act of 1965, which govern solid waste disposal.

#### **State**

- Assembly Bill (AB) 341 (Chapter 476, Statutes of 2011) increases the statewide waste diversion goal to 75 percent by 2020, and mandates recycling for commercial and multi-family residential land uses.
- AB 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) required every California city and county to divert 50 percent of its waste from landfills by the year 2000 by such means as recycling, source reduction, and composting. In addition, AB 939 requires each county to prepare a countywide siting element specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the county that cannot be reduced or recycled for a 15-year period.
- AB 1327 (California Solid Waste Reuse and Recycling Access Act of 1991) requires local agencies to adopt ordinances mandating the use of recyclable materials in development projects.

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- AB 1826 (California Public Resources Code, Sections 42649.8 et seq.) requires recycling of organic matter by businesses and multifamily residences of five or more units generating such wastes in amounts over certain thresholds. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.
- Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the 2016 CALGreen (Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

#### Local

- City of Rancho Cucamonga Municipal Code, Section 8.19.280 (Construction and Demolition Waste) outlines the requirements for diverting construction waste from landfills. This section requires diversion of 50 to 75 percent of construction and demolition waste through recycling, reuse, and diversion programs.

Project-related construction and operation phases would be implemented in accordance with all applicable federal, state, and local laws and regulations governing solid waste disposal. Therefore, no impact would occur and no mitigation measures are necessary.

### 3.20 MANDATORY FINDINGS OF SIGNIFICANCE

- a) **Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less Than Significant Impact With Mitigation Incorporated.** The project site is currently developed and disturbed and is in a highly-urbanized area of the City. As shown in Figures 3, *Aerial Photograph*, the site is developed with a church use and its associated improvements. Onsite vegetation includes a number of decorative trees and shrubs along the site boundaries and internal to the project site. As shown in Figure 3, the project site is surrounded by residential development. The project site does not contain any sensitive natural resources that could be disturbed as a result of project development.

As demonstrated in Section 3.4, *Biological Resources*, implementation of the Proposed Project would not result in the reduction of the habitat of fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal. Impacts were deemed to be less than significant.

Additionally, impacts to burrowing owls would be reduced to a level of less than significant with implementation of Mitigation Measure BIO-1 and impacts to nesting habitat for migratory birds would be reduced to a less than significant level with implementation of Mitigation Measure BIO-2.

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Furthermore, as demonstrated in Section 3.5, *Cultural Resources*, no historic resources were identified onsite, and therefore the project does not have the potential to eliminate important examples of California history or prehistory. Impacts were deemed to 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.** The issues relevant to development of the Proposed Project are confined to the immediate project area. Additionally, the project site is in a highly-urbanized area of the City where supporting utility infrastructure (e.g., water, wastewater, and drainage) and services (e.g., solid waste collection) currently exist. The project site is also generally too small in scope to appreciably contribute to existing cumulative impacts.

Furthermore, impacts related to other topical areas such as air quality, GHG, hydrology and water quality, and traffic would not be cumulatively considerable with development of the Proposed Project in conjunction with other cumulative projects.

In consideration of the preceding factors, the Proposed Project’s contribution to cumulative impacts would be rendered less than significant; therefore, project impacts would not be cumulatively considerable.

- 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 Incorporated.** As discussed in the respective topical sections of this Initial Study, implementation of the Proposed Project would not result in significant impacts in the areas of air quality, GHG, geology and soils, hazards and hazardous materials, and hydrology and water quality, which may cause adverse effects on human beings. Therefore, implementation of the Proposed Impacts related to these environmental effects were deemed to be less than significant.

As substantiated in Section 3.13, *Noise*, implementation of the Proposed Project would result in significant construction-related noise impacts, which may cause adverse effects on human beings. However, feasible mitigation measures (Mitigation Measures NOI-1 and NOI-2) have been identified to reduce these impacts to less than significant levels. Therefore, with implementation of mitigation measures, the Proposed Project would not result in substantial adverse effects on human beings.

## 4. Mitigation Monitoring and Reporting Program

Project-specific mitigation measures have been categorized in matrix format, as shown in Table 27. The matrix identifies the environmental factor, specific mitigation measures, schedule, and responsible monitor. The mitigation matrix serves as the basis for scheduling the implementation of, and compliance with, all mitigation measures.

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure		Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<b>BIOLOGICAL RESOURCES</b>					
BIO-1	<p>A preconstruction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 14 days prior to any ground-disturbing activities (including clearing and grading) occurring within the vacant but disturbed portion of the project site, which is on the western end of the site. If ground-disturbing activities are delayed or suspended for more than 14 days after the preconstruction survey, the site shall be resurveyed for owls. A final report of the findings, prepared by a qualified biologist, shall be submitted to the City of Rancho Cucamonga prior to the initiation of any ground-disturbing activities that have the potential to disturb any burrowing owls.</p> <p>If owls are determined to be present within the construction footprint, they shall be captured and relocated. The preconstruction survey and any relocation activity shall be conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (2012). According to CDFW guidelines, mitigation actions shall be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is</p>	Project Applicant/Developer, Construction Contractor, Monitoring Biologist	Prior to the initiation of any ground-disturbing activities	City of Rancho Cucamonga Planning Department and/or Building & Safety Services Department	



#### 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
variable, and therefore the time frame shall be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFW guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on their own). Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that: a) the adult birds have not begun egg laying and incubation; or b) the juveniles from the occupied burrows are foraging independently and are capable of independent survival. If a biologist is unable to verify one of these two conditions, then no disturbance shall occur within 300 feet of the burrowing owl's nest during the breeding season to prevent abandonment of the young.				
BIO-2 Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting bird season (February 16 to August 31), a qualified monitoring biologist contracted by the Rancho Cucamonga Fire Protection District/City of Rancho Cucamonga shall conduct a preconstruction survey(s) to identify any active nests in and adjacent to the project site no more than three days prior to initiation of the action. If the biologist does not find any active nests that would be potentially impacted, the proposed action may proceed. However, if the biologist finds an active nest within or directly adjacent to the action area (within 100 feet) and determines that the nest may be impacted, the biologist shall delineate an appropriate buffer zone around the nest using temporary plastic fencing or other suitable materials, such as barricade tape and traffic cones. The buffer zone shall be determined by the biologist in consultation with applicable resource agencies and in consideration of species sensitivity and existing nest site conditions, and in coordination with the construction contractor. The qualified biologist shall serve as a construction monitor during those	Project Applicant/Developer, Construction Contractor, Monitoring Biologist	Prior to the commencement of any proposed actions (e.g., site clearing, demolition, grading) during the breeding/nesting season	City of Rancho Cucamonga Planning Department and/or Building & Safety Services Department	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Only specified activities (if any) approved by the qualified biologist in coordination with the construction contractor shall take place within the buffer zone until the nest is vacated. Activities that may be prohibited within the buffer zone by the biologist may include but not be limited to grading and tree clearing. Once the nest is no longer active and upon final determination by the biologist, the proposed action may proceed within the buffer zone.</p> <p>The monitoring biologist shall prepare a survey report/memorandum summarizing his/her findings and recommendations of the preconstruction survey. Any active nests observed during the survey shall be mapped on a current aerial photograph, including documentation of GPS coordinates, and included in the survey report/memorandum. The completed survey report/memorandum shall be submitted to the City of Rancho Cucamonga Planning Department prior to the commencement of construction-related activities that have the potential to disturb any active nests during the nesting season.</p>				
<b>CULTURAL RESOURCES</b>				
<p>CUL-1 <b>Archaeological Monitoring.</b> Prior to the issuance of grading permits, and for any subsequent permit involving excavation to a depth of between zero and five feet below the current grade, the project applicant shall provide a qualified archaeological monitor to observe all ground-disturbing activity, including but not limited to grubbing, trenching, boring, and mechanical excavation. All monitoring work shall be performed or supervised by an archaeologist meeting the Secretary of the Interior's Professional Qualifications for Archeology as defined at 36 CFR Part 61, Appendix A.</p>	<p>Project Applicant/Developer, Construction Contractor, Monitoring Archeologist</p>	<p>Prior to the issuance of grading permits</p>	<p>City of Rancho Cucamonga Planning Department and/or Building &amp; Safety Services Department</p>	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>CUL-2 <b>Workers' Environmental Awareness Program Training.</b> Prior to the issuance of grading permits, a Workers' Environmental Awareness Program training shall be provided by a qualified archaeologist to all construction personnel to ensure that they are aware of sensitivity of the area, and the protocol should cultural and/or tribal cultural resources be identified during ground-disturbing activity. The training shall include a handout that details the standard notification protocols and includes the appropriate notification chain of command and points-of-contact. The handout shall emphasize the need for confidentiality and culturally-appropriate treatment of any cultural or tribal cultural resources.</p>	<p>Project Applicant/Developer, Construction Contractor, Monitoring Archeologist</p>	<p>Prior to the issuance of grading permits</p>	<p>City of Rancho Cucamonga Planning Department and/or Building &amp; Safety Services Department</p>	
<p>CUL-3 <b>Inadvertent Discoveries.</b> If previously unidentified cultural resources and/or tribal cultural resources are unearthed during ground-disturbing activities, all work shall immediately be suspended within 100 feet of the discovery and the City of Rancho Cucamonga Building and Safety Services Department shall be immediately contacted. Suspension of ground disturbances in the vicinity of the discovery shall not be lifted until the archaeological monitor in coordination with the construction contractor has evaluated the discovery to assess whether it is an archaeological resource and/or tribal cultural resource classified as significant pursuant to the CEQA definition of historical (State CEQA Guidelines 15064.5[a]) and/or unique archeological resource (Public Resources Code 21083.2[g]). If the qualified archaeologist determines that adverse impacts to tribal cultural resources or significant archaeological resources could occur and impacts to the resource cannot be avoided, treatment measures shall be developed and implemented in consultation with the City of Rancho Cucamonga Building and Safety Services Department, the qualified archaeologist, and consulting Native American tribes (when tribal cultural resources are involved). For example, if archaeological remains are recovered, they shall be offered to a repository with a</p>	<p>Project Applicant/Developer, Construction Contractor, Monitoring Archeologist</p>	<p>Through the duration of all ground-disturbing activities</p>	<p>City of Rancho Cucamonga Planning Department and/or Building &amp; Safety Services Department</p>	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
retrievable collection system and an educational and research interest in the materials, such as the San Bernardino County Museum. If no repository is found, the resource(s) shall be considered the property of the City and may be stored, disposed of, transferred, exchanged, or otherwise handled by the City at its discretion. The final recommendations on the treatment and disposition of the deposits shall be developed in accordance with all applicable provisions of California Public Resource Code Section 21083.2 and State CEQA Guidelines Sections 15064.5 and 15126.4. The project applicant shall follow all recommendations made by the archeologist.				
<b>NOISE</b>				
<p>NOI-1 As required by the City of Rancho Cucamonga's Municipal Code, operational noise from amplified indoor concerts or outdoor movie nights and open mic nights shall not exceed the noise standards contained in Section 17.66.050, including the performance standard of 65 dBA Leq between the hours of 7:00 AM to 10:00 PM at the nearest residential property line. To ensure compliance with the City's Municipal Code performance standards, Christ's Church of the Valley shall:</p> <ul style="list-style-type: none"> <li>• Conclude all amplified speech, music, or movie nights by 10:00 PM. Where feasible, conclude such events by 7:00 PM to minimize community noise exposure during the sensitive evening hours at nearby residences.</li> <li>• Limit these types of events to the weekend, where practical and feasible.</li> <li>• Keep all doors and windows closed during indoor concerts at all times.</li> <li>• Limit bass tones to the degree feasible, as these low frequency tones propagate and carry the furthest.</li> </ul>	Project Applicant/Developer, Acoustical Consultant	Upon and throughout project operation	City of Rancho Cucamonga Planning Department and/or Building & Safety Services Department	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<ul style="list-style-type: none"> <li>For outdoor events, orient the speaker system away from nearby residences.</li> <li>Develop a communications and outreach plan for nearby residences. Provide advance notification and the proposed schedule for planned upcoming events.</li> <li>Once operational, Christ's Church of the Valley shall retain a qualified acoustical consultant to monitor noise levels at the adjacent residential property line during at least one indoor small concert performance and one outdoor movie or open mic night. A report shall be submitted to the City of Rancho Cucamonga Planning Department for review and approval detailing the findings and any additional noise recommendations or requirements.</li> </ul>				
<p>NOI-2 As required by the City of Rancho Cucamonga's Municipal Code, construction activities shall take place only between the hours of 7:00 AM and 8:00 PM on weekdays and Saturdays, and not on Sundays or a national holiday. In addition, the following practices shall be observed and implemented:</p> <ul style="list-style-type: none"> <li>Erect a temporary noise barrier/curtain between the construction zone and all adjacent residences. The temporary sound barrier shall have a minimum height of 12 feet and be free of gaps and holes. The barrier can be (a) a ¾-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density or at least 2 pounds per square foot.</li> <li>Limit noise-producing signals, including horns, whistles, alarms, and bells, to safety warning purposes only;</li> <li>Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment;</li> <li>Unnecessary idling of internal combustion engines should be strictly prohibited;</li> <li>Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as</li> </ul>	Project Applicant/Developer, Construction Contractor	Throughout the duration of construction activities	City of Rancho Cucamonga Planning Department and/or Building & Safety Services Department	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>possible from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used reduce noise levels at the adjacent sensitive receptors. Any enclosure openings or venting shall face away from sensitive receptors;</p> <ul style="list-style-type: none"> <li>Utilize "quiet" air compressors and other stationary noise sources where technology exists;</li> <li>Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction;</li> <li>Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.</li> </ul>				

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure		Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<b>TRIBAL CULTURAL RESOURCES</b>					
TCR-1	<p>The project applicant shall retain and compensate for the services of a qualified professional tribal monitor/consultant who is both approved by the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) Tribal Government and is listed under the Native American Heritage Commission's tribal contact list for the area of the project site. The tribal monitor/consultant shall only be present onsite during the construction phases that involve ground-disturbing activities, which are defined by the Kizh Nation as activities that may include, but are not limited to, pavement removal, pot-holing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The tribal monitor/consultant will complete daily monitoring logs that provide descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The onsite monitoring shall cease when the project site grading and excavation activities are completed, or when the tribal representatives and monitor/consultant have indicated that the site has a low potential for impacting tribal cultural resources. Proof of the project applicant's retention of the tribal monitor/consultant shall be provided to the City of Rancho Cucamonga Planning Department prior to the issuance of permits for construction phases that involve ground-disturbing activities.</p> <p>In addition, the project applicant shall follow/implement the following measures during the project's construction phases that involve ground-disturbing activities.</p> <ul style="list-style-type: none"> <li>• <b>Unanticipated Discovery of Tribal Cultural and Archaeological Resources:</b> Upon discovery of archaeological resources (if any), construction activities in the immediate vicinity of the find shall cease until the find can be assessed. Any archaeological resources unearthed during construction activities shall be evaluated by a qualified archaeologist and tribal</li> </ul>	Project Applicant/Developer, Construction Contractor, Monitoring Archeologist, Tribal Monitor	During the project's construction phases that involve ground-disturbing activities	City of Rancho Cucamonga Planning Department and/or Building & Safety Services Department	

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>monitor/consultant. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation (Kizh Nation) shall coordinate with the project applicant regarding treatment and curation of these resources. Typically, the Kizh Nation will request reburial or preservation for educational purposes. Work may continue on other portions of the project site while evaluation and, if necessary, mitigation takes place for the find (CEQA Guidelines Section 15064.5 (f)). If a resource is determined by the qualified archaeologist to constitute a "historical resource" or "unique archaeological resource", time allotment and funding sufficient to allow for implementation of avoidance measures, or appropriate mitigation, shall be made available. The treatment plan established for the resources (if any are found) shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources.</p> <ul style="list-style-type: none"> <li> <b>Unanticipated Discovery of Human Remains and Associated Funerary Objects:</b> Native American human remains are defined in Public Resources Code (PRC) 5097.98(d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. 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 </li> </ul>				



## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>(NAHC) and the provisions of PRC 5097.98 shall be followed.</p> <ul style="list-style-type: none"> <li> <b>Resource Assessment and Continuation of Work Protocol:</b> Upon discovery of any human remains, the tribal and/or archaeological monitor/consultant shall immediately divert work at a minimum of 50 feet and place an exclusion zone around the burial. The monitor/consultant shall then notify the Kizh Nation, lead archaeologist, and construction manager, who shall then contact the coroner. Work shall continue to be diverted from the burial area while the coroner determines whether the remains are Native American. The discovery shall be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner shall notify NAHC as mandated by state law who will then appoint a Most Likely Descendent. </li> <li> <b>Kizh-Gabrieleño Procedures for Burials and Funerary Remains:</b> If the Kizh Nation is designated as the Most Likely Descendent, the following treatment measures shall be implemented. To the Kizh Nation, the term "human remains" encompasses more than human bones. In ancient as well as historic times, tribal traditions included, but were not limited to, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains are also considered as associated funerary objects. All such remains shall be treated in the same manner as bone fragments that remain intact. </li> </ul>				

## 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>– <i>Treatment Measures:</i> Prior to the continuation of ground-disturbing activities, the project applicant, in coordination with the Kizh Nation and construction manager, shall arrange a designated location within the footprint of the project site for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside of construction-related working hours. The Kizh Nation shall make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials be removed. The Kizh Nation shall work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be undertaken, which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Kizh Nation for data recovery purposes. Cremations shall either be removed in bulk or by means as necessary to ensure complete recovery of all material. If the discovery of human remains includes four or more burials, the location shall be considered a cemetery and a separate</p>				

#### 4. Mitigation Monitoring and Reporting Program

**Table 27 Mitigation Monitoring Requirements**

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
<p>treatment plan shall be created. Once complete, a final report of all activities shall be submitted to the Kizh Nation and NAHC. The Kizh Nation shall not authorize any scientific study or the utilization of any invasive diagnostics on human remains.</p> <p>Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container onsite, if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location mitigated and protected in perpetuity between the Kizh Nation, project application and construction manager. There shall be no publicity regarding any cultural materials recovered.</p> <p>– <i>Professional Standards:</i> Archaeological and Native American monitoring and excavation during construction shall be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects shall be taken. Principal personnel shall meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California. The qualified archaeologist shall ensure that all other personnel are appropriately trained and qualified.</p>				

## 5. References

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- Airnav.com (Airnav). 2017, December 1. Airport Information. <http://www.airnav.com/airports/>.
- A-Tech Consulting, Inc. 2018, August 17. Comprehensive Asbestos, XRF-Lead and Hazmat Survey.
- Bay Area Air Quality Management District (BAAQMD). 2017, May. California Environmental Quality Act Air Quality Guidelines.
- Borer, Jim Borer (Certified Arborist #496). Specimen Tree Preservation, Conservation, and Analysis. March 2, 2018.
- Cadre Environmental Inc. Biological Resources Technical Report. March 2019.
- California Air Pollution Control Officers Association (CAPCOA). 2017. California Emissions Estimator Model (CalEEMod). Version 2016.3.2. Prepared by: BREEZE Software, A Division of Trinity Consultants in collaboration with South Coast Air Quality Management District and the California Air Districts.
- California Air Resources Board. 2017a, October 18. Area Designations Maps/State and National. <http://www.arb.ca.gov/desig/desig.htm>.
- . 2017b, March 14. Final Proposed Short-Lived Climate Pollutant Reduction Strategy. <https://www.arb.ca.gov/cc/shortlived/shortlived.htm>.
- . 2017c, November. California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. [https://www.arb.ca.gov/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf).
- . 2011, Facts About The Advanced Clean Car Program. [https://www.arb.ca.gov/msprog/zevprog/factsheets/advanced\\_clean\\_cars\\_eng.pdf](https://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf).
- California Energy Commission (CEC). 2018a. News Release: Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation. [http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).
- . 2018b. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. [http://www.energy.ca.gov/title24/2019standards/documents/2018\\_Title\\_24\\_2019\\_Building\\_Standards\\_FAQ.pdf](http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf).
- California Department of Fish and Wildlife (CDFW). 2017, October. California Regional Conservation Plans. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>.

## 5. References

- California Department of Forestry and Fire Protection (CAL FIRE). 2008. Very High Fire Hazard Severity Zones in LRA: Rancho Cucamonga. [http://www.fire.ca.gov/fire\\_prevention/fhsz\\_maps/FHSZ/san\\_bernardino/Rancho\\_Cucamonga.pdf](http://www.fire.ca.gov/fire_prevention/fhsz_maps/FHSZ/san_bernardino/Rancho_Cucamonga.pdf).
- California Department of Resources Recycling and Recovery (CalRecycle). 2018, March 30. Jurisdiction Disposal by Facility. <http://www.calrecycle.ca.gov/lgcentral/Reports/DRS/Destination/JurDspFa.aspx>.
- . 2018b, March 30. Facility/Site Summary Details: Badlands Sanitary Landfill. <http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0006/Detail/>.
- . 2018c, March 30. Facility/Site Summary Details: El Sobrante Landfill. <http://www.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0217/Detail/>.
- . 2018d, March 30. Landfill Tonnage Reports. <http://www.calrecycle.ca.gov/SWFacilities/Landfills/Tonnages/>.
- . 2018e, March 30. Estimate Solid Waste Generation Rates. <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>.
- California Department of Transportation (Caltrans). 2011, September 7. California Scenic Highway Mapping System (online maps). [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm).
- . 2013, September. Technical Noise Supplement (“TeNS”). Prepared by ICF International.
- California Geological Survey (CGS). 2007. Update of Mineral Land Classification for Portland Cement Concrete-Grade Aggregate in the Claremont-Upland Production-Consumption (P-C) Region, Los Angeles and San Bernardino Counties, California. Plate 1: Updated Mineral Land Classification Map. [ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR\\_202/SR\\_202-Plate1.pdf](ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_202/SR_202-Plate1.pdf).
- . 2015a. Fault Activity Map of California (2010). <http://maps.conservation.ca.gov/cgs/fam/>.
- . 20015b. CGS Information Warehouse: Regulatory Maps. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>.
- . 2017, May 30. Tsunami Inundation Zones. <http://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=4d56b41ba6c64d538ec3a91d40078dff>.
- California Natural Resources Agency (CNRA). 2018. CEQA: The California Environmental Quality Act. <http://resources.ca.gov/ceqa/>.
- California Office of Emergency Services (Cal OES). 2016, February 23. DVD. Dam Inundation Maps.

## 5. References

- California Stormwater Quality Association (CASQA). 2015. Construction BMP Online Handbook.  
<https://www.casqa.org/resources/bmp-handbooks/construction>.
- Cogstone. 2018, April. Cultural Resources Assessment.
- Cucamonga Valley Water District (CVWD). 2016, June. 2015 Urban Water Management Plan.  
[https://wuedata.water.ca.gov/public/uwmp\\_attachments/3975614249/CVWD%20%2D%20Final%202015%20UWMP%2Epdf](https://wuedata.water.ca.gov/public/uwmp_attachments/3975614249/CVWD%20%2D%20Final%202015%20UWMP%2Epdf).
- Department of Water Resources (DWR). 2017, December 1. Groundwater Information Center Map Interactive Map Application. <https://gis.water.ca.gov/app/gicima/>.
- Division of Land Resource Protection (DLRP). 2016, February 29. San Bernardino County Williamson Act FY 2015/2016 Sheet 2 of 2.  
[ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanBernardino\\_so\\_15\\_16\\_WA.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/wa/SanBernardino_so_15_16_WA.pdf).
- . 2018, March 30. California Important Farmland Finder.  
<https://maps.conservation.ca.gov/dlrp/ciff/>.
- Federal Emergency Management Agency (FEMA). 2015, August 18. Flood Map Service Center.  
<https://msc.fema.gov/portal>.
- Federal Highway Administration (FHWA). 2008. Roadway Construction Noise Model (RCNM). Version 1.1.
- Federal Transit Administration (FTA). 2006, May. Transit Noise and Vibration Impact Assessment. United States Department of Transportation. FTA-VA-90-1003-06.
- Governor's Office of Planning and Research (OPR). 2008, June. CEQA and Climate Change: Addressing Climate Change through CEQA Review. Technical Advisory.  
<http://www.opr.ca.gov/ceqa/pdfs/june08-ceqa.pdf>.
- John R. Byerly Incorporated. 2019, March. Soils Investigation for Christ's Church of the Valley Auditorium Building, 7576 Etiwanda Avenue, Rancho Cucamonga, California.
- Inland Empire Utilities Agency (IEUA). 2017. IEUA FY 2016-2017 Recycled Water Annual Report.  
<https://18x37n2ovtbb3434n48jhbs1-wpengine.netdna-ssl.com/wp-content/uploads/2018/03/FY2016-17-RW-Annual-Report.pdf>.
- . 2016. Final 2015 Urban Water Management Plan. <https://18x37n2ovtbb3434n48jhbs1-wpengine.netdna-ssl.com/wp-content/uploads/2016/07/FINAL-IEUA-WFA-2015-UWMP-2016-07-07.pdf>.
- Los Angeles World Airports (LAWA). 2016. Third Quarter 2016 Noise Contour Map: LA/Ontario International Airport. <https://www.flyontario.com/sites/default/files/3q16-quarterly-report-map.pdf>.

## 5. References

- Metropolitan Water District of Southern California (MWD). 2018, January 11. F. E. Weymouth Treatment Plant. [http://www.mwdh2o.com/AboutYourWater/Water-Quality/F-E Weymouth/Pages/default.aspx](http://www.mwdh2o.com/AboutYourWater/Water-Quality/F-E-Weymouth/Pages/default.aspx).
- Office of Environmental Health Hazard Assessment (OEHHA). 2015, February. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. [http://oehha.ca.gov/air/hot\\_spots/2015/2015GuidanceManual.pdf](http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf).
- Ontario, City of (Ontario). 2011, April 19. LA/Ontario International Airport Land Use Compatibility Plan. [http://www.ontarioplan.org/wp-content/uploads/sites/4/pdfs/ALUCP\\_FULL.pdf](http://www.ontarioplan.org/wp-content/uploads/sites/4/pdfs/ALUCP_FULL.pdf).
- PlaceWorks. 2019, May. Traffic Impact Analysis.
- Rancho Cucamonga, City of. 1983 (as amended through 2000). Etiwanda Specific Plan. <https://www.cityofrc.us/civicax/filebank/blobdload.aspx?BlobID=14039>.
- . 2010, May 19. 2010 Rancho Cucamonga General Plan, Chapter 2: Managing Land Use, Community Design, and Historic Resources. <https://www.cityofrc.us/civicax/filebank/blobdload.aspx?BlobID=12518>.
- . 2011, February 16. General Plan Chapter 6: Resource Conservation. <https://www.cityofrc.us/civicax/filebank/blobdload.aspx?BlobID=6817>.
- . 2012, July 18. Zoning Map. <https://www.google.com/maps/search/christ+church+of+the+valley/@34.1153607,-117.527156,1388m/data=!3m1!1e3>.
- . 2018 (as amended). City of Rancho Cucamonga Municipal Code. <http://qcode.us/codes/ranchocucamonga/>.
- South Coast Air Quality Management District (SCAQMD). 1993. California Environmental Quality Act Air Quality Handbook.
- . 2008, July. Final Localized Significance Threshold Methodology.
- . 2011. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>.
- Southern California Association of Governments (SCAG). 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>.

## 5. References

- US Department of Transportation (USDOT). 2017. Feasibility and Implications of Electric Vehicle (EV) Deployment and Infrastructure Development.  
[https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ev\\_deployment/page08.cfm](https://www.fhwa.dot.gov/environment/sustainability/energy/publications/ev_deployment/page08.cfm).
- United States Fish and Wildlife Service (USFWS). 2017, November 29. Habitat Conservation Plans in Pacific Southwest Region of US Fish and Wildlife Service. Data layer on *Data Basin* maintained by Conservation Biology Institute.  
<https://databasin.org/maps/bcd7a710c93743a48b4b29231dfdc158/active>.
- United States Geological Survey (USGS). 2018, January 24. Areas of Land Subsidence in California.  
[https://ca.water.usgs.gov/land\\_subsidence/california-subsidence-areas.html](https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html).
- Valued Engineering Inc. (Value). 2019, March. Hydrology Report for Christ's Church of the Valley New Auditorium Building.



## 5. References

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